D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

APR 27 2007

CASE Review Letter

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received April 23, 2007
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the report submitted by SEI Environmental, Inc. SEI Environmental received Corrective Action Plan approval in September 2001. The Corrective Action Solicitation Response estimated a cleanup time frame of 30 months. The corrective action has been ongoing for 60 months and the documented CoC concentration reduction to date is at 29.23%. The UST Program is extremely concerned about the lack of progress at the site. The next corrective action monitoring report is due on or before **July 30, 2007**.

Please remember that SEI is responsible for maintaining the granulated activated carbon units. For any well that has detection in post-GAC samples, the GAC filter should be changed immediately and such work documented in the submitted reports. SEI should establish a GAC filter change schedule such that the breakthrough is minimized. Documentation of all GAC filter changes should be documented in future CASE Reports.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Chris Boggs, SEI Environmental, 130 Penmarc Dr., Ste 108, Raleigh, NC, 27603
Technical file

UST PROGRAM
DOCKETING # 1

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

APR 27 2007

CASE Report Letter

FRONTIS HEMPHILL
2146 OLD MCKINNEY RD
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received April 23, 2007
York County

Dear Mr. Hemphill

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

APR 27 2007

Case Report with

GARY WIGGAM
3043 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received April 23, 2007
York County

Dear Mr. Wiggam:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

APR 27 2007

CASE Rept letter

EVERETTE & JANET CROOK
3035 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received April 23, 2007
York County

Dear Mr. & Mrs. Crook:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

APR 27 2007

CASE Rept letter

TONY & SUSAN HILL
3049 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received April 23, 2007
York County

Dear Mr. & Mrs. Hill:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

SEI
Environmental, Inc.

130 Penmarc Drive, Suite 108
Raleigh, NC 27603
919.832.2535
Fax 919.832.5914

RECEIVED
AUG 0 6 2007
UNDERGROUND STORAGE
TANK PROGRAM

July 30, 2007

Ms. Debra L. Thoma, Hydrogeologist
South Carolina Department of Health and Environmental Control
Assessment & Corrective Action Section, Underground Storage Tank Program
2600 Bull Street
Columbia, South Carolina 29201

RE: Corrective Action System Evaluation Report
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Dear Ms. Thoma:

Please find enclosed the quarterly Corrective Action System Evaluation (C.A.S.E) Report for the June 28, 2007 groundwater sampling event at the above referenced site. If you have any questions or comments, please contact me at (919) 832-2535.

Sincerely,
SEI Environmental, Inc.

Chris L. Boggs, P.G.
Staff Scientist

cc: Ms. Louis Smith, Smith's Grocery

UST PROGRAM
DOCKETING # 2

CORRECTIVE ACTION SYSTEM EVALUATION REPORT
March 2007 through June 2007

Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

PREPARED FOR:

Ms. Louis Smith
Smith's Grocery
3176 Charlotte Highway
York, South Carolina 29745

PREPARED BY:

SEI ENVIRONMENTAL, INC.
130 Penmarc Drive, Suite 108
Raleigh, North Carolina 27603-2434
UST Site Rehabilitation Contractor No. 354

July 30, 2007

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: April 18, 2007
For Period Covering: March 28, 2007
Facility Name : Smith's Grocery
UST Permit Number: 09322
County: York
Latitude: N 35°02'30.59"

Monitoring Report Number: 12
to June 28, 2007
Street Address: 176 Charlotte Highway (49)
City: York, South Carolina
Zip Code: 29745
Longitude: W 81°08'47.98"

Submitted by UST Owner/Operator:

Name: Louis Smith
Company: Smith's Grocery
Address: 3176 Charlotte Highway
City: York State: SC
Zip Code: 29745
Telephone: (803) 684-6289
SEI Project Number: 300401

Prepared by Consultant/Contractor:

Name: Chris L. Boggs, P.G.
Company: SEI Environmental, Inc.
Address: 130 Penmarc Drive, Suite 108
City: Raleigh State: NC
Zip Code: 27603
Telephone: (919) 832-2535
UST Site Rehabilitation Contractor No. 354

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: Chris L. Boggs, P.G.
SC Reg. No. 2101
Signature:
Date: 7/31/07

TABLE OF CONTENTS

LIMITATIONS iii
1.0 INTRODUCTION 1
2.0 FIELD MEASUREMENTS AND SAMPLING 1
2.1 GROUNDWATER SAMPLING 1
2.2 WATER SUPPLY WELL SAMPLING 2
3.0 LABORATORY ANALYTICAL RESULTS 3
3.1 GROUNDWATER ANALYTICAL RESULTS 3
3.2 WATER SUPPLY WELL ANALYTICAL RESULTS 3
3.3 SITE SPECIFIC TARGET LEVELS 3
4.0 REMEDIATION SYSTEM EFFECTIVENESS 4
5.0 CONCLUSIONS AND RECOMMENDATIONS 4

LIST OF TABLES

TABLE 1 Historical Groundwater Elevation and Product Thickness Data
TABLE 2 Historical Groundwater Analytical Results

LIST OF FIGURES

FIGURE 1 USGS Quadrangle Map
FIGURE 2 Site Map
FIGURE 3 Potentiometric Surface Map, June 28, 2007
FIGURE 4 Groundwater Chemicals of Concern Site Map, June 28, 2007

LIST OF APPENDICES

APPENDIX A Figures
APPENDIX B Tables
APPENDIX C Field Data Information Sheets for Groundwater Sampling
APPENDIX D Laboratory Reports and Chain-of-Custody Forms

LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Geologist registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by AccuTest Laboratories.

1.0 INTRODUCTION

Smith's Grocery is a convenience and retail fuel store located at 3176 Charlotte Highway (SC Highway 49) in York, York County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- May 10, 2004 – Groundwater Sampling Event
- August 17, 2004 – Groundwater Sampling Event
- January 14, 2005 – Groundwater Sampling Event
- June 29, 2005 – Groundwater Sampling Event
- September 16, 2005 – Groundwater Sampling Event
- February 28, 2006 – Groundwater Sampling Event
- June 21, 2006 – Groundwater Sampling Event
- October 4, 2006 – Groundwater Sampling Event
- December 4, 2006 – Groundwater Sampling Event
- March 28, 2007 – Groundwater Sampling Event
- June 20, 2007- PTS injection
- June 28, 2007- Groundwater Sampling Event

On June 28, 2007 seventeen groundwater monitoring wells and four water supply wells were sampled in accordance with the requirements of the PFP contract. This report provides details of the groundwater sampling event.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On June 28, 2007, groundwater samples were collected from fifteen (MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-17 through 19, and TW-1 through TW-3) of twenty-three existing groundwater monitoring wells. Six (MW-3 through MW-5, MW-9, MW-16, and MW-20) have been removed from the sampling schedule.

Prior to sampling, groundwater monitoring wells were gauged utilizing an oil-water interface probe to measure depth to groundwater, and to detect any free product present. The depth to groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction. Figure 2 in Appendix A is a site map depicting monitoring well locations.

Free product was not currently and has not historically been detected in any of the monitoring wells. Figure 3 in Appendix A presents a groundwater potentiometric map for the current sampling event. Table 1 in Appendix B summarizes groundwater measurement data.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead. Appendix C contains Field Data Information Sheets for Groundwater Sampling.

2.2 Water Supply Well Sampling

On June 28, 2007, groundwater samples were collected from four (Crook, Smith, Swift and Hill) water supply wells. Three water supply wells (Crook, Hill, and Swift) are fitted with granular activated carbon (GAC) filters. As such, samples were collected from the Swift and Hill wells before (pre) and after (post) the GAC filters. The Crook well was not sampled in this manner during the current sampling event. Prior to sampling, the water was allowed to run for at least ten minutes. The samples were placed into laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods

8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

Chemicals of Concern (CoC) were detected in ten (MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, MW-17 and TW-2) of the seventeen monitoring wells sampled at concentrations exceeding their respective SSTL. Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.2 Water Supply Well Analytical Results

CoC were detected in two (Swift and Hill) of the pre-GAC filter samples collected at concentrations exceeding their respective SSTLs. Figure 4 in Appendix A is a site map presenting water supply well locations and their CoC concentrations. Table 2 in Appendix B summarizes historical water supply well analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.3 Site Specific Target Levels

Site Specific Target Levels (SSTLs) have been designated for sixteen (MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-17 through MW-19, TW-2, and TW-3) monitoring wells and all four (Crook, Swift, Hill, and Smith) water supply wells. For three (Crook, Swift, and Hill) water supply wells with GAC filters, the SSTLs apply to the pre-GAC filter samples. Table 4 in Appendix B summarizes SSTL information.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target

concentrations for seven (benzene, toluene, ethylbenzene, xylenes, MTBE, naphthalene, lead, and EDB) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial January 6, 2003, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. Monitoring well MW-1 was not located during the current sampling event. Consequently, SSTL data for monitoring well MW-1 from the September 16, 2005, groundwater sampling event was utilized for the concentration reduction calculation. The formula is a follows:

$$\left[\frac{\text{[01/06/03 Sample Concentration Above SSTL]} - \text{[Current Sample Concentration Above SSTL]}}{\text{[01/06/03 Sample Concentration Above SSTL]}}\right] * 100 = \% \text{ Reduction}$$

Using the current analytical results, the concentration reduction is -3.707 %.

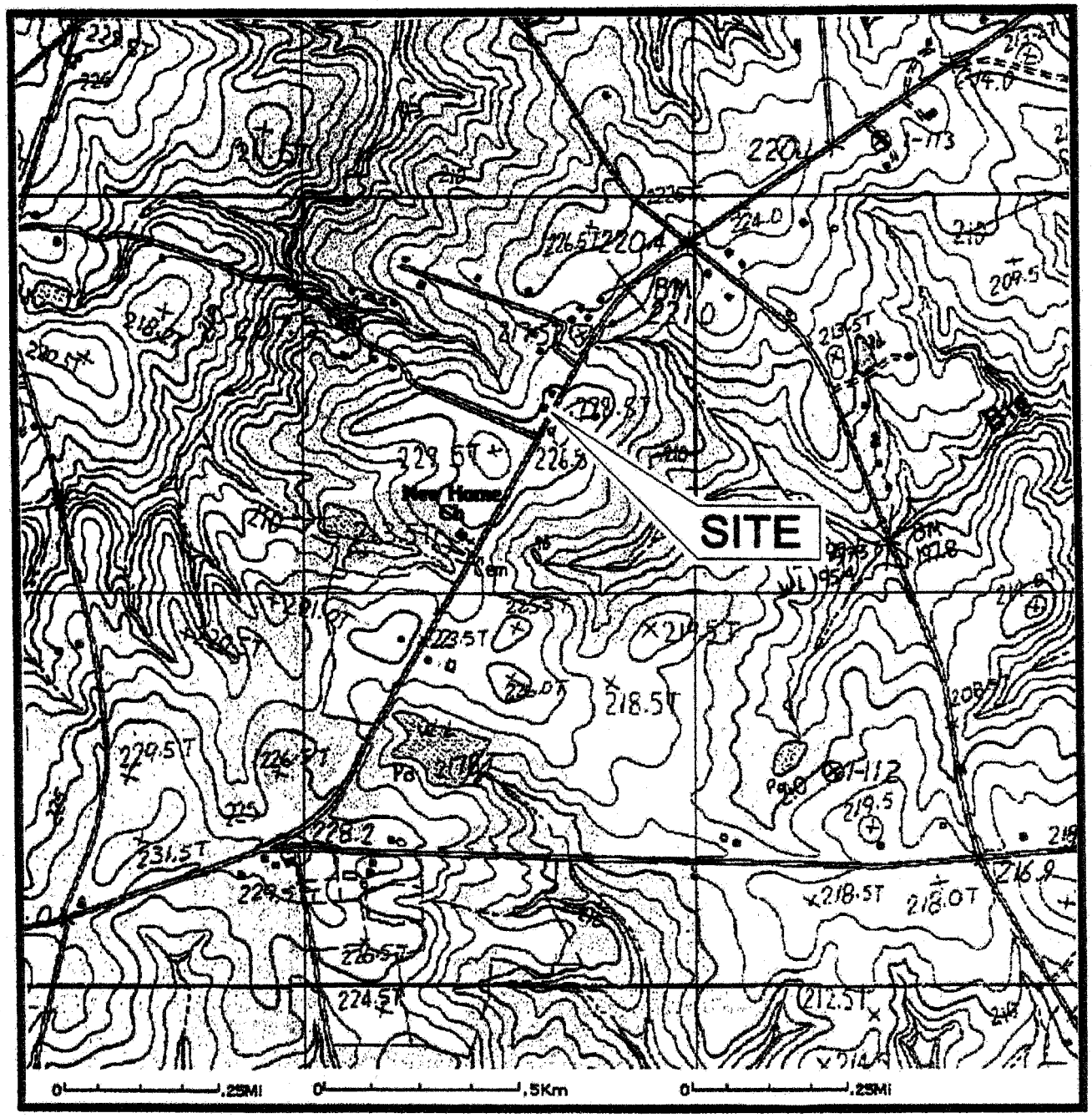
5.0 CONCLUSIONS

Free product was not detected. CoC were detected in eight monitoring wells and two water supply wells above their respective SSTLs. The percent concentration reduction has been calculated at -3.707%.

SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. The next sampling event will occur in June 2007. SEI initiated remediation using PTS injected in existing injection wells on June 20, 2007.

APPENDIX A
FIGURES

7.5 MINUTE SERIES(TOPOGRAPHIC)

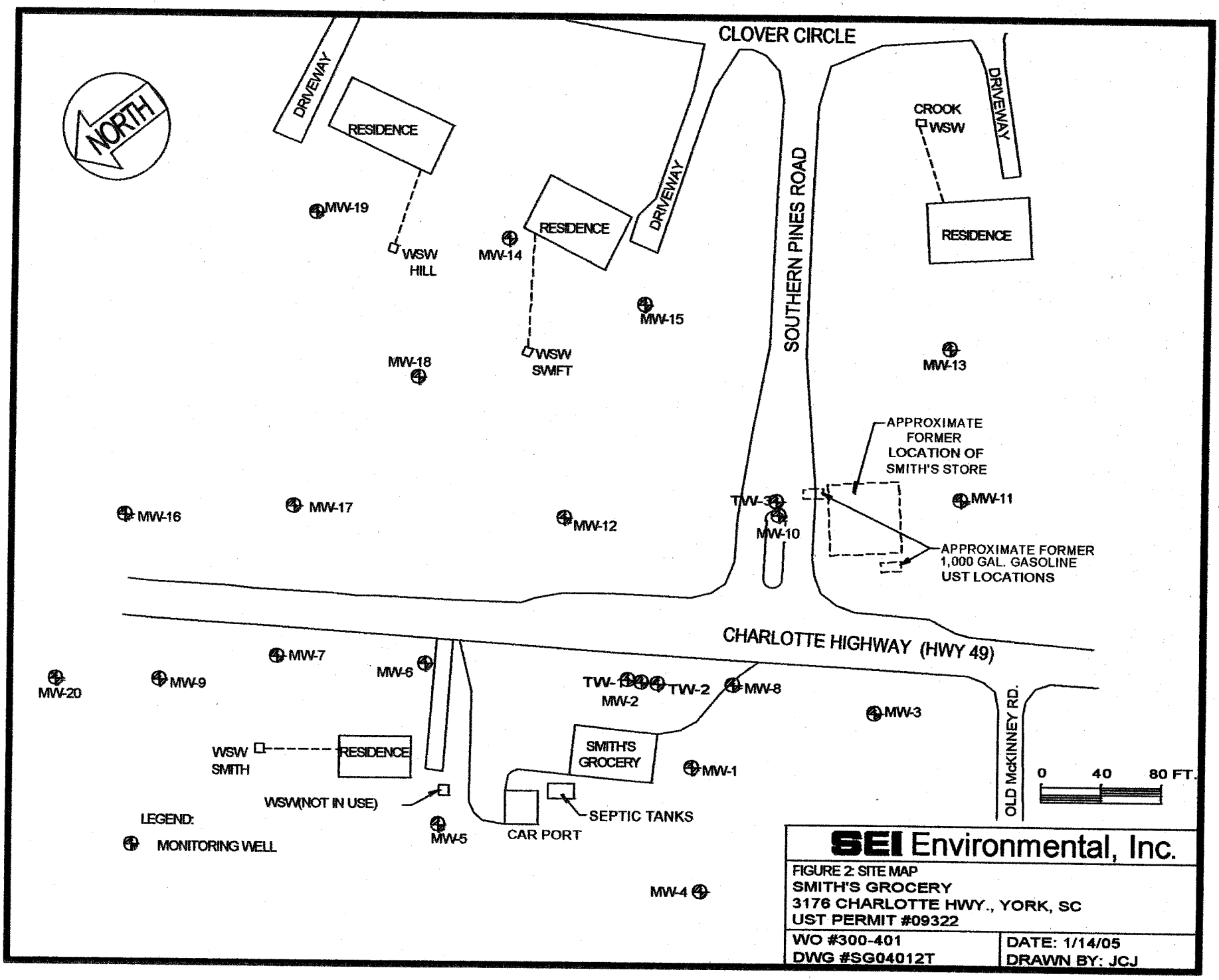


NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP(U.S.G.S. TOPO)
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

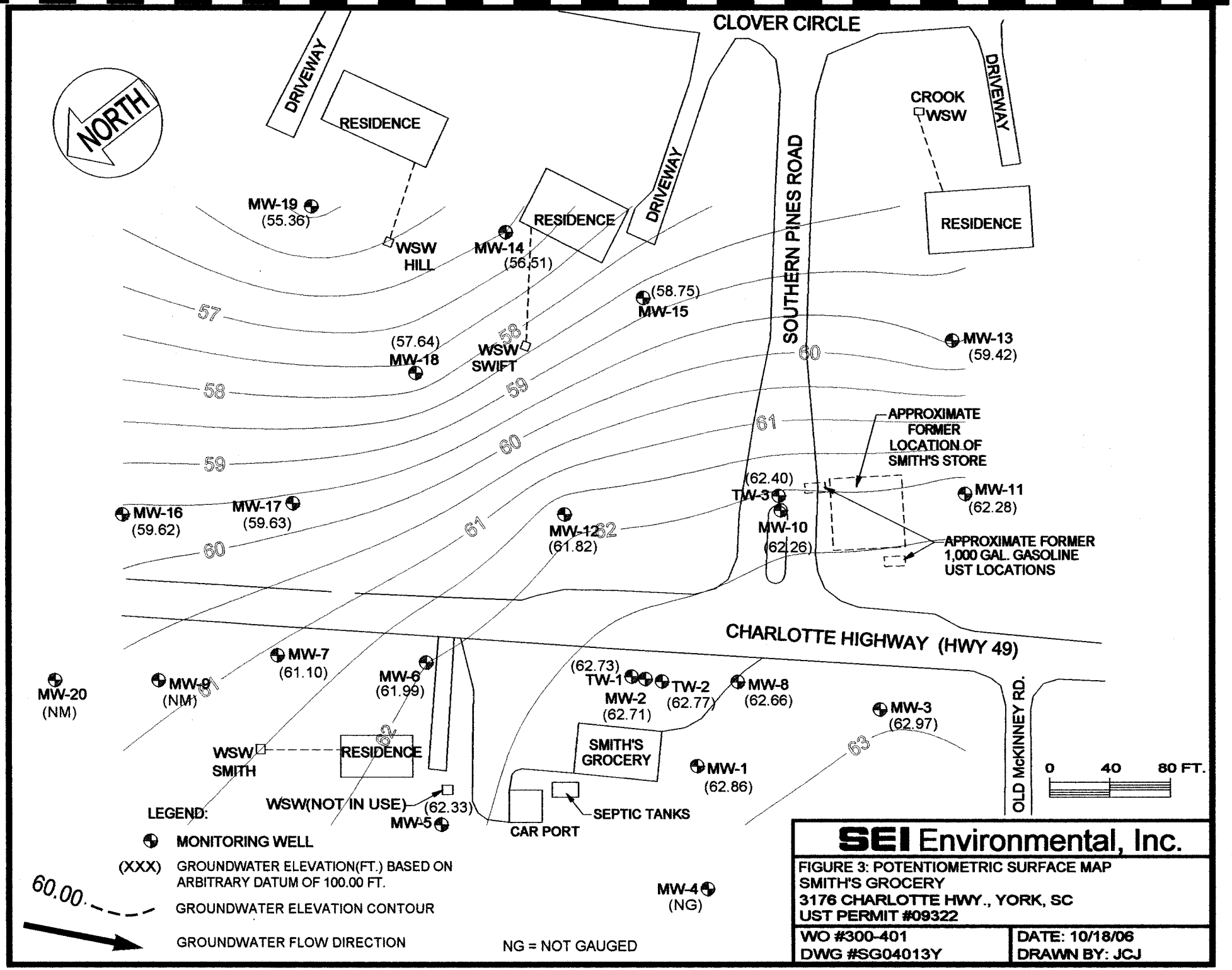
W.O. #: 300-401	DATE: 9/8/05
DWG #	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

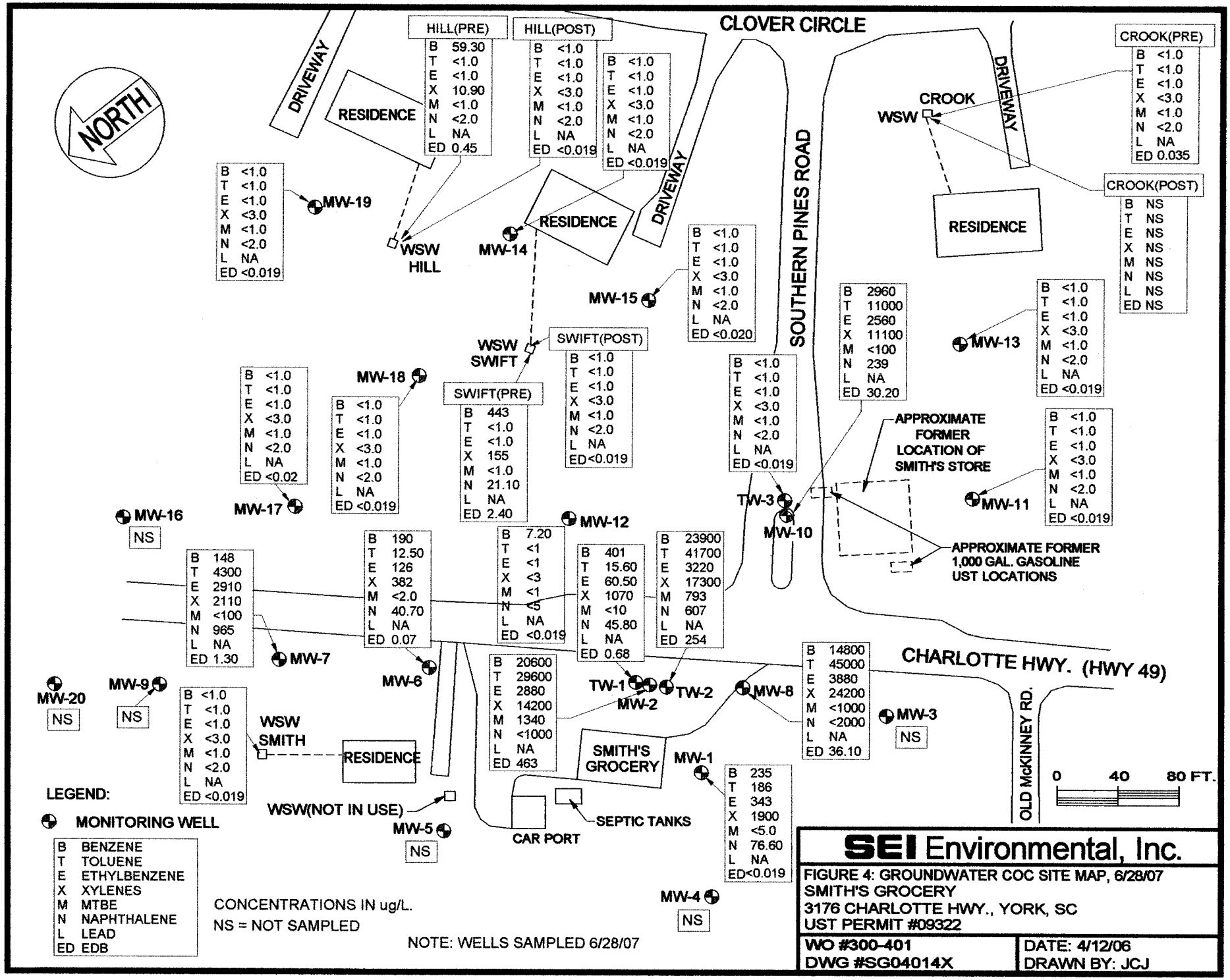
WO #300-401	DATE: 1/14/05
DWG #SG04012T	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: POTENTIOMETRIC SURFACE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 10/18/06
DWG #SG04013Y	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP, 6/28/07
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 4/12/06
DWG #SG04014X	DRAWN BY: JCJ

APPENDIX B
TABLES

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-1	01/06/03	29.88			91.16	61.28
	04/02/03	28.05				63.11
	08/26/03	24.07				67.09
	01/08/04	25.46				65.70
	05/10/04	26.90				64.26
	08/17/04	27.03				64.13
	01/14/05	27.06				64.10
	06/29/05	25.67				65.49
	09/16/05	28.10				63.06
	02/28/06	Well Not Located				N/A
	06/21/06	29.16				62.00
	10/04/06	30.24				60.92
	12/04/06	30.51				60.65
	03/28/07	27.91				63.25
	06/28/07	28.30				62.86
MW-2	01/06/03	33.76			94.57	60.81
	04/02/03	31.92				62.65
	08/26/03	27.81				66.76
	01/08/04	29.40				65.17
	05/10/04	26.68				67.89
	08/17/04	30.71				63.86
	01/14/05	30.78				63.79
	06/29/05	29.35				65.22
	09/16/05	30.61				63.96
	02/28/06	31.19				63.38
	06/21/06	31.67				62.90
	10/04/06	32.76				61.81
	12/04/06	33.08				61.49
	03/28/07	31.67				62.90
	06/28/07	31.86				62.71
MW-3	01/06/03	30.87			91.91	61.04
	04/02/03	29.02				62.89
	08/26/03	25.98				65.93
	01/08/04	26.46				65.45
	05/10/04	28.83				63.08
	08/17/04	27.76				64.15
	01/14/05	27.86				64.05
	06/29/05	26.39				65.52
	09/16/05	27.67				64.24
	02/28/06	29.10				62.81
	06/21/06	28.79				63.12
	10/04/06	29.85				62.06
	12/04/06	30.19				61.72
	03/28/07	28.77				63.14
	06/28/07	28.94				62.97

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-4	01/06/03	24.58			86.20	61.62
	04/02/03	22.73				63.47
	08/26/03	15.07				71.13
	01/08/04	20.73				65.47
	05/10/04	25.94				60.26
	08/17/04	Well Not Located				N/A
	01/14/05	21.83				64.37
	06/29/05	20.51				65.69
	09/16/05	Well Not Located				N/A
	02/28/06	Well Not Located				N/A
	06/21/06	Well Not Located				N/A
	10/04/06	Well Not Located				N/A
	12/04/06	Well Not Located				N/A
	03/28/07	Well Destroyed				N/A
MW-5	01/06/03	27.96			89.29	61.33
	04/02/03	25.00				64.29
	08/26/03	22.70				66.59
	01/08/04	24.49				64.80
	05/10/04	25.57				63.72
	08/17/04	25.75				63.54
	01/14/05	25.44				63.85
	06/29/05	24.30				64.99
	09/16/05	25.86				63.43
	02/28/06	27.63				61.66
	06/21/06	26.64				62.65
	10/04/06	27.75				61.54
	12/04/06	27.73				61.56
	03/28/07	26.11				63.18
	06/28/07	26.96				62.33
MW-6	01/06/03	33.57			93.91	60.34
	04/02/03	31.66				62.25
	08/26/03	27.51				66.40
	01/08/04	29.58				64.33
	05/10/04	29.91				64.00
	08/17/04	29.50				64.41
	01/14/05	30.77				63.14
	06/29/05	29.74				64.17
	09/16/05	30.81				63.10
	02/28/06	31.07				62.84
	06/21/06	31.72				62.19
	10/04/06	32.86				61.05
	12/04/06	32.06				61.85
	03/28/07	31.56				62.35
	06/28/07	31.92				61.99

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-7	01/06/03	31.57			91.68	60.11
	04/02/03	29.40				62.28
	08/26/03	26.88				64.80
	01/08/04	28.40				63.28
	05/10/04	27.78				63.90
	08/17/04	29.85				61.83
	01/14/05	29.28				62.40
	06/29/05	28.17				63.51
	09/16/05	29.66				62.02
	02/28/06	29.50				62.18
	06/21/06	30.48				61.20
	10/04/06	31.47				60.21
	12/04/06	31.34				60.34
	03/28/07	29.74				61.94
	06/28/07	30.58				61.10
MW-8	01/06/03	33.84			94.72	60.88
	04/02/03	32.02				62.70
	08/26/03	27.58				67.14
	01/08/04	29.47				65.25
	05/10/04	29.90				64.82
	08/17/04	30.88				63.84
	01/14/05	30.85				63.87
	06/29/05	29.50				65.22
	09/16/05	30.76				63.96
	02/28/06	31.30				63.42
	06/21/06	31.84				62.88
	10/04/06	32.93				61.79
	12/04/06	33.24				61.48
	03/28/07	31.85				62.87
	06/28/07	32.06				62.66
MW-9	01/06/03	30.41			90.54	60.13
	04/02/03	28.20				62.34
	08/26/03	26.10				64.44
	01/08/04	27.33				63.21
	05/10/04	28.69				61.85
	08/17/04	29.50				61.04
	01/14/05	28.14				62.40
	06/29/05	26.97				63.57
	09/16/05	26.38				64.16
	02/28/06	Well Not Located				N/A
	06/21/06	27.13				63.41
	10/04/06	Well Not Located				NA
	12/04/06	Well Not Located				NA
	03/28/07	Well Destroyed				NA

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-10	01/06/03	39.71			99.77	60.06
	04/02/03	37.77				62.00
	08/26/03	33.36				66.41
	01/08/04	35.04				64.73
	05/10/04	35.50				64.27
	08/17/04	36.49				63.28
	01/14/05	36.66				63.11
	06/29/05	35.04				64.73
	09/16/05	36.34				63.43
	02/28/06	37.02				62.75
	06/21/06	37.40				62.37
	10/04/06	38.56				61.21
	12/04/06	38.94				60.83
	03/28/07	37.51				62.26
	06/28/07	37.51				62.26
MW-11	01/06/03	40.37			100.46	60.09
	04/02/03	38.36				62.10
	08/26/03	33.88				66.58
	01/08/04	35.70				64.76
	05/10/04	36.19				64.27
	08/17/04	37.17				63.29
	01/14/05	36.79				63.67
	06/29/05	35.68				64.78
	09/16/05	37.11				63.35
	02/28/06	37.75				62.71
	06/21/06	38.10				62.36
	10/04/06	39.35				61.11
	12/04/06	39.69				60.77
	03/28/07	38.18				62.28
	06/28/07	38.18				62.28
MW-12	01/06/03	39.64			99.61	59.97
	04/02/03	37.78				61.83
	08/26/03	33.78				65.83
	01/08/04	35.44				64.17
	05/10/04	35.75				63.86
	08/17/04	36.72				62.89
	01/14/05	37.18				62.43
	06/29/05	35.34				64.27
	09/16/05	Well Not Located				N/A
	02/28/06	37.12				62.49
	06/21/06	37.68				61.93
	10/04/06	38.79				60.82
	12/04/06	Not Measured				
	03/28/07	37.93				61.68
	06/28/07	37.79				61.82

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-13	01/06/03	42.87			100.39	57.52
	04/02/03	41.13				59.26
	08/26/03	37.20				63.19
	01/08/04	38.70				61.69
	05/10/04	39.27				61.12
	08/17/04	40.27				60.12
	01/14/05	40.12				60.27
	06/29/05	37.96				62.43
	09/16/05	40.11				60.28
	02/28/06	40.76				59.63
	10/04/06	40.91				59.48
	06/21/06	42.05				58.34
	12/04/06	Not Measured				
	03/28/07	41.05				59.34
	06/28/07	40.97				59.42
MW-14	01/06/03	43.66			98.89	55.23
	04/02/03	42.10				56.79
	08/26/03	38.39				60.50
	01/08/04	39.40				59.49
	05/10/04	40.06				58.83
	08/17/04	41.12				57.77
	01/14/05	40.75				58.14
	06/29/05	39.77				59.12
	09/16/05	40.65				58.24
	02/28/06	41.42				57.47
	06/21/06	41.52				57.37
	10/04/06	42.74				56.15
	12/04/06	Not Measured				
	03/28/07	41.82				57.07
	06/28/07	42.38				56.51
MW-15	01/06/03	44.97			100.18	55.21
	04/02/03	43.24				56.94
	08/26/03	39.58				60.60
	01/08/04	46.55				53.63
	05/10/04	41.19				58.99
	08/17/04	42.11				58.07
	01/14/05	43.06				57.12
	06/29/05	40.92				59.26
	09/16/05	41.80				58.38
	02/28/06	42.54				57.64
	06/21/06	42.64				57.54
	10/04/06	43.61				56.57
	12/04/06	Not Measured				
	03/28/07	42.98				57.20
	06/28/07	41.43				58.75

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-16	01/06/03	31.07			89.91	58.84
	04/02/03	29.00				60.91
	08/26/03	27.54				62.37
	01/08/04	28.03				61.88
	05/10/04	27.83				62.08
	08/17/04	29.23				60.68
	01/14/05	28.92				60.99
	06/29/05	27.86				62.05
	09/16/05	29.23				60.68
	02/28/06	28.35				61.56
	06/21/06	29.89				60.02
	10/04/06	31.18				58.73
	12/04/06	Not Measured				
	03/28/07	30.71				59.20
	06/28/07	30.29				59.62
MW-17	01/06/03	36.81			94.46	57.65
	04/02/03	34.63				59.83
	08/26/03	37.08				57.38
	01/08/04	32.56				61.90
	05/10/04	32.93				61.53
	08/17/04	34.87				59.59
	01/14/05	33.83				60.63
	06/29/05	32.60				61.86
	09/16/05	33.84				60.62
	02/28/06	34.21				60.25
	06/21/06	34.73				59.73
	10/04/06	35.78				58.68
	12/04/06	Not Measured				
	03/28/07	34.73				59.73
	06/28/07	34.83				59.63
MW-18	01/06/03	42.83			98.14	55.31
	04/02/03	41.26				56.88
	08/26/03	37.47				60.67
	01/08/04	38.14				60.00
	05/10/04	39.09				59.05
	08/17/04	35.43				62.71
	01/14/05	40.04				58.10
	06/29/05	38.93				59.21
	09/16/05	39.77				58.37
	02/28/06	40.54				57.60
	06/21/06	40.69				57.45
	10/04/06	41.64				56.50
	12/04/06	Not Located				
	03/28/07	Not Located				
	06/28/07	40.50				57.64

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-19	01/06/03	45.14			98.27	53.13
	04/02/03	43.31				54.96
	08/26/03	39.24				59.03
	01/08/04	40.83				57.44
	05/10/04	41.47				56.80
	08/17/04	42.01				56.26
	01/14/05	42.18				56.09
	06/29/05	41.17				57.10
	09/16/05	42.25				56.02
	02/28/06	42.76				55.51
	06/21/06	42.97				55.30
	10/04/06	44.12				54.15
	12/04/06	Not Measured				
	03/28/07	Dry				
	06/28/07	42.91				55.36
MW-20	01/06/03	28.09			88.35	60.26
	04/02/03	25.79				62.56
	08/26/03	24.98				63.37
	01/08/04	25.10				63.25
	05/10/04	28.41				59.94
	08/17/04	Well Not Located				N/A
	01/14/05	25.85				62.50
	06/29/05	24.63				63.72
	09/16/05	Well Not Located				N/A
	02/28/06	25.88				62.47
	06/21/06	Well Not Located				N/A
	10/04/06	Well Not Located				N/A
	12/04/06	Well Not Located				N/A
	03/28/07	26.30				62.05
	06/28/07	Well Not Located				
TW-1	01/06/03	34.33			94.72	60.39
	04/02/03	31.86				62.86
	08/26/03	27.96				66.76
	01/08/04	29.48				65.24
	05/10/04	30.31				64.41
	08/17/04	30.40				64.32
	01/14/05	30.75				63.97
	06/29/05	29.56				65.16
	09/16/05	30.76				63.96
	02/28/06	31.46				63.26
	06/21/06	31.64				63.08
	10/04/06	32.89				61.83
	12/04/06	33.03				61.69
	03/28/07	31.92				62.80
	06/28/07	31.99				62.73

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
TW-2	01/06/03	33.91			94.72	60.81
	04/02/03	32.04				62.68
	08/26/03	27.54				67.18
	01/08/04	29.45				65.27
	05/10/04	29.89				64.83
	08/17/04	30.87				63.85
	01/14/05	30.94				63.78
	06/29/05	29.52				65.20
	09/16/05	30.67				64.05
	02/28/06	31.36				63.36
	06/21/06	31.86				62.86
	10/04/06	32.94				61.78
	12/04/06	33.24				61.48
	03/28/07	31.82				62.90
	06/28/07	31.95				62.77
TW-3	01/06/03	38.81			99.21	60.40
	04/02/03	36.97				62.24
	08/26/03	32.80				66.41
	01/08/04	34.40				64.81
	05/10/04	34.79				64.42
	08/17/04	35.75				63.46
	01/14/05	38.75				60.46
	06/29/05	34.33				64.88
	09/16/05	30.59				68.62
	02/28/06	36.26				62.95
	06/21/06	36.68				62.53
	10/04/06	37.77				61.44
	12/04/06	38.07				61.14
	03/28/07	36.73				62.48
	06/28/07	36.81				62.40

N/A = Not Applicable

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-1*	01/06/03	**911.00**	**9,810.00**	**2,660.00**	**18,650.00**	**250.00**	**743.00**	**56.00**	<0.010	33,080.00
	04/02/03	**590.00**	**2,900.00**	960.00	7,400.00	27.00	**200.00**	**10.00**	<0.010	12,087.00
	08/26/03	**610.00**	1,200.00	640.00	4,800.00	**100.00**	**500.00**	**33.00**	<0.010	7,883.00
	01/08/04	**620.00**	850.00	340.00	3,800.00	**100.00**	**500.00**	**5.00**	0.17	6,215.17
	05/10/04	**330.00**	1,100.00	459.00	3,700.00	25.00	**130.00**	**40.00**	<0.010	5,784.00
	08/17/04	**380.00**	970.00	670.00	3,600.00	<25	**120.00**	**63.00**	<0.010	5,803.00
	01/14/05	**270.00**	1,440.00	900.00	5,620.00	<1.0	**268.00**	<5.0	0.09	8,498.09
	06/29/05	**273.00**	1,200.00	601.00	3,640.00	<20	**136.00**	**29.50**	<0.019	5,879.50
	09/16/05	**23,300.00**	**59,100.00**	**4,700.00**	**28,400.00**	<500	<1,000	NA	**27.20**	115,527.20
	02/28/06	Well Not Located								0.00
	06/21/06	**19,500.00**	**59,900.00**	**4,070.00**	**24,400.00**	<1,000	<2,000	**47.60**	**17.70**	107,870.00
	10/04/06	**22,400.00**	**64,500.00**	**4,100.00**	**22,000.00**	<1,000	<2,000	**41.40**	**27.60**	113,000.00
	12/04/06	**18,900.00**	**60,700.00**	**3,830.00**	**22,000.00**	<1,000	<2,000	**NA**	**29.50**	105,430.00
	03/28/07	**149.00**	153.00	279.00	1,780.00	<10	55.00	NA	<0.019	2,416.00
	06/28/07	**235.00**	186.00	343.00	1,900.00	<5.0	**76.60**	NA	<0.019	2,740.60
	SSTL	**11.00**	**2,223.00**	**1,555.00**	**10,000.00**	**90.00**	**66.00**	**2.00**	**0.32**	
	> SSTL	224.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-2	01/06/03	**18,400.00**	**31,100.00**	**3,180.00**	**18,920.00**	**395.00**	**514.00**	28.00	0.02	72,537.02
	04/02/03	**13,000.00**	1,800.00	**1,600.00**	9,500.00	**480.00**	**500.00**	**190.00**	**160.00**	27,230.00
	08/26/03	**16,000.00**	**26,000.00**	**2,200.00**	13,000.00	**480.00**	**540.00**	**190.00**	**120.00**	58,530.00
	01/08/04	**18,000.00**	**33,000.00**	**2,200.00**	12,000.00	**880.00**	**1,200.00**	**1,000.00**	**150.00**	68,430.00
	05/10/04	**17,000.00**	**24,000.00**	**2,000.00**	11,000.00	**750.00**	**2,500.00**	**1,200.00**	**260.00**	58,710.00
	08/17/04	**19,000.00**	**29,000.00**	**2,900.00**	14,000.00	**1,200.00**	**2,500.00**	**2,100.00**	**500.00**	71,200.00
	01/14/05	**20,600.00**	**36,400.00**	**2,960.00**	**17,200.00**	**940.00**	**862.00**	**1,230.00**	**186.00**	80,378.00
	06/29/05	**18,500.00**	**27,300.00**	**2,600.00**	14,400.00	**952.00**	<500	**792.00**	**151.00**	64,695.00
	09/16/05	**24,300.00**	**34,500.00**	**2,870.00**	**15,500.00**	**1,130.00**	**645.00**	NA	0.083	78,945.083
	02/28/06	**24,400.00**	**36,200.00**	**2,700.00**	12,400.00	**847.00**	<500	NA	**310.00**	76,857.00
	06/21/06	**19,500.00**	**26,300.00**	**2,420.00**	12,600.00	**859.00**	<1,000	**1,010.00**	**320.00**	63,009.00
	10/04/06	**18,100.00**	**25,600.00**	**2,010.00**	9,820.00	**1,020.00**	<1,000	**1,480.00**	**664.00**	58,694.00
	12/04/06	**8,530.00**	**12,300.00**	**895.00**	4,980.00	**584.00**	<1,000	NA	**318.00**	27,607.00
	03/28/07	**17,500.00**	**27,900.00**	**2,090.00**	11,700.00	**534.00**	<400	NA	**184.00**	59,908.00
	06/28/07	**20,600.00**	**29,600.00**	**2,880.00**	14,200.00	**1,340.00**	<1000	NA	**463.00**	69,083.00
	SSTL	**10.00**	**2,021.00**	**1,418.00**	**15,000.00**	**81.00**	**61.00**	**30.00**	**10.00**	
	> SSTL	20,590.00	27,579.00	1,464.00	0.00	1,259.00	0.00	0.00	453.00	
MW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	350.00	<0.020	350.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	8.50	0.00	8.50
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	
MW-4	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	12.00	<0.020	12.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Removed from Sampling Schedule								0.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-6	01/06/03	<1.0	<1.0	<1.0	5.40	<1.0	<1.0	12.00	<0.020	17.40
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	5.40	<0.010	5.40
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	0.00
MW-6	01/06/03	**4,840.00**	**20,400.00**	**3,540.00**	**19,020.00**	25.00	**640.00**	11.00	**7.00**	48,483.00
	04/02/03	**2,600.00**	**11,000.00**	**1,800.00**	**9,000.00**	**250.00**	**1,200.00**	**64.00**	2.60	25,906.60
	08/26/03	**1,400.00**	**6,800.00**	**1,100.00**	6,600.00	**250.00**	**1,200.00**	**37.00**	<0.010	16,387.00
	01/08/04	**350.00**	1,200.00	240.00	1,300.00	<1.0	**77.00**	<5.0	1.20	3,168.20
	05/10/04	**640.00**	**2,200.00**	300.00	1,900.00	<5.0	**160.00**	**36.00**	1.80	5,227.80
	08/17/04	**1,100.00**	**2,200.00**	730.00	3,400.00	<50	<250	13.00	<0.010	7,443.00
	01/14/05	**1,070.00**	**2,960.00**	718.00	3,990.00	<1.0	**116.00**	**107.00**	1.67	8,962.67
	06/29/05	**413.00**	500.00	290.00	1,480.00	<10	**77.30**	<5.0	0.55	2,760.85
	09/16/05	**323.00**	273.00	194.00	1,010.00	<10	**63.60**	NA	0.76	1,864.36
	02/28/06	**1,020.00**	1,150.00	619.00	2,980.00	<10	**141.00**	NA	1.00	5,911.00
	06/21/06	**316.00**	109.00	200.00	1,020.00	<10	**81.20**	15.50	0.42	1,742.12
	10/04/06	**585.00**	76.30	327.00	1,510.00	<10	**75.80**	26.70	0.75	2,601.55
	12/04/06	**332.00**	**3,340.00**	**2,940.00**	**19,900.00**	<10	**937.00**	NA	1.10	27,450.10
	03/28/07	**792.00**	64.70	529.00	2,590.00	<10	**156.00**	NA	0.82	4,132.52
	06/28/07	**190.00**	12.50	126.00	382.00	<2.0	**40.70**	NA	0.07	751.27
	SSTL	6.00	1,212.00	860.00	8,000.00	48.00	31.00	18.00	4.83	
	> SSTL	184.00	0.00	0.00	0.00	0.00	9.70	0.00	0.00	
MW-7	01/06/03	**1,020.00**	1.00	**2,290.00**	**16,940.00**	1.00	**826.00**	5.00	**1.70**	21,084.70
	04/02/03	**240.00**	110.00	120.00	38.00	**210.00**	**120.00**	**240.00**	**1.70**	1,079.70
	08/26/03	**740.00**	250.00	110.00	1,600.00	**50.00**	**250.00**	**160.00**	0.09	3,160.09
	01/08/04	**630.00**	**13,000.00**	**2,400.00**	**25,000.00**	**100.00**	**1,000.00**	5.00	**3.50**	42,138.50
	05/10/04	**700.00**	**10,000.00**	**3,400.00**	**23,000.00**	**200.00**	**1,000.00**	5.00	**6.80**	38,311.80
	08/17/04	**23.00**	49.00	21.00	140.00	<5.0	<25	**19.00**	<0.010	252.00
	01/14/05	**565.00**	**9,180.00**	**3,570.00**	**24,400.00**	<1.0	**1,370.00**	**24.00**	**1.75**	39,110.75
	06/29/05	**582.00**	**7,030.00**	**3,480.00**	**23,100.00**	<100	**890.00**	<5.0	**1.70**	35,083.70
	09/16/05	**610.00**	**5,770.00**	**3,280.00**	**21,600.00**	<50	**1,040.00**	NA	**1.90**	32,301.90
	02/28/06	**178.00**	**4,760.00**	**2,480.00**	**19,300.00**	<100	**562.00**	NA	**1.20**	27,281.20
	06/21/06	**500.00**	**3,890.00**	**3,190.00**	**23,200.00**	<100	**916.00**	**23.90**	**0.86**	31,720.76
	10/04/06	**415.00**	**4,640.00**	**3,360.00**	**21,200.00**	<100	**781.00**	**22.60**	**1.60**	30,420.20
	12/04/06	**91.30**	**8.20**	**55.00**	**294.00**	<5.0	**16.30**	NA	0.25	465.05
	03/28/07	**420.00**	**2,810.00**	**2,390.00**	**17,900.00**	<100	**818.00**	NA	0.73	24,338.73
	06/28/07	**148.00**	**4,300.00**	**2,910.00**	**2,110.00**	<100	**965.00**	NA	1.30	10,434.30
	SSTL	6.00	1,212.00	860.00	12,123.00	48.00	31.00	18.00	0.86	
	> SSTL	142.00	3,088.00	2,060.00	0.00	0.00	934.00	0.00	0.64	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-8	01/06/03	**6,770.00**	**84,600.00**	**3,560.00**	**24,740.00**	7.30	**362.00**	**24.00**	**1.90**	120,065.20
	04/02/03	**8,600.00**	**46,000.00**	**3,500.00**	**23,000.00**	**200.00**	**1,000.00**	**49.00**	**190.00**	82,539.00
	08/26/03	**3,800.00**	**10,000.00**	1,200.00	6,800.00	**100.00**	**500.00**	**81.00**	**58.00**	22,539.00
	01/08/04	**5,600.00**	**22,000.00**	**3,400.00**	**20,000.00**	**100.00**	**1,300.00**	**18.00**	**4.70**	52,422.70
	05/10/04	**4,500.00**	**18,000.00**	1,600.00	**18,000.00**	**200.00**	**1,000.00**	**67.00**	**6.30**	43,373.30
	08/17/04	**10,000.00**	**37,000.00**	**2,900.00**	**20,000.00**	<1,000	<5,000	**27.00**	**63.00**	69,990.00
	01/14/05	**6,780.00**	**38,200.00**	**4,340.00**	**28,200.00**	<1.0	**1,600.00**	<5.0	**2.33**	79,122.33
	06/29/05	**6,490.00**	**31,000.00**	**4,320.00**	**27,500.00**	<500	<1,000	<5.0	**2.60**	69,312.60
	09/16/05	**14,300.00**	**50,000.00**	**4,640.00**	**28,000.00**	54.60	**1,040.00**	NA	**22.20**	98,056.80
	02/28/06	**17,100.00**	**52,500.00**	**3,950.00**	**21,800.00**	<500	<1000	NA	**17.00**	95,367.00
	06/21/06	**11,600.00**	**44,300.00**	**3,860.00**	**22,000.00**	<1,000	<2,000	<10	**6.70**	81,766.70
	10/04/06	**18,500.00**	**56,900.00**	**4,480.00**	**24,900.00**	<1,000	<2000	33.50	**16.50**	104,830.00
	12/04/06	**15,900.00**	**51,800.00**	**3,690.00**	**22,400.00**	<1,000	<2000	NA	**15.60**	93,805.60
	03/28/07	**17,600.00**	**56,400.00**	**4,390.00**	**25,900.00**	<1,000	<2000	NA	**21.50**	104,311.50
	06/28/07	**14,800.00**	**45,000.00**	**3,880.00**	**24,200.00**	<1,000	<2000	NA	**36.10**	87,916.10
	SSTL	**12.00**	**2,424.00**	**1,700.00**	**16,000.00**	**96.00**	**62.00**	**4.00**	**0.48**	
	> SSTL	14,788.00	42,576.00	2,180.00	8,200.00	0.00	0.00	0.00	35.62	
MW-9	01/06/03	<1.0	2.20	5.70	579.00	<1.0	**109.00**	**24.00**	<0.020	719.90
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	05/10/04	Well Not Located								0.00
	08/17/04	**540.00**	**12,000.00**	**2,800.00**	**23,000.00**	<500	<2,500	**19.00**	**8.40**	38,367.40
	01/14/05	Removed from Sampling Schedule								0.00
	RBSL	**6.00**	**1,000.00**	**700.00**	**10,000.00**	**40.00**	**25.00**	**15.00**	**0.06**	
MW-10	01/06/03	**7,980.00**	**24,900.00**	**3,540.00**	18,180.00	25.00	**299.00**	**35.00**	**78.00**	55,037.00
	04/02/03	**11,000.00**	**23,000.00**	**2,400.00**	13,000.00	**200.00**	**1,000.00**	**49.00**	**190.00**	50,839.00
	08/26/03	**12,000.00**	**33,000.00**	**3,200.00**	17,000.00	**250.00**	**1,200.00**	**210.00**	**450.00**	67,310.00
	01/08/04	**4,200.00**	**14,000.00**	**2,400.00**	12,000.00	**100.00**	**500.00**	6.30	**100.00**	33,306.30
	05/10/04	**8,600.00**	**21,000.00**	**2,400.00**	14,000.00	<250	<1,200	5.70	**210.00**	46,215.70
	08/17/04	**3,500.00**	**16,000.00**	**2,200.00**	14,000.00	<500	<2,500	**25.00**	**67.00**	35,792.00
	01/14/05	**10,200.00**	**34,600.00**	**3,150.00**	**18,400.00**	<1.0	38.00	20.00	**162.00**	66,560.00
	06/29/05	**9,040.00**	**26,000.00**	**3,040.00**	16,600.00	<500	<1,000	6.30	**115.00**	54,801.30
	09/16/05	**8,120.00**	**25,900.00**	**3,130.00**	17,000.00	<200	<400	NA	**143.00**	54,293.00
	02/28/06	**2,410.00**	**9,780.00**	**1,840.00**	7,910.00	<200	<400	NA	**15.90**	21,955.90
	06/21/06	**2,700.00**	**11,800.00**	**2,060.00**	10,000.00	<200	<400	11.10	**23.60**	26,594.70
	10/04/06	**3,400.00**	**13,900.00**	**2,130.00**	10,500.00	<250	<500	**50.90**	**43.40**	30,024.30
	12/04/06	**2,950.00**	**11,900.00**	**2,130.00**	10,100.00	<250	<500	NA	**38.00**	27,118.00
	03/28/07	**2,180.00**	**8,510.00**	**1,880.00**	8,060.00	<100	<200	NA	**18.70**	20,648.70
	06/28/07	**2,960.00**	**11,000.00**	**2,560.00**	11,100.00	<100	239.00	NA	**30.20**	27,889.20
	SSTL	**9.00**	**1,819.00**	**1,274.00**	**18,185.00**	**73.00**	**46.00**	**21.00**	**0.00**	
	> SSTL	2,951.00	9,181.00	1,286.00	0.00	0.00	0.00	0.00	21.20	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-11	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	**7.80**	**6.00**	<0.020	13.80
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26.00**	<0.010	26.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**33.00**	**0.29**	33.29
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**46.00**	<0.010	46.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17.00**	<0.010	17.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**10.00**	<0.010	10.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**37.10**	<0.019	37.10
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.07**	0.07
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**30.10**	<0.019	30.10
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**12.40**	<0.019	12.40
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**5.00**	**0.020**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-12	01/06/03	**720.00**	**17.20**	13.40	**1,550.00**	<1.0	**113.00**	6.00	**12.00**	2,431.60
	04/02/03	**12.00**	<5.0	<1.0	1.80	<1.0	<5.0	**38.00**	0.24	52.04
	08/26/03	**51.00**	<5.0	<1.0	72.00	<1.0	5.50	**37.00**	0.37	165.87
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	0.015	0.015
	05/10/04	**23.00**	<5.0	<1.0	43.00	<1.0	<5.0	6.80	0.11	72.91
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**12.00**	0.11	12.11
	01/14/05	**74.20**	<1.0	<1.0	67.60	<1.0	<5.0	6.00	0.23	148.03
	06/29/05	**28.40**	<1.0	<1.0	10.80	<1.0	<2.0	<5.0	0.027	39.227
	09/16/05	Well Not Located								0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	NA	0.018	0.018
	06/21/06	**7.20**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	7.20
	10/04/06	**17.70**	<1.0	<1.0	<3.0	<1.0	<2.0	**12.10**	0.02	29.82
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.03	0.03
	03/28/07	**9.00**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.02	9.02
	06/28/07	**7.20**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.02	7.20
	SSTL	**7.00**	**5.00**	**68.00**	**730.00**	**5.00**	**36.00**	**7.00**	**7.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-13	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	1.30	<5.0	<0.020	1.30
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**40.00**	<0.010	40.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45.00**	<0.010	45.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**10.90**	<0.018	10.90
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	21.00	<0.019	21.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	5.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-14	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**39.00**	<0.010	39.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100.00**	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45.00**	<0.010	45.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**19.00**	<0.010	19.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**15.00**	<0.020	15.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**6.40**	<0.018	6.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**5.10**	<0.019	5.10
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**NA**	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**NA**	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**NA**	0.042	0.042
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	5.00	0.010	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-15	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	9.00	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120.00**	<0.010	120.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**48.00**	<0.010	48.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26.00**	<0.010	26.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	8.00	<0.020	8.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	7.50	<0.018	7.50
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.038	0.038
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.032	0.032
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.046	0.046
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.50	**0.900**	9.400
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.110**	0.110
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.076**	0.076
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.020	0.000
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.050	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-16	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	18.00	<0.020	18.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	140.00	<0.010	140.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	13.00	<0.010	13.00
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
MW-17	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	**44.00**	<0.020	44.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17.00**	<0.010	17.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**42.00**	<0.010	42.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.020	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	7.30	<0.010	7.30
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	9.00	<0.020	9.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.40	<0.019	5.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.024**	0.024
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	**0.021**	0.021
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	12.00	**0.026**	12.026
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.031**	0.031
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.034**	0.034
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.02	0.000
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.011	
MW-18	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**50.00**	<0.010	50.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100.00**	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**97.00**	<0.010	97.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.90	<0.010	9.90
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**17.00**	<0.020	17.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.70	<0.018	8.70
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	9.10	<0.019	9.10
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	11.50	<0.019	11.50
	12/04/06	Well Not Located								
	03/28/07	Well Not Located								
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.120	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-19	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	6.00	<0.020	6.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18.00**	<0.010	18.00
	01/08/04	<1.0	<5.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18.00**	<0.010	18.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	Well Dry								0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.020	0.00
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**15.00**	**0.020**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-20	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	11.00	<0.020	11.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	130.00	<0.010	130.00
	05/10/04	Removed from Sampling Schedule								
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	
TW-1	01/06/03	3,380.00	1,510.00	1,860.00	9,370.00	25.00	160.00	6.00	5.20	16,316.20
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	2,000.00	2,500.00	1,100.00	5,800.00	50.00	250.00	5.00	0.38	11,705.38
	05/10/04	Well Not Located								0.00
	08/17/04	67.00	<50	<10	59.00	<10	<50	30.00	0.52	156.52
	01/14/05	700.00	7.80	82.90	1,700.00	8.10	79.80	<5.0	0.47	2,579.07
	06/29/05	400.00	5.30	22.60	759.00	8.60	72.80	<5.0	0.41	1,268.71
	09/16/05	457.00	13.20	13.20	989.00	<10	60.80	NA	0.77	1,533.97
	02/28/06	95.60	13.30	<2.0	19.20	41.60	<4.0	NA	1.30	171.00
	06/21/06	986.00	11.80	105.00	1,980.00	14.20	153.00	<5.0	0.56	3,250.56
	10/04/06	1,090.00	23.30	174.00	2,530.00	<20	83.20	<5.0	1.20	3,901.70
	12/04/06	502.00	<20	67.00	1,540.00	<20	54.00	NA	0.90	2,163.90
	03/28/07	576.00	23.50	87.50	1,980.00	<10	83.20	NA	1.00	2,751.20
	06/28/07	401.00	15.60	60.50	1,070.00	<10	45.80	NA	0.68	1,593.58
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
TW-2	01/06/03	6,620.00	6,860.00	620.00	4,110.00	50.20	160.00	6.00	5.20	18,431.40
	04/02/03	3,300.00	1,500.00	220.00	2,000.00	50.00	250.00	10.00	1.10	7,331.10
	08/26/03	3,000.00	450.00	79.00	1,700.00	10.00	160.00	6.80	0.35	5,406.15
	01/08/04	2,800.00	460.00	14.00	1,000.00	22.00	34.00	5.40	1.10	4,336.50
	05/10/04	3,700.00	640.00	160.00	1,800.00	5.00	170.00	<5.0	1.20	6,476.20
	08/17/04	1,400.00	<500	<100	300.00	<100	<500	5.40	2.20	1,707.60
	01/14/05	3,100.00	605.00	175.00	1,490.00	31.90	172.00	<5.0	0.59	5,574.49
	06/29/05	3,670.00	241.00	148.00	1,710.00	16.10	228.00	<5.0	0.40	6,013.50
	09/16/05	3,640.00	876.00	237.00	1,010.00	36.90	160.00	NA	0.86	5,860.76
	02/28/06	529.00	17.20	22.00	1,130.00	<10	31.10	NA	0.34	1,729.64
	06/21/06	4,060.00	1,430.00	320.00	1,890.00	51.20	258.00	<5.0	1.00	8,000.20
	10/04/06	2,390.00	778.00	116.00	581.00	59.80	<100	<5.0	1.30	3,926.10
	12/04/06	1,580.00	1,040.00	76.00	463.00	66.00	<100	NA	0.86	3,225.85
	03/28/07	1,730.00	1,860.00	158.00	997.00	129.00	102.00	NA	0.49	4,976.49
	06/28/07	23,900.00	41,700.00	3,220.00	17,300.00	793.00	607.00	NA	254.00	87,774.00
	SSTL	5.00	5.00	5.00	180.00	5.00	10.00	2.00	0.05	
	> SSTL	23,895.00	41,692.00	3,215.00	17,120.00	788.00	0.00	0.00	1.25	
TW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	8.90	<5.0	0.13	9.03
	04/02/03	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<5.0	0.03	0.031
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<0.010	0.00
	05/10/04	2.90	11.00	1.80	12.00	<1.0	<5.0	<5.0	0.05	27.75
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	0.04	0.04
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.08	0.077
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.04	0.044
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	2.00	0.230	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
Crook WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**10.00**	<0.020	10.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**9.80**	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	**12.00**	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	**400.00**	<1.0	<1.0	**110.00**	<1.0	**12.00**	<5.0	2.24	524.24
post		**22.00**	<1.0	<1.0	3.20	<1.0	<5.0	<5.0	0.09	25.29
pre	06/29/05	**193.00**	BDL	BDL	**69.90**	BDL	**9.60**	NA	NA	272.50
post		4.20	BDL	BDL	3.70	BDL	BDL	NA	NA	7.90
pre	09/16/05	**12.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	12.646
post		**342.00**	<10	<10	<30	<10	<20	NA	3.80	345.80
pre	02/28/06	Not Sampled								0.00
post										0.00
pre	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.041	0.041
post		Not Sampled								0.00
pre	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.053	0.053
post		Not Sampled								0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.041	0.041
		Not Sampled								
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.031	0.031
		Not Sampled								
pre	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.035	0.035
post		Not Sampled								
	SSTL	**5.00**	**2.00**	**2.00**	**26.00**	**2.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Swift WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**10.00**	<0.020	10.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**9.80**	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	**12.00**	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	**400.00**	<1.0	<1.0	**110.00**	<1.0	**12.00**	<5.0	2.24	524.24
post		**22.00**	<1.0	<1.0	**3.20**	<1.0	<5.0	<5.0	0.09	25.29
pre	06/29/05	**193.00**	BDL	BDL	**69.90**	BDL	**9.60**	NA	NA	272.50
post		**4.20**	BDL	BDL	**3.70**	BDL	ND	NA	NA	7.90
pre	09/16/05	**12.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.046	12.646
post		**342.00**	<10	<10	<30	<10	<20	NA	3.80	345.80
pre	02/28/06	**169.00**	<1.0	<1.0	**88.60**	<1.0	**9.30**	NA	NA	266.90
post		**7.20**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	7.20
pre	06/21/06	**182.00**	<1.0	<1.0	**114.00**	<1.0	**13.80**	<5.0	1.30	311.10
post		**9.30**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.049	9.349
pre	10/04/06	**86.40**	<1.0	<1.0	**62.20**	<2.0	**6.00**	<5.0	1.90	156.50
post		**30.10**	<1.0	<1.0	**10.40**	<1.0	<2.0	<5.0	0.180	40.680
pre	12/04/06	**81.20**	<1.0	<1.0	**100.00**	<1.0	11.30	NA	2.800	195.300
post		**9.20**	<1.0	<1.0	<1.0	<1.0	<1.0	NA	0.07	9.272
pre	03/28/07	**24.80**	<1.0	<1.0	**38.50**	<1.0	5.30	NA	0.760	69.360
post		**8.10**	<1.0	<1.0	<1.0	<1.0	<1.0	NA	0.04	8.144
pre	06/28/07	**443.00**	<1.0	<1.0	**155.00**	<1.0	21.10	NA	2.400	621.500
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	**2.00**	**2.00**	**2.00**	**2.00**	**5.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	28.10	0.00	0.00	8.40	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
Hill WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**9.00**	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**22.00**	<0.010	22.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**6.10**	<0.010	6.10
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
pre	01/14/05	**2.80**	<1.0	<1.0	<1.0	<1.0	<5.0	**10.00**	0.11	12.91
post		<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
pre	06/29/05	**2.40**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.19	2.59
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.06	0.063
pre	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	0.051
post		**2.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.16	2.76
pre	02/28/06	**9.40**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	9.40
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	0.00
pre	06/21/06	**11.10**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.35	11.45
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.019	0.019
pre	10/04/06	**68.10**	<1.0	<1.0	8.50	<1.0	<2.0	<5.0	0.43	77.03
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.020	0.000
pre	12/04/06	**26.10**	<1.0	<1.0	3.30	<1.0	<2.0	NA	0.36	28.76
post		1.40	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.029	1.429
pre	03/28/07	**24.00**	<1.0	<1.0	3.50	<1.0	<2.0	NA	0.36	27.86
post	04/02/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.000
pre	06/28/07	59.30	<1.0	<1.0	10.90	<1.0	<2.0	NA	0.450	70.650
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.000
	SSTL	**2.00**	**2.00**	**2.00**	**2.00**	**5.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Smith WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**5.20**	<0.010	5.20
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120.00**	<0.010	120.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**41.00**	<0.010	41.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**51.00**	<0.020	51.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**57.40**	<0.018	57.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	Not Sampled								0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	**2.00**	**2.00**	**2.00**	**2.00**	**5.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL MASS										**286,636.387**
TOTAL SSTL MASS		**117.00**	**10,972.00**	**7,769.00**	**80,330.00**	**603.00**	**391.00**	**199.00**	**53.33**	**100,082.00**
INITIAL MASS ABOVE SSTL										**217,876.56**
CURRENT MASS ABOVE SSTL										**225,953.981**
PERCENT TOTAL MASS REDUCTION ABOVE SSTL										**-3.707**

µg/l - micrograms per liter
ND = Not Detected
NE = Not Established
NA = Not Analyzed
RBSL = Risk Based Screen Level
SSTL = Site Specific Target Levels
Bold denotes concentrations over their respective SSTL or RBSL
* = 09/16/05 Sampling Event SSTL Data Utilized For Reduction Calculation

- Concentration Reduction Calculation is as follows:

APPENDIX C
Field Data Sheets

SEI Environmental

SC Monitoring Well Gauging Data Sheet

Site Name: Smith Grocery WO# 300401

Date 6·27·07

Well ID	Total Depth (feet)	Well Dia. (in.)	Depth to Product (feet)	Product Thickness (feet)	Depth to Water (feet)	Notes
MW-1	35.00				28.30	1021
MW-2	38.00				31.86	956
MW-3	35.00				28.94	Gauge Only
MW-4	27.00				CNL	Gauge Only
MW-5	30.00				26.96	Gauge Only
MW-6	37.00				31.92	1037
MW-7	36.00				30.58	1051
MW-8	38.00				32.06	982
MW-9	36.00				CNL	Gauge Only
MW-10	44.00				37.51	1134
MW-11	44.00				38.18	1146
MW-12	44.00				37.79	1427
MW-13	47.00				40.97	1200
MW-14	50.00				42.38	1315
MW-15	50.00				41.43	1304
MW-16	37.00				30.29	Gauge Only
MW-17	40.00				34.83	1414
MW-18	46.00				[illegible]	← 40.50 | 1402
MW-19	50.00				42.91	1352
MW-20	35.00				CNL	Gauge Only
TW-1	61.00				31.99	1012
TW-2	88.00				31.95	945
TW-3	71.00				26.81	1126

WSW Samples: Crook (Pre/Post), Hill (Pre/Post), Swift (Pre/Post), & Smith (Pre/Post)

Analysis: EPA Method 8260B for BTEX, MTBE and Naphthalene
EPA Method 8011 for EDB
LEAD

Swift Pre ⇒ 1252
Post ⇒ 1240

Smith Pre ⇒ 1108

Crook Pre ⇒ 1221

Hill Pre ⇒ 1341
Post ⇒ 1327

APPENDIX D
Laboratory Analytical Results and Chain-of-Custody

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

07/16/07

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F50782

Sampling Date: 06/27/07

Report to:

SEI Environmental-Raleigh

cboggs@sei-environmental.com

ATTN: Chris Boggs

Total number of pages in report: 56

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Table of Contents

Sections:

Section 1: Sample Summary 3

Section 2: Sample Results 5

2.1: F50782-1: MW-1 6
2.2: F50782-2: MW-2 8
2.3: F50782-3: MW-6 10
2.4: F50782-4: MW-7 12
2.5: F50782-5: MW-8 14
2.6: F50782-6: MW-10 16
2.7: F50782-7: MW-11 18
2.8: F50782-8: MW-12 20
2.9: F50782-9: MW-13 22
2.10: F50782-10: MW-14 24
2.11: F50782-11: MW-15 26
2.12: F50782-12: MW-17 28
2.13: F50782-13: MW-18 30
2.14: F50782-14: MW-19 32
2.15: F50782-15: TW-1 34
2.16: F50782-16: TW-2 36
2.17: F50782-17: TW-3 38
2.18: F50782-18: SMITH PRE 40
2.19: F50782-19: CROOK PRE 42
2.20: F50782-20: SWIFT PRE 44
2.21: F50782-21: SWIFT POST 46
2.22: F50782-22: HILL PRE 48
2.23: F50782-23: HILL POST 50

Section 3: Misc. Forms 52

3.1: Chain of Custody 53

Sample Summary

SEI-Columbia, SC

Job No: F50782

Smith's Grocery; York, SC
Project No: 300401

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F50782-1	06/27/07	10:21	RR	06/29/07	AQ	Ground Water	MW-1
F50782-2	06/27/07	09:56	RR	06/29/07	AQ	Ground Water	MW-2
F50782-3	06/27/07	10:37	RR	06/29/07	AQ	Ground Water	MW-6
F50782-4	06/27/07	10:51	RR	06/29/07	AQ	Ground Water	MW-7
F50782-5	06/27/07	09:32	RR	06/29/07	AQ	Ground Water	MW-8
F50782-6	06/27/07	11:34	RR	06/29/07	AQ	Ground Water	MW-10
F50782-7	06/27/07	11:46	RR	06/29/07	AQ	Ground Water	MW-11
F50782-8	06/27/07	14:27	RR	06/29/07	AQ	Ground Water	MW-12
F50782-9	06/27/07	12:00	RR	06/29/07	AQ	Ground Water	MW-13
F50782-10	06/27/07	13:15	RR	06/29/07	AQ	Ground Water	MW-14
F50782-11	06/27/07	13:04	RR	06/29/07	AQ	Ground Water	MW-15
F50782-12	06/27/07	14:14	RR	06/29/07	AQ	Ground Water	MW-17
F50782-13	06/27/07	14:02	RR	06/29/07	AQ	Ground Water	MW-18

Sample Summary
(continued)

SEI-Columbia, SC

Job No: F50782

Smith's Grocery; York, SC
Project No: 300401

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F50782-14	06/27/07	13:52	RR	06/29/07	AQ	Ground Water	MW-19
F50782-15	06/27/07	10:12	RR	06/29/07	AQ	Ground Water	TW-1
F50782-16	06/27/07	09:45	RR	06/29/07	AQ	Ground Water	TW-2
F50782-17	06/27/07	11:26	RR	06/29/07	AQ	Ground Water	TW-3
F50782-18	06/27/07	11:08	RR	06/29/07	AQ	Ground Water	SMITH PRE
F50782-19	06/27/07	12:21	RR	06/29/07	AQ	Ground Water	CROOK PRE
F50782-20	06/27/07	12:52	RR	06/29/07	AQ	Ground Water	SWIFT PRE
F50782-21	06/27/07	12:40	RR	06/29/07	AQ	Ground Water	SWIFT POST
F50782-22	06/27/07	13:41	RR	06/29/07	AQ	Ground Water	HILL PRE
F50782-23	06/27/07	13:27	RR	06/29/07	AQ	Ground Water	HILL POST

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	F50782-1	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0020136.D	5	07/09/07	MM	n/a	n/a	VN859
Run #2	M0020907.D	10	07/06/07	MM	n/a	n/a	VM858

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	235	5.0	ug/l	
108-88-3	Toluene	186	5.0	ug/l	
100-41-4	Ethylbenzene	343	5.0	ug/l	
1330-20-7	Xylene (total)	1900 [a]	30	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	ug/l	
91-20-3	Naphthalene	76.6	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%	101%	87-116%
17060-07-0	1,2-Dichloroethane-D4	110%	102%	76-127%
2037-26-5	Toluene-D8	101%	101%	86-112%
460-00-4	4-Bromofluorobenzene	109%	106%	84-120%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	F50782-1	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD40410.D	1	07/06/07	AA	07/05/07	OP21327	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	36.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	126%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	F50782-2	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0020126.D	500	07/09/07	MM	n/a	n/a	VN859
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	20600	500	ug/l	
108-88-3	Toluene	29600	500	ug/l	
100-41-4	Ethylbenzene	2880	500	ug/l	
1330-20-7	Xylene (total)	14200	1500	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1340	500	ug/l	
91-20-3	Naphthalene	ND	1000	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		87-116%
17060-07-0	1,2-Dichloroethane-D4	108%		76-127%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	104%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	F50782-2	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40462.D	1000	07/11/07	AA	07/05/07	OP21327	GDD1109
Run #2							

	Initial Volume	Final Volume
Run #1	37.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	463	19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	0% [b]		63-137%

(a) All hits confirmed by dual column analysis.
(b) Outside control limits due to dilution.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	F50782-3	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0020157.D	2	07/10/07	MM	n/a	n/a	VN860
Run #2	M0020965.D	5	07/10/07	MM	n/a	n/a	VM860

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	190	2.0	ug/l	
108-88-3	Toluene	12.5	2.0	ug/l	
100-41-4	Ethylbenzene	126	2.0	ug/l	
1330-20-7	Xylene (total)	382 [a]	15	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	ug/l	
91-20-3	Naphthalene	40.7	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	100%	87-116%
17060-07-0	1,2-Dichloroethane-D4	105%	91%	76-127%
2037-26-5	Toluene-D8	94%	96%	86-112%
460-00-4	4-Bromofluorobenzene	91%	94%	84-120%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	F50782-3	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40463.D	1	07/11/07	AA	07/05/07	OP21327	GDD1109
Run #2							

	Initial Volume	Final Volume
Run #1	36.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	0.065	0.019	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	F50782-4	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0020128.D	100	07/09/07	MM	n/a	n/a	VN859
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	148	100	ug/l	
108-88-3	Toluene	4300	100	ug/l	
100-41-4	Ethylbenzene	2910	100	ug/l	
1330-20-7	Xylene (total)	21100	300	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/l	
91-20-3	Naphthalene	965	200	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		87-116%
17060-07-0	1,2-Dichloroethane-D4	104%		76-127%
2037-26-5	Toluene-D8	96%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	F50782-4	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40464.D	2	07/11/07	AA	07/05/07	OP21327	GDD1109
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	1.3	0.038	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	113%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	F50782-5	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0020129.D	1000	07/09/07	MM	n/a	n/a	VN859
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	14800	1000	ug/l	
108-88-3	Toluene	45000	1000	ug/l	
100-41-4	Ethylbenzene	3880	1000	ug/l	
1330-20-7	Xylene (total)	24200	3000	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1000	ug/l	
91-20-3	Naphthalene	ND	2000	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		87-116%
17060-07-0	1,2-Dichloroethane-D4	102%		76-127%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	103%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	F50782-5	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40465.D	50	07/11/07	AA	07/05/07	OP21327	GDD1109
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	36.1	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	0% [b]		63-137%

(a) All hits confirmed by dual column analysis.
(b) Outside control limits due to dilution.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	F50782-6	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0020911.D	100	07/06/07	MM	n/a	n/a	VM858
Run #2	N0020135.D	200	07/09/07	MM	n/a	n/a	VN859

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	2960	100	ug/l	
108-88-3	Toluene	11000 [a]	200	ug/l	
100-41-4	Ethylbenzene	2560	100	ug/l	
1330-20-7	Xylene (total)	11100	300	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/l	
91-20-3	Naphthalene	239	200	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	107%	87-116%
17060-07-0	1,2-Dichloroethane-D4	102%	111%	76-127%
2037-26-5	Toluene-D8	100%	93%	86-112%
460-00-4	4-Bromofluorobenzene	106%	103%	84-120%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	F50782-6	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40466.D	50	07/11/07	AA	07/05/07	OP21327	GDD1109
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	30.2	0.96	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	0% [b]		63-137%

(a) All hits confirmed by dual column analysis.
(b) Outside control limits due to dilution.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	F50782-7	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0020141.D	1	07/09/07	MM	n/a	n/a	VN859
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		87-116%
17060-07-0	1,2-Dichloroethane-D4	114%		76-127%
2037-26-5	Toluene-D8	91%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	F50782-7	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD40416.D	1	07/07/07	AA	07/05/07	OP21327	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	36.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	83%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	F50782-8	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0020142.D	1	07/09/07	MM	n/a	n/a	VN859
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	7.2	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		87-116%
17060-07-0	1,2-Dichloroethane-D4	108%		76-127%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	F50782-8	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40421.D	1	07/07/07	AA	07/05/07	OP21327	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	35.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	F50782-9	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0020143.D	1	07/09/07	MM	n/a	n/a	VN859
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		87-116%
17060-07-0	1,2-Dichloroethane-D4	106%		76-127%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	103%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	F50782-9	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD40422.D	1	07/07/07	AA	07/05/07	OP21327	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	78%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14		
Lab Sample ID:	F50782-10	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0020144.D	1	07/09/07	MM	n/a	n/a	VN859
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		87-116%
17060-07-0	1,2-Dichloroethane-D4	102%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	100%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14		
Lab Sample ID:	F50782-10	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40423.D	1	07/07/07	AA	07/05/07	OP21327	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	35.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	0.042	0.020	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	78%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15		
Lab Sample ID:	F50782-11	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0020154.D	1	07/10/07	MM	n/a	n/a	VN860
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		87-116%
17060-07-0	1,2-Dichloroethane-D4	105%		76-127%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	96%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15		
Lab Sample ID:	F50782-11	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD40424.D	1	07/07/07	AA	07/05/07	OP21327	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	34.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	70%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-17		
Lab Sample ID:	F50782-12	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0020155.D	1	07/10/07	MM	n/a	n/a	VN860
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		87-116%
17060-07-0	1,2-Dichloroethane-D4	103%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	95%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-17		
Lab Sample ID:	F50782-12	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40425.D	1	07/07/07	AA	07/05/07	OP21327	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	35.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	82%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-18		
Lab Sample ID:	F50782-13	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F022137.D	1	07/09/07	WJ	n/a	n/a	VF397
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		87-116%
17060-07-0	1,2-Dichloroethane-D4	98%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	89%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-19		
Lab Sample ID:	F50782-14	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD40427.D	1	07/07/07	AA	07/05/07	OP21327	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	35.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	76%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-1		
Lab Sample ID:	F50782-15	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F022139.D	10	07/09/07	WJ	n/a	n/a	VF397
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	401	10	ug/l	
108-88-3	Toluene	15.6	10	ug/l	
100-41-4	Ethylbenzene	60.5	10	ug/l	
1330-20-7	Xylene (total)	1070	30	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	ug/l	
91-20-3	Naphthalene	45.8	20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		87-116%
17060-07-0	1,2-Dichloroethane-D4	105%		76-127%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	88%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-1		
Lab Sample ID:	F50782-15	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40433.D	1	07/07/07	AA	07/05/07	OP21328	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	0.68	0.019	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-2		
Lab Sample ID:	F50782-16	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F022173.D	250	07/10/07	WJ	n/a	n/a	VF399
Run #2	F022179.D	500	07/11/07	WJ	n/a	n/a	VF400

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	23900	250	ug/l	
108-88-3	Toluene	41700 [a]	500	ug/l	
100-41-4	Ethylbenzene	3220	250	ug/l	
1330-20-7	Xylene (total)	17300	750	ug/l	
1634-04-4	Methyl Tert Butyl Ether	793	250	ug/l	
91-20-3	Naphthalene	607	500	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%	101%	87-116%
17060-07-0	1,2-Dichloroethane-D4	110%	106%	76-127%
2037-26-5	Toluene-D8	91%	94%	86-112%
460-00-4	4-Bromofluorobenzene	84%	90%	84-120%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-2		
Lab Sample ID:	F50782-16	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40470.D	500	07/11/07	AA	07/05/07	OP21328	GDD1109
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	254	9.7	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	0% [b]		63-137%

(a) All hits confirmed by dual column analysis.
(b) Outside control limits due to dilution.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-3		
Lab Sample ID:	F50782-17	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F022170.D	1	07/10/07	WJ	n/a	n/a	VF399
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		87-116%
17060-07-0	1,2-Dichloroethane-D4	103%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	91%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-3		
Lab Sample ID:	F50782-17	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD40435.D	1	07/07/07	AA	07/05/07	OP21328	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	81%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SMITH PRE		
Lab Sample ID:	F50782-18	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F022171.D	1	07/10/07	WJ	n/a	n/a	VF399
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		87-116%
17060-07-0	1,2-Dichloroethane-D4	103%		76-127%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	92%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SMITH PRE		
Lab Sample ID:	F50782-18	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD40436.D	1	07/07/07	AA	07/05/07	OP21328	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	37.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	79%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CROOK PRE		
Lab Sample ID:	F50782-19	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F022143.D	1	07/09/07	WJ	n/a	n/a	VF397
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		87-116%
17060-07-0	1,2-Dichloroethane-D4	102%		76-127%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	95%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CROOK PRE		
Lab Sample ID:	F50782-19	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40439.D	1	07/07/07	AA	07/05/07	OP21328	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	37.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	0.035	0.019	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	81%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SWIFT PRE		
Lab Sample ID:	F50782-20	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F022144.D	1	07/09/07	WJ	n/a	n/a	VF397
Run #2	F022167.D	10	07/10/07	WJ	n/a	n/a	VF399

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	443 [a]	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	155	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	21.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	100%	87-116%
17060-07-0	1,2-Dichloroethane-D4	107%	103%	76-127%
2037-26-5	Toluene-D8	95%	94%	86-112%
460-00-4	4-Bromofluorobenzene	87%	89%	84-120%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SWIFT PRE		
Lab Sample ID:	F50782-20	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40469.D	5	07/11/07	AA	07/05/07	OP21328	GDD1109
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	2.4	0.096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SWIFT POST		
Lab Sample ID:	F50782-21	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F022172.D	1	07/10/07	WJ	n/a	n/a	VF399
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		87-116%
17060-07-0	1,2-Dichloroethane-D4	108%		76-127%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	92%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SWIFT POST		
Lab Sample ID:	F50782-21	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD40443.D	1	07/07/07	AA	07/05/07	OP21328	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	37.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	82%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HILL PRE		
Lab Sample ID:	F50782-22	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F022146.D	1	07/09/07	WJ	n/a	n/a	VF397
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	59.3	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	10.9	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		87-116%
17060-07-0	1,2-Dichloroethane-D4	103%		76-127%
2037-26-5	Toluene-D8	96%		86-112%
460-00-4	4-Bromofluorobenzene	91%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HILL PRE		
Lab Sample ID:	F50782-22	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD40444.D	1	07/07/07	AA	07/05/07	OP21328	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	37.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	0.45	0.019	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	88%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

ACCUTEST Laboratories

Report of Analysis

Client Sample ID:	HILL POST		
Lab Sample ID:	F50782-23	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F022147.D	1	07/09/07	WJ	n/a	n/a	VF397
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		87-116%
17060-07-0	1,2-Dichloroethane-D4	105%		76-127%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	90%		84-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HILL POST		
Lab Sample ID:	F50782-23	Date Sampled:	06/27/07
Matrix:	AQ - Ground Water	Date Received:	06/29/07
Method:	SW846 8011 SW846 8011	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD40445.D	1	07/07/07	AA	07/05/07	OP21328	GDD1108
Run #2							

	Initial Volume	Final Volume
Run #1	36.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	70%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST. 22255

CHAIN OF CUSTODY

4405 Vineland Rd., Suite C15
Orlando, FL 32811
407.425.6700, fax 407.425.0707

Accutest Job #: F50782
Accutest Control #:

Client Information

Name: SEI Environmental
Address: 5100 Reagan Dr., Suite 7
City: Charlotte State: NC Zip: 28206
Send Report to:
Phone #: 704-596-8624

Facility Information

Project Name: Smith Grocery
Location:
Project No.:
FAX #:

Analytical Information

Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Preservation HCl	Preservation NaOH	Preservation HNO3	Preservation H2SO4	Preservation NaHSO4	EPA method 8260B for BTEX, MTBE, & Naphthalene	EPA method 8011 for EDB
1 MW-1	6-27-07	1021	RR	GW	6	3				3	X	X
2 MW-2		956									X	X
3 MW-6		1027									X	X
4 MW-7		1051									X	X
5 MW-8		932									X	X
6 MW-10		1134									X	X
7 MW-11		1146									X	X
8 MW-12		1427									X	X
9 MW-13		1200									X	X
10 MW-14		1315									X	X

Turnaround Information

- [x] 21 Day Standard
- [ ] 14 Day
- [ ] 7 Days EMERGENCY
- [ ] Other _____ (Days)

Approved By:

RUSH TAT is for FAX data
Data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Zach C Smith	6-28-07	1 FX	2 FX	6/29/07 0900	2 Sonny Babitonia
3		3	4		4
5		5	Seal #	Preserved where applies ☐	On Ice ☑

0.4°C

Revised 09/2005 RS

ACCUTEST.

CHAIN OF CUSTODY

4405 Vineland Rd., Suite C15
Orlando, FL 32811
407.425.6700, fax 407.425.0707

Accutest Job #: F50782
Accutest Control #:

Client Information

Name: SEI Environmental
Address: 5100 Reagan Dr., Suite 7
City: Charlotte State: NC Zip: 28206
Send Report to:
Phone #: 704-596-8624

Facility Information

Project Name: Smith Grocery
Location:
Project No.
FAX #:

Analytical Information

Field ID / Point of Collection	Collection: Date	Time	Sampled By	Matrix	# of bottles	Preservation: HCL	Preservation: HNO3	Preservation: H2SO4	Preservation: Other	EPA method 8260B for BTEX, MTBE, & Naphthalene	EPA method 504.1 for EDB
11 MW-15	6/27/07	1304	BR	GW	6	3			3	X	X
12 MW-17		1414								X	X
13 MW-18		1402								X	X
14 MW-19		1352								X	X
15 TW-1		1012								X	X
16 TW-2		945								X	X
17 TW-3		1126								X	X
18 Smith Pre		1108								X	X
19 Creek Pre		1221								X	X

Turnaround Information

- [x] 21 Day Standard
- [ ] 14 Day
- [ ] 7 Days EMERGENCY
- [ ] Other _____ (Days)

Approved By:

RUSH TAT is for FAX data
Date unless previously approved.

Date Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Kenneth C. Smith	6/28/07	1 FX	2 FX	6/29/07 0900	2 Joanny Batista
3		3	4		4
5		5	Seal #	Preserved where applies ☐	On Ice: ☑

Revised 09/2005 RS

0.4°C

ACCUTEST.

CHAIN OF CUSTODY

4405 Vineland Rd., Suite C15
Orlando, FL 32811
407.425.6700, fax 407.425.0707

Accutest Job #: F50782
Accutest Control #:

Client Information	Facility Information	Analytical Information
Name: SEI Environmental	Project Name: Smith Grocery	
Address: 5100 Reagan Dr., Suite 7	Location:	
City: Charlotte State: NC Zip: 28206	Project No.:	
Send Report to:		
Phone #: 704-596-8624	FAX #:	

Field ID / Point of Collection	Collection: Date	Time	Sampled By	Matrix	# of bottles	Preservation: HCL	NaOH	HNO3	H2SO4	NaHSO4	Other	EPA method 8260B for BTEX, MTBE, + Naphthalene	EPA method 8011 for EDB
1 Swift Pre	6/27/07	1252	RR	GW	6	3					3	X	X	X
Swift Post		1240										X	X	X
2 Hill Pre		1241										X	X	X
3 Hill Post		1227										X	X	X

Turnaround Information

- [x] 21 Day Standard
- [ ] 14 Day
- [ ] 7 Days EMERGENCY
- [ ] Other _____ (Days)

Approved By:

RUSH TAT is for FAX data
Data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
Zach C. Smith	6/28/07	1 FX	2 FX	6/29/07 0900	2 Joany Bautista
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by Sampler:	Date Time:	Received By:	Cooler #	Preserved where applic.	On Ice:
5		5			

0.4°C

Revised 09/2005 RS

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F50782 CLIENT: SEI Environ. PROJECT: Smith Grocery

DATE/TIME RECEIVED: 6/29/07 0900 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 0.4c

METHOD OF DELIVERY: [FEDEX] UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 8536 3068 2273

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] TIMES ON COC DOES NOT MATCH LABEL(S)
- [ ] ID'S ON COC DOES NOT MATCH LABEL(S)
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

MISC. INFORMATION

NUMBER OF ENCORES ? Ø

NUMBER OF 5035 FIELD KITS ? Ø

NUMBER OR LAB FILTERED METALS ? Ø

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE JB 6/29/07 TECHNICIAN SIGNATURE/DATE 6/29/07 ASBD 10/03/06

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

AUG 15 2007

TONY & SUSAN HILL
3049 CLOVER CIR
YORK SC 29745

Re: **CASE Report Review**
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received August 6, 2007
York County

Dear Mr. & Mrs. Hill:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

UST PROGRAM
DOCKET # 3

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

AUG 15 2007

EVERETTE & JANET CROOK
3035 CLOVER CIR
YORK SC 29745

Re: **CASE Report Review**
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received August 6, 2007
York County

Dear Mr. & Mrs. Crook:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

UST PROGRAM
DOCKETING # 4

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

AUG 15 2007

GARY WIGGAM
3043 CLOVER CIR
YORK SC 29745

Re: **CASE Report Review**
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received August 6, 2007
York County

Dear Mr. Wiggam:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

UST PROGRAM 5
DOCKETING #

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

AUG 15 2007

FRONTIS HEMPHILL
2146 OLD MCKINNEY RD
YORK SC 29745

Re: **CASE Report Review**
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received August 6, 2007
York County

Dear Mr. Hemphill

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

AUG 15 2007

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: **CASE Report Review**
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received August 6, 2007
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the report submitted by SEI Environmental, Inc. SEI Environmental received Corrective Action Plan approval in September 2001. The UST Program is extremely concerned about the lack of progress at the site, but is encouraged by the initiation of PTS injections at the site. The next corrective action monitoring report is due on or before October 30, 2007.

Please remember that SEI is responsible for maintaining the granulated activated carbon units. For any well that has detection in post-GAC samples, the GAC filter should be changed immediately and such work documented in the submitted reports. SEI should establish a GAC filter change schedule such that the breakthrough is minimized. Documentation of all GAC filter changes should be included in future CASE Reports.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Chris Boggs, SEI Environmental, 130 Penmarc Dr., Ste 108, Raleigh, NC, 27603
Technical file

SEI
Environmental, Inc.

RECEIVED
NOV 26 2007
UNDERGROUND STORAGE
TANK PROGRAM

November 16, 2007

Ms. Debra L. Thoma, Hydrogeologist
South Carolina Department of Health and Environmental Control
Assessment & Corrective Action Section, Underground Storage Tank Program
2600 Bull Street
Columbia, South Carolina 29201

RE: Corrective Action System Evaluation Report
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Dear Ms. Thoma:

Please find enclosed the quarterly Corrective Action System Evaluation (C.A.S.E) Report for the September 12, 2007 groundwater sampling event at the above referenced site. If you have any questions or comments, please contact me at (919) 832-2535.

Sincerely,
SEI Environmental, Inc.

Chris L. Boggs, P.G.
Staff Scientist

cc: Ms. Louis Smith, Smith's Grocery

UST PROGRAM
DOCKETING # 8

CORRECTIVE ACTION SYSTEM EVALUATION REPORT
July 2007 through September 2007

Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

PREPARED FOR:

Ms. Louis Smith
Smith's Grocery
3176 Charlotte Highway
York, South Carolina 29745

PREPARED BY:

SEI ENVIRONMENTAL, INC.
130 Penmarc Drive, Suite 108
Raleigh, North Carolina 27603-2434
UST Site Rehabilitation Contractor No. 354

November 16, 2007

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: November 16, 2007
For Period Covering: June 28, 2007
Facility Name : Smith's Grocery
UST Permit Number: 09322
County: York
Latitude: N 35°02'30.59"

Monitoring Report Number: 13
to September 12, 2007
Street Address: 176 Charlotte Highway (49)
City: York, South Carolina
Zip Code: 29745
Longitude W 81°08'47.98"
:

Submitted by UST Owner/Operator:

Name: Louis Smith
Company: Smith's Grocery
Address: 3176 Charlotte Highway
City: York State: SC
Zip Code: 29745
Telephone: (803) 684-6289
SEI Project Number: 300401

Prepared by Consultant/Contractor:

Name: Chris L. Boggs, P.G.
Company: SEI Environmental, Inc.
Address: 130 Penmarc Drive, Suite 108
City: Raleigh State: NC
Zip Code: 27603
Telephone: (919) 832-2535
UST Site Rehabilitation Contractor No. 354

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: Chris L. Boggs, P.G.
SC Reg. No. 2101
Signature:
Date: 11/16/07

TABLE OF CONTENTS

LIMITATIONS iii
1.0 INTRODUCTION 1
2.0 FIELD MEASUREMENTS AND SAMPLING 1
2.1 GROUNDWATER SAMPLING 1
2.2 WATER SUPPLY WELL SAMPLING 2
3.0 LABORATORY ANALYTICAL RESULTS 3
3.1 GROUNDWATER ANALYTICAL RESULTS 3
3.2 WATER SUPPLY WELL ANALYTICAL RESULTS 3
3.3 SITE SPECIFIC TARGET LEVELS 3
4.0 REMEDIATION SYSTEM EFFECTIVENESS 4
5.0 CONCLUSIONS AND RECOMMENDATIONS 4

LIST OF TABLES

TABLE 1 Historical Groundwater Elevation and Product Thickness Data
TABLE 2 Historical Groundwater Analytical Results

LIST OF FIGURES

FIGURE 1 USGS Quadrangle Map
FIGURE 2 Site Map
FIGURE 3 Potentiometric Surface Map, September 12, 2007
FIGURE 4 Groundwater Chemicals of Concern Site Map, September 12, 2007

LIST OF APPENDICES

APPENDIX A Figures
APPENDIX B Tables
APPENDIX C Field Data Information Sheets for Groundwater Sampling
APPENDIX D Laboratory Reports and Chain-of-Custody Forms

LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Geologist registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by AccuTest Laboratories.

1.0 INTRODUCTION

Smith's Grocery is a convenience and retail fuel store located at 3176 Charlotte Highway (SC Highway 49) in York, York County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- May 10, 2004 – Groundwater Sampling Event
- August 17, 2004 – Groundwater Sampling Event
- January 14, 2005 – Groundwater Sampling Event
- June 29, 2005 – Groundwater Sampling Event
- September 16, 2005 – Groundwater Sampling Event
- February 28, 2006 – Groundwater Sampling Event
- June 21, 2006 – Groundwater Sampling Event
- October 4, 2006 – Groundwater Sampling Event
- December 4, 2006 – Groundwater Sampling Event
- March 28, 2007 – Groundwater Sampling Event
- June 20, 2007- PTS injection
- June 28, 2007- Groundwater Sampling Event
- September 12, 2007 – Groundwater Sampling Event

On September 12, 2007 nineteen groundwater monitoring wells and four water supply wells were sampled in accordance with the requirements of the PFP contract. This report provides details of the groundwater sampling event.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On September 12, 2007, groundwater samples were collected from nineteen (MW-1 through 3, MW-5 through MW-8, MW-10 through MW-12, MW-14 through 19, and TW-1 through TW-3) of twenty-three existing groundwater monitoring wells.

Prior to sampling, groundwater monitoring wells were gauged utilizing an oil-water interface probe to measure depth to groundwater, and to detect any free product present. The depth to groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction. Figure 2 in Appendix A is a site map depicting monitoring well locations.

Free product was not currently and has not historically been detected in any of the monitoring wells. Figure 3 in Appendix A presents a groundwater potentiometric map for the current sampling event. Table 1 in Appendix B summarizes groundwater measurement data.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead. Appendix C contains Field Data Information Sheets for Groundwater Sampling.

2.2 Water Supply Well Sampling

On September 12, 2007, groundwater samples were collected from four (Crook, Smith, Swift and Hill) water supply wells. Three water supply wells (Crook, Hill, and Swift) are fitted with granular activated carbon (GAC) filters. As such, samples were collected from the Swift and Hill wells before (pre) and after (post) the GAC filters. The Crook well was not sampled in this manner during the current sampling event. Prior to sampling, the water was allowed to run for at least ten minutes. The samples were placed into laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX),

methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

Chemicals of Concern (CoC) were detected in ten (MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-14, MW-15, MW-17 and TW-2) of the nineteen monitoring wells sampled at concentrations exceeding their respective SSTL. Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.2 Water Supply Well Analytical Results

CoC were detected in one (Hill) of the pre-GAC filter samples collected at concentrations exceeding their respective SSTLs. CoC were detected in the Swift post-GAC filter samples collected at concentrations exceeding their respective SSTLs in the lab results. However it is believed that the sample containers were reversed (pre for post); the corrected results are reflected in the Table 2. Figure 4 in Appendix A is a site map presenting water supply well locations and their CoC concentrations. Table 2 in Appendix B summarizes historical water supply well analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.3 Site Specific Target Levels

Site Specific Target Levels (SSTLs) have been designated for sixteen (MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-17 through MW-19, TW-2, and TW-3) monitoring wells and all four (Crook, Swift, Hill, and Smith) water supply wells. For three (Crook, Swift, and Hill) water supply wells with GAC filters, the SSTLs apply to the pre-GAC filter samples. Table 4 in Appendix B summarizes SSTL information.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target concentrations for seven (benzene, toluene, ethylbenzene, xylenes, MTBE, naphthalene, lead, and EDB) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial January 6, 2003, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. Monitoring well MW-1 was not located during the current sampling event. Consequently, SSTL data for monitoring well MW-1 from the September 16, 2005, groundwater sampling event was utilized for the concentration reduction calculation. The formula is a follows:

$$\left[\frac{\text{[01/06/03 Sample Concentration Above SSTL]} - \text{[Current Sample Concentration Above SSTL]}}{\text{[01/06/03 Sample Concentration Above SSTL]}}\right] * 100 = \% \text{ Reduction}$$

Using the current analytical results, the concentration reduction is 5.186 %.

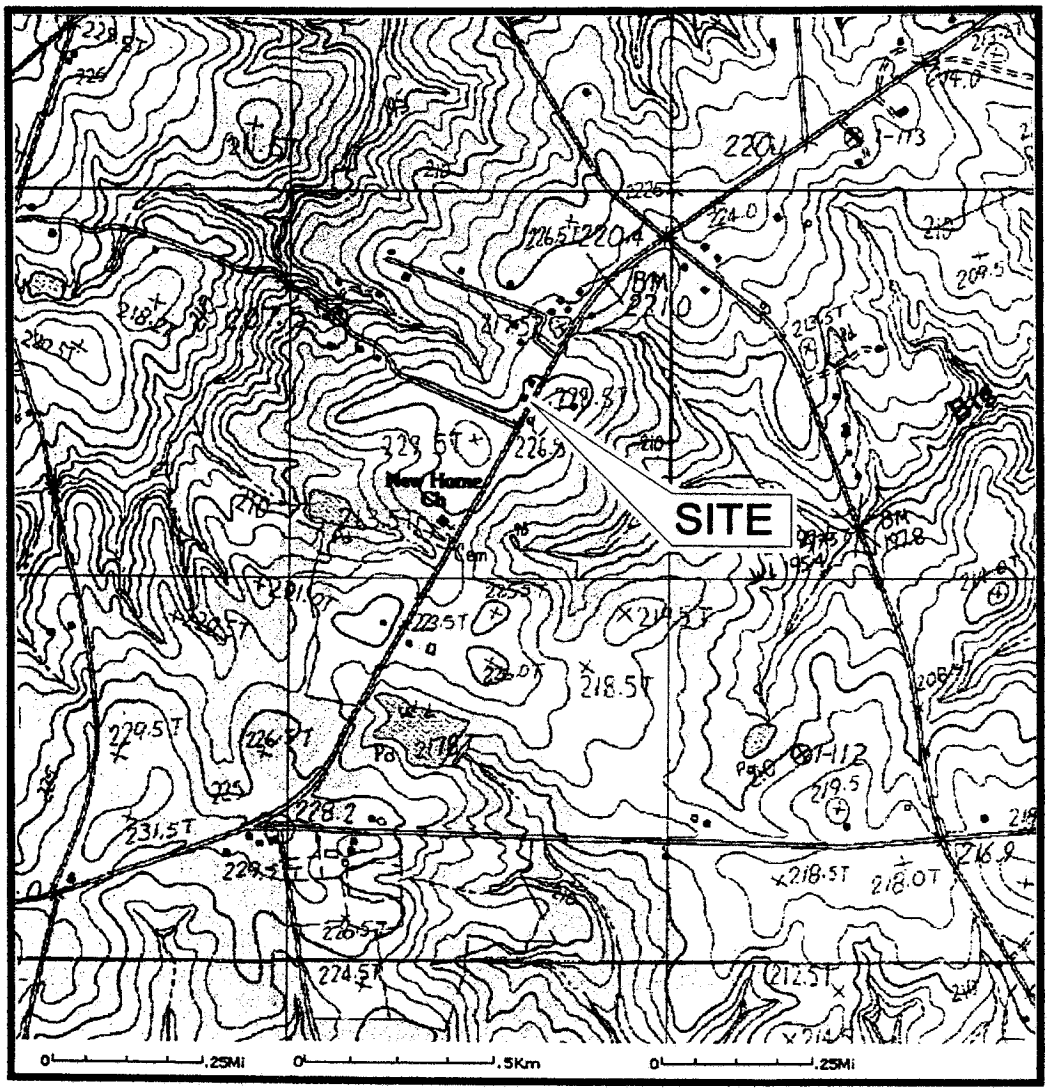
5.0 CONCLUSIONS

Free product was not detected. CoC were detected in ten monitoring wells and two water supply wells above their respective SSTLs. The percent concentration reduction has been calculated at -5.186 %.

SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. The next sampling event will occur in December 2007.

APPENDIX A
FIGURES

7.5 MINUTE SERIES(TOPOGRAPHIC)

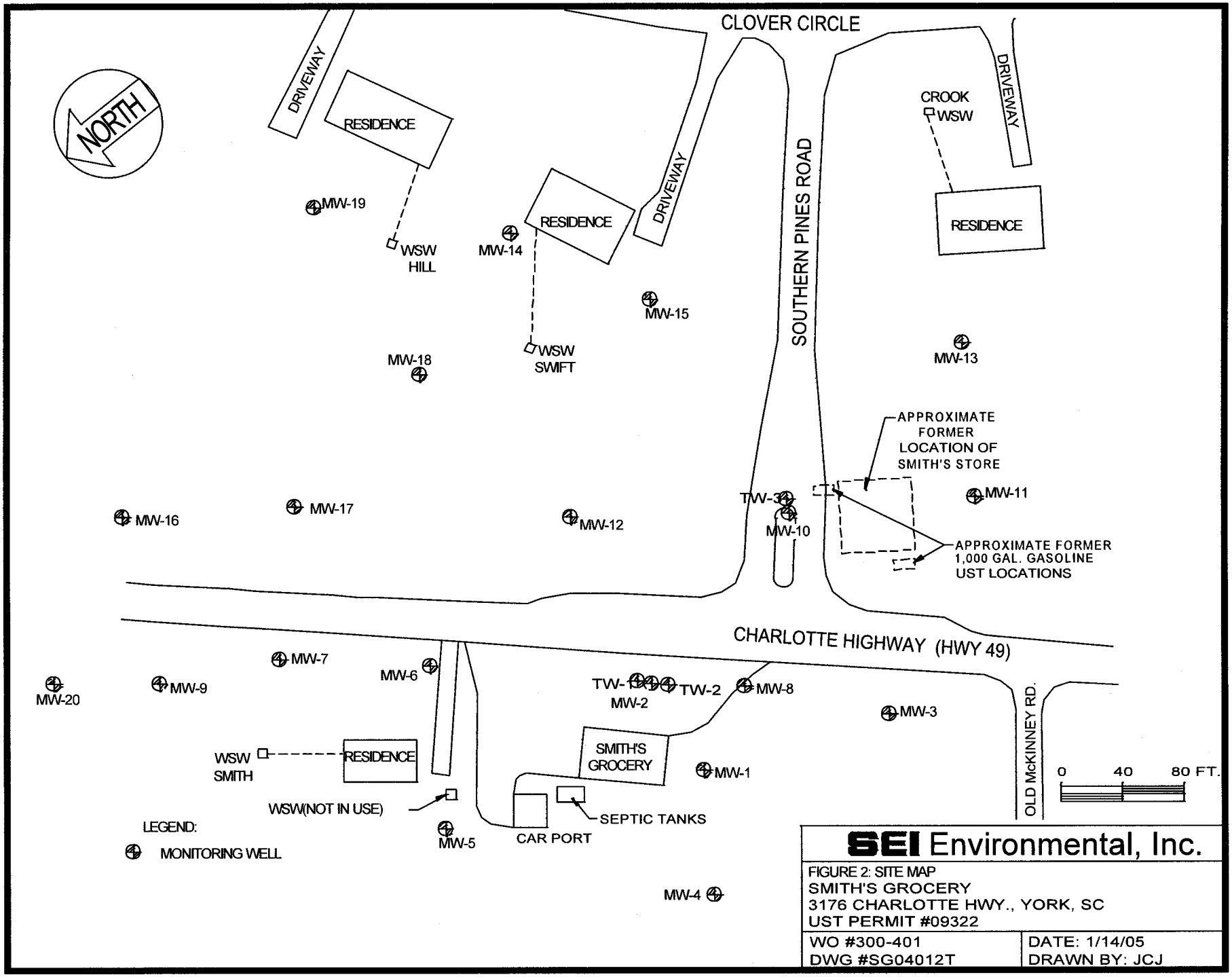


NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP(U.S.G.S. TOPO)
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

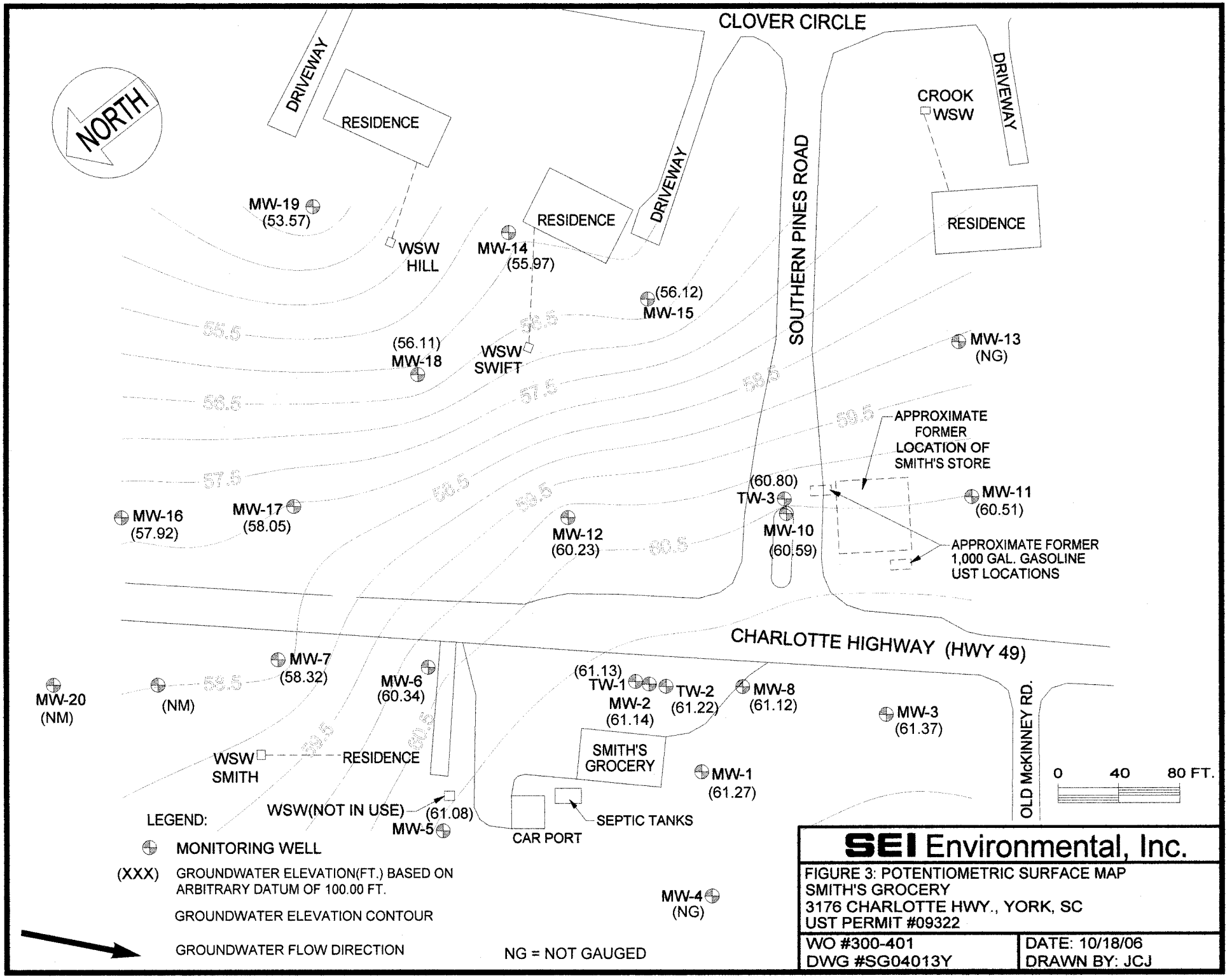
W.O. #: 300-401 DWG #	DATE: 9/8/05 DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

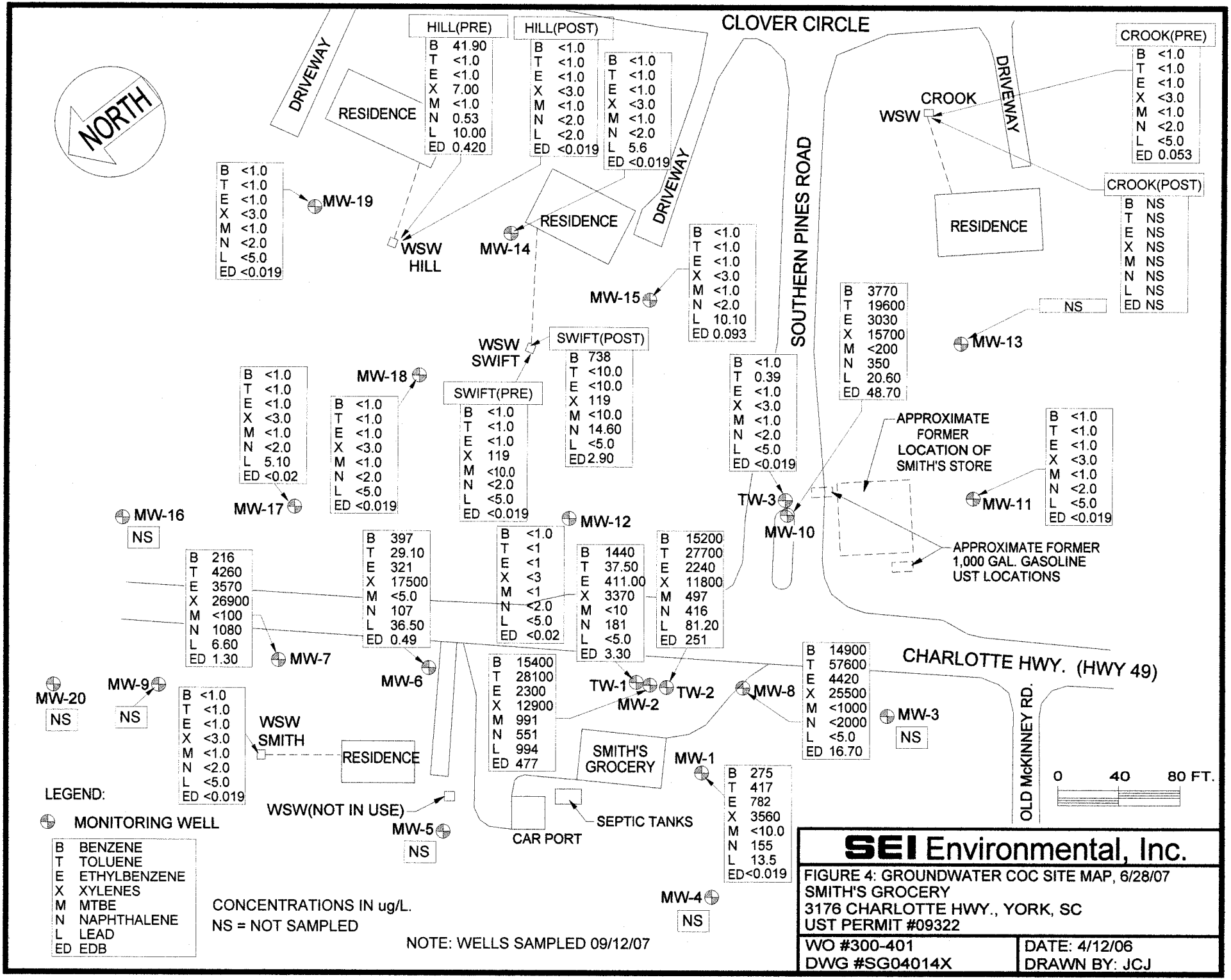
WO #300-401	DATE: 1/14/05
DWG #SG04012T	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: POTENTIOMETRIC SURFACE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 10/18/06
DWG #SG04013Y	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP, 6/28/07
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 4/12/06
DWG #SG04014X	DRAWN BY: JCJ

APPENDIX B
TABLES

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-1	01/06/03	29.88			91.16	61.28
	04/02/03	28.05				63.11
	08/26/03	24.07				67.09
	01/08/04	25.46				65.70
	05/10/04	26.90				64.26
	08/17/04	27.03				64.13
	01/14/05	27.06				64.10
	06/29/05	25.67				65.49
	09/16/05	28.10				63.06
	02/28/06	Well Not Located				N/A
	06/21/06	29.16				62.00
	10/04/06	30.24				60.92
	12/04/06	30.51				60.65
	03/28/07	27.91				63.25
	06/28/07	28.30				62.86
	09/12/07	29.89				61.27
MW-2	01/06/03	33.76			94.57	60.81
	04/02/03	31.92				62.65
	08/26/03	27.81				66.76
	01/08/04	29.40				65.17
	05/10/04	26.68				67.89
	08/17/04	30.71				63.86
	01/14/05	30.78				63.79
	06/29/05	29.35				65.22
	09/16/05	30.61				63.96
	02/28/06	31.19				63.38
	06/21/06	31.67				62.90
	10/04/06	32.76				61.81
	12/04/06	33.08				61.49
	03/28/07	31.67				62.90
	06/28/07	31.86				62.71
	09/12/07	33.43				61.14
MW-3	01/06/03	30.87			91.91	61.04
	04/02/03	29.02				62.89
	08/26/03	25.98				65.93
	01/08/04	26.46				65.45
	05/10/04	28.83				63.08
	08/17/04	27.76				64.15
	01/14/05	27.86				64.05
	06/29/05	26.39				65.52
	09/16/05	27.67				64.24
	02/28/06	29.10				62.81
	06/21/06	28.79				63.12
	10/04/06	29.85				62.06
	12/04/06	30.19				61.72
	03/28/07	28.77				63.14
	06/28/07	28.94				62.97
	09/12/07	30.54				61.37

Table 1

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery

3176 Charlotte Highway (Highway 49)

York, York County, South Carolina

UST Permit Number: 09322

SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-4	01/06/03	24.58			86.20	61.62
	04/02/03	22.73				63.47
	08/26/03	15.07				71.13
	01/08/04	20.73				65.47
	05/10/04	25.94				60.26
	08/17/04	Well Not Located				N/A
	01/14/05	21.83				64.37
	06/29/05	20.51				65.69
	09/16/05	Well Not Located				N/A
	02/28/06	Well Not Located				N/A
	06/21/06	Well Not Located				N/A
	10/04/06	Well Not Located				N/A
	12/04/06	Well Not Located				N/A
	03/28/07	Well Destroyed				N/A
MW-5	01/06/03	27.96			89.29	61.33
	04/02/03	25.00				64.29
	08/26/03	22.70				66.59
	01/08/04	24.49				64.80
	05/10/04	25.57				63.72
	08/17/04	25.75				63.54
	01/14/05	25.44				63.85
	06/29/05	24.30				64.99
	09/16/05	25.86				63.43
	02/28/06	27.63				61.66
	06/21/06	26.64				62.65
	10/04/06	27.75				61.54
	12/04/06	27.73				61.56
	03/28/07	26.11				63.18
	06/28/07	26.96				62.33
	09/12/07	28.21				61.08
MW-6	01/06/03	33.57			93.91	60.34
	04/02/03	31.66				62.25
	08/26/03	27.51				66.40
	01/08/04	29.58				64.33
	05/10/04	29.91				64.00
	08/17/04	29.50				64.41
	01/14/05	30.77				63.14
	06/29/05	29.74				64.17
	09/16/05	30.81				63.10
	02/28/06	31.07				62.84
	06/21/06	31.72				62.19
	10/04/06	32.86				61.05
	12/04/06	32.06				61.85
	03/28/07	31.56				62.35
	06/28/07	31.92				61.99
	09/12/07	33.57				60.34

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-7	01/06/03	31.57			91.68	60.11
	04/02/03	29.40				62.28
	08/26/03	26.88				64.80
	01/08/04	28.40				63.28
	05/10/04	27.78				63.90
	08/17/04	29.85				61.83
	01/14/05	29.28				62.40
	06/29/05	28.17				63.51
	09/16/05	29.66				62.02
	02/28/06	29.50				62.18
	06/21/06	30.48				61.20
	10/04/06	31.47				60.21
	12/04/06	31.34				60.34
	03/28/07	29.74				61.94
	06/28/07	30.58				61.10
	09/12/07	33.36				58.32
MW-8	01/06/03	33.84			94.72	60.88
	04/02/03	32.02				62.70
	08/26/03	27.58				67.14
	01/08/04	29.47				65.25
	05/10/04	29.90				64.82
	08/17/04	30.88				63.84
	01/14/05	30.85				63.87
	06/29/05	29.50				65.22
	09/16/05	30.76				63.96
	02/28/06	31.30				63.42
	06/21/06	31.84				62.88
	10/04/06	32.93				61.79
	12/04/06	33.24				61.48
	03/28/07	31.85				62.87
	06/28/07	32.06				62.66
	09/12/07	33.60				61.12
MW-9	01/06/03	30.41			90.54	60.13
	04/02/03	28.20				62.34
	08/26/03	26.10				64.44
	01/08/04	27.33				63.21
	05/10/04	28.69				61.85
	08/17/04	29.50				61.04
	01/14/05	28.14				62.40
	06/29/05	26.97				63.57
	09/16/05	26.38				64.16
	02/28/06	Well Not Located				N/A
	06/21/06	27.13				63.41
	10/04/06	Well Not Located				NA
	12/04/06	Well Not Located				NA
	03/28/07	Well Destroyed				NA

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-10	01/06/03	39.71			99.77	60.06
	04/02/03	37.77				62.00
	08/26/03	33.36				66.41
	01/08/04	35.04				64.73
	05/10/04	35.50				64.27
	08/17/04	36.49				63.28
	01/14/05	36.66				63.11
	06/29/05	35.04				64.73
	09/16/05	36.34				63.43
	02/28/06	37.02				62.75
	06/21/06	37.40				62.37
	10/04/06	38.56				61.21
	12/04/06	38.94				60.83
	03/28/07	37.51				62.26
	06/28/07	37.51				62.26
	09/12/07	39.18				60.59
MW-11	01/06/03	40.37			100.46	60.09
	04/02/03	38.36				62.10
	08/26/03	33.88				66.58
	01/08/04	35.70				64.76
	05/10/04	36.19				64.27
	08/17/04	37.17				63.29
	01/14/05	36.79				63.67
	06/29/05	35.68				64.78
	09/16/05	37.11				63.35
	02/28/06	37.75				62.71
	06/21/06	38.10				62.36
	10/04/06	39.35				61.11
	12/04/06	39.69				60.77
	03/28/07	38.18				62.28
	06/28/07	38.18				62.28
	09/12/07	39.95				60.51
MW-12	01/06/03	39.64			99.61	59.97
	04/02/03	37.78				61.83
	08/26/03	33.78				65.83
	01/08/04	35.44				64.17
	05/10/04	35.75				63.86
	08/17/04	36.72				62.89
	01/14/05	37.18				62.43
	06/29/05	35.34				64.27
	09/16/05	Well Not Located				N/A
	02/28/06	37.12				62.49
	06/21/06	37.68				61.93
	10/04/06	38.79				60.82
	12/04/06	Not Measured				
	03/28/07	37.93				61.68
	06/28/07	37.79				61.82
	09/12/07	39.38				60.23

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-13	01/06/03	42.87			100.39	57.52
	04/02/03	41.13				59.26
	08/26/03	37.20				63.19
	01/08/04	38.70				61.69
	05/10/04	39.27				61.12
	08/17/04	40.27				60.12
	01/14/05	40.12				60.27
	06/29/05	37.96				62.43
	09/16/05	40.11				60.28
	02/28/06	40.76				59.63
	10/04/06	40.91				59.48
	06/21/06	42.05				58.34
	12/04/06	Not Measured				
	03/28/07	41.05				59.34
	06/28/07	40.97				59.42
	09/12/07	Not Measured				#VALUE!
MW-14	01/06/03	43.66			98.89	55.23
	04/02/03	42.10				56.79
	08/26/03	38.39				60.50
	01/08/04	39.40				59.49
	05/10/04	40.06				58.83
	08/17/04	41.12				57.77
	01/14/05	40.75				58.14
	06/29/05	39.77				59.12
	09/16/05	40.65				58.24
	02/28/06	41.42				57.47
	06/21/06	41.52				57.37
	10/04/06	42.74				56.15
	12/04/06	Not Measured				
	03/28/07	41.82				57.07
	06/28/07	42.38				56.51
	09/12/07	42.92				55.97
MW-15	01/06/03	44.97			100.18	55.21
	04/02/03	43.24				56.94
	08/26/03	39.58				60.60
	01/08/04	46.55				53.63
	05/10/04	41.19				58.99
	08/17/04	42.11				58.07
	01/14/05	43.06				57.12
	06/29/05	40.92				59.26
	09/16/05	41.80				58.38
	02/28/06	42.54				57.64
	06/21/06	42.64				57.54
	10/04/06	43.61				56.57
	12/04/06	Not Measured				
	03/28/07	42.98				57.20
	06/28/07	41.43				58.75
	09/12/07	44.06				56.12

Table 1

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery

3176 Charlotte Highway (Highway 49)

York, York County, South Carolina

UST Permit Number: 09322

SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-16	01/06/03	31.07			89.91	58.84
	04/02/03	29.00				60.91
	08/26/03	27.54				62.37
	01/08/04	28.03				61.88
	05/10/04	27.83				62.08
	08/17/04	29.23				60.68
	01/14/05	28.92				60.99
	06/29/05	27.86				62.05
	09/16/05	29.23				60.68
	02/28/06	28.35				61.56
	06/21/06	29.89				60.02
	10/04/06	31.18				58.73
	12/04/06	Not Measured				
	03/28/07	30.71				59.20
	06/28/07	30.29				59.62
	09/12/07	31.99				57.92
MW-17	01/06/03	36.81			94.46	57.65
	04/02/03	34.63				59.83
	08/26/03	37.08				57.38
	01/08/04	32.56				61.90
	05/10/04	32.93				61.53
	08/17/04	34.87				59.59
	01/14/05	33.83				60.63
	06/29/05	32.60				61.86
	09/16/05	33.84				60.62
	02/28/06	34.21				60.25
	06/21/06	34.73				59.73
	10/04/06	35.78				58.68
	12/04/06	Not Measured				
	03/28/07	34.73				59.73
	06/28/07	34.83				59.63
	09/12/07	36.41				58.05
MW-18	01/06/03	42.83			98.14	55.31
	04/02/03	41.26				56.88
	08/26/03	37.47				60.67
	01/08/04	38.14				60.00
	05/10/04	39.09				59.05
	08/17/04	35.43				62.71
	01/14/05	40.04				58.10
	06/29/05	38.93				59.21
	09/16/05	39.77				58.37
	02/28/06	40.54				57.60
	06/21/06	40.69				57.45
	10/04/06	41.64				56.50
	12/04/06	Not Located				
	03/28/07	Not Located				
	06/28/07	40.50				57.64
	09/12/07	42.03				56.11

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-19	01/06/03	45.14			98.27	53.13
	04/02/03	43.31				54.96
	08/26/03	39.24				59.03
	01/08/04	40.83				57.44
	05/10/04	41.47				56.80
	08/17/04	42.01				56.26
	01/14/05	42.18				56.09
	06/29/05	41.17				57.10
	09/16/05	42.25				56.02
	02/28/06	42.76				55.51
	06/21/06	42.97				55.30
	10/04/06	44.12				54.15
	12/04/06	Not Measured				
	03/28/07	Dry				
	06/28/07	42.91				55.36
	09/12/07	44.70				53.57
MW-20	01/06/03	28.09			88.35	60.26
	04/02/03	25.79				62.56
	08/26/03	24.98				63.37
	01/08/04	25.10				63.25
	05/10/04	28.41				59.94
	08/17/04	Well Not Located				N/A
	01/14/05	25.85				62.50
	06/29/05	24.63				63.72
	09/16/05	Well Not Located				N/A
	02/28/06	25.88				62.47
	06/21/06	Well Not Located				N/A
	10/04/06	Well Not Located				N/A
	12/04/06	Well Not Located				N/A
	03/28/07	26.30				62.05
	06/28/07	Well Not Located				
	09/12/07	Not Measured				
TW-1	01/06/03	34.33			94.72	60.39
	04/02/03	31.86				62.86
	08/26/03	27.96				66.76
	01/08/04	29.48				65.24
	05/10/04	30.31				64.41
	08/17/04	30.40				64.32
	01/14/05	30.75				63.97
	06/29/05	29.56				65.16
	09/16/05	30.76				63.96
	02/28/06	31.46				63.26
	06/21/06	31.64				63.08
	10/04/06	32.89				61.83
	12/04/06	33.03				61.69
	03/28/07	31.92				62.80
	06/28/07	31.99				62.73
	09/12/07	33.59				61.13

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
TW-2	01/06/03	33.91			94.72	60.81
	04/02/03	32.04				62.68
	08/26/03	27.54				67.18
	01/08/04	29.45				65.27
	05/10/04	29.89				64.83
	08/17/04	30.87				63.85
	01/14/05	30.94				63.78
	06/29/05	29.52				65.20
	09/16/05	30.67				64.05
	02/28/06	31.36				63.36
	06/21/06	31.86				62.86
	10/04/06	32.94				61.78
	12/04/06	33.24				61.48
	03/28/07	31.82				62.90
	06/28/07	31.95				62.77
	09/12/07	33.50				61.22
TW-3	01/06/03	38.81			99.21	60.40
	04/02/03	36.97				62.24
	08/26/03	32.80				66.41
	01/08/04	34.40				64.81
	05/10/04	34.79				64.42
	08/17/04	35.75				63.46
	01/14/05	38.75				60.46
	06/29/05	34.33				64.88
	09/16/05	30.59				68.62
	02/28/06	36.26				62.95
	06/21/06	36.68				62.53
	10/04/06	37.77				61.44
	12/04/06	38.07				61.14
	03/28/07	36.73				62.48
	06/28/07	36.81				62.40
	09/12/07	38.41				60.80

N/A = Not Applicable

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-1*	01/06/03	**911.00**	**9,810.00**	**2,660.00**	**18,650.00**	**250.00**	**743.00**	**56.00**	<0.010	33,080.00
	04/02/03	**590.00**	**2,900.00**	960.00	7,400.00	27.00	**200.00**	**10.00**	<0.010	12,087.00
	08/26/03	**610.00**	1,200.00	640.00	4,800.00	**100.00**	**500.00**	**33.00**	<0.010	7,883.00
	01/08/04	**620.00**	850.00	340.00	3,800.00	**100.00**	**500.00**	**5.00**	0.17	6,215.17
	05/10/04	**330.00**	1,100.00	459.00	3,700.00	25.00	**130.00**	**40.00**	<0.010	5,784.00
	08/17/04	**380.00**	970.00	670.00	3,600.00	<25	**120.00**	**63.00**	<0.010	5,803.00
	01/14/05	**270.00**	1,440.00	900.00	5,620.00	<1.0	**268.00**	<5.0	0.09	8,498.09
	06/29/05	**273.00**	1,200.00	601.00	3,640.00	<20	**136.00**	**29.50**	<0.019	5,879.50
	09/16/05	**23,300.00**	**59,100.00**	**4,700.00**	**28,400.00**	<500	<1,000	NA	**27.20**	115,527.20
	02/28/06	Well Not Located								0.00
	06/21/06	**19,500.00**	**59,900.00**	**4,070.00**	**24,400.00**	<1,000	<2,000	**47.60**	**17.70**	107,870.00
	10/04/06	**22,400.00**	**64,500.00**	**4,100.00**	**22,000.00**	<1,000	<2,000	**41.40**	**27.60**	113,000.00
	12/04/06	**18,900.00**	**60,700.00**	**3,830.00**	**22,000.00**	<1,000	<2,000	**NA**	**29.50**	105,430.00
	03/28/07	**149.00**	153.00	279.00	1,780.00	<10	55.00	NA	<0.019	2,416.00
	06/28/07	**235.00**	186.00	343.00	1,900.00	<5.0	**76.60**	NA	<0.019	2,740.60
	09/12/07	**275.00**	417.00	782.00	3,560.00	<10.0	**155.00**	**13.50**	<0.019	5,189.00
	SSTL	**11.00**	**2,223.00**	**1,558.00**	**10,000.00**	**90.00**	**56.00**	**2.00**	**0.32**	
	> SSTL	264.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-2	01/06/03	**18,400.00**	**31,100.00**	**3,180.00**	**18,920.00**	**395.00**	**514.00**	28.00	0.02	72,537.02
	04/02/03	**13,000.00**	1,800.00	**1,600.00**	9,500.00	**480.00**	**500.00**	**190.00**	**160.00**	27,230.00
	08/26/03	**16,000.00**	**26,000.00**	**2,200.00**	13,000.00	**480.00**	**540.00**	**190.00**	**120.00**	58,530.00
	01/08/04	**18,000.00**	**33,000.00**	**2,200.00**	12,000.00	**880.00**	**1,200.00**	**1,000.00**	**150.00**	68,430.00
	05/10/04	**17,000.00**	**24,000.00**	**2,000.00**	11,000.00	**750.00**	**2,500.00**	**1,200.00**	**260.00**	58,710.00
	08/17/04	**19,000.00**	**29,000.00**	**2,900.00**	14,000.00	**1,200.00**	**2,500.00**	**2,100.00**	**500.00**	71,200.00
	01/14/05	**20,600.00**	**36,400.00**	**2,960.00**	**17,200.00**	**940.00**	**862.00**	**1,230.00**	**186.00**	80,378.00
	06/29/05	**18,500.00**	**27,300.00**	**2,600.00**	14,400.00	**952.00**	<500	**792.00**	**151.00**	64,695.00
	09/16/05	**24,300.00**	**34,500.00**	**2,870.00**	**15,500.00**	**1,130.00**	**645.00**	NA	0.083	78,945.083
	02/28/06	**24,400.00**	**36,200.00**	**2,700.00**	12,400.00	**847.00**	<500	NA	**310.00**	76,857.00
	06/21/06	**19,500.00**	**26,300.00**	**2,420.00**	12,600.00	**859.00**	<1,000	**1,010.00**	**320.00**	63,009.00
	10/04/06	**18,100.00**	**25,600.00**	**2,010.00**	9,820.00	**1,020.00**	<1,000	**1,480.00**	**664.00**	58,694.00
	12/04/06	**8,530.00**	**12,300.00**	**895.00**	4,980.00	**584.00**	<1,000	NA	**318.00**	27,607.00
	03/28/07	**17,500.00**	**27,900.00**	**2,090.00**	11,700.00	**534.00**	<400	NA	**184.00**	59,908.00
	06/28/07	**20,600.00**	**29,600.00**	**2,880.00**	14,200.00	**1,340.00**	<1000	NA	**463.00**	69,083.00
	09/12/07	**15,400.00**	**28,100.00**	**2,300.00**	12,900.00	**991.00**	**551.00**	**994.00**	**477.00**	61,713.00
	SSTL	**10.00**	**2,021.00**	**1,416.00**	**15,000.00**	**81.00**	**51.00**	**30.00**	**10.00**	
	> SSTL	15,390.00	26,079.00	884.00	0.00	910.00	0.00	0.00	467.00	
MW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	350.00	<0.020	350.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	8.50	0.00	8.50
	01/14/05	Removed from Sampling Schedule								0.00
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	
MW-4	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	12.00	<0.020	12.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Removed from Sampling Schedule								0.00
	05/10/04	Removed from Sampling Schedule								0.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-5	01/06/03	<1.0	<1.0	<1.0	5.40	<1.0	<1.0	12.00	<0.020	17.40
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	5.40	<0.010	5.40
	01/14/05	Removed from Sampling Schedule								0.00
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	0.00
MW-6	01/06/03	**4,840.00**	**20,400.00**	**3,540.00**	**19,020.00**	25.00	**640.00**	11.00	**7.00**	48,483.00
	04/02/03	**2,600.00**	**11,000.00**	**1,800.00**	**9,000.00**	**250.00**	**1,200.00**	**54.00**	2.60	25,906.60
	08/26/03	**1,400.00**	**5,800.00**	**1,100.00**	6,600.00	**250.00**	**1,200.00**	**37.00**	<0.010	16,387.00
	01/08/04	**350.00**	1,200.00	240.00	1,300.00	<1.0	**77.00**	<5.0	1.20	3,168.20
	05/10/04	**640.00**	**2,200.00**	300.00	1,900.00	<5.0	**150.00**	**36.00**	1.80	5,227.80
	08/17/04	**1,100.00**	**2,200.00**	730.00	3,400.00	<50	<250	13.00	<0.010	7,443.00
	01/14/05	**1,070.00**	**2,960.00**	718.00	3,990.00	<1.0	**116.00**	**107.00**	1.67	8,962.67
	06/29/05	**413.00**	500.00	290.00	1,480.00	<10	**77.30**	<5.0	0.55	2,760.85
	09/16/05	**323.00**	273.00	194.00	1,010.00	<10	**63.60**	NA	0.76	1,864.36
	02/28/06	**1,020.00**	1,150.00	619.00	2,980.00	<10	**141.00**	NA	1.00	5,911.00
	06/21/06	**316.00**	109.00	200.00	1,020.00	<10	**81.20**	15.50	0.42	1,742.12
	10/04/06	**585.00**	76.30	327.00	1,510.00	<10	**75.80**	**26.70**	0.75	2,601.55
	12/04/06	**332.00**	**3,340.00**	**2,940.00**	**19,900.00**	<10	**937.00**	NA	1.10	27,450.10
	03/28/07	**792.00**	64.70	529.00	2,590.00	<10	**156.00**	NA	0.82	4,132.52
	06/28/07	**190.00**	12.50	126.00	382.00	<2.0	**40.70**	NA	0.07	751.27
	09/12/07	**397.00**	29.10	321.00	1,750.00	<5.0	**107.00**	**36.60**	0.49	2,641.19
	SSTL	6.00	1,212.00	850.00	8,000.00	48.00	31.00	18.00	4.83	
	> SSTL	391.00	0.00	0.00	0.00	0.00	76.00	0.00	0.00	
MW-7	01/06/03	**1,020.00**	1.00	**2,290.00**	**16,940.00**	1.00	**826.00**	5.00	**1.70**	21,084.70
	04/02/03	**240.00**	110.00	120.00	38.00	**210.00**	**120.00**	**240.00**	**1.70**	1,079.70
	08/26/03	**740.00**	250.00	110.00	1,600.00	**50.00**	**250.00**	**160.00**	0.09	3,160.09
	01/08/04	**630.00**	**13,000.00**	**2,400.00**	**25,000.00**	**100.00**	**1,000.00**	5.00	**3.50**	42,138.50
	05/10/04	**700.00**	**10,000.00**	**3,400.00**	**23,000.00**	**200.00**	**1,000.00**	5.00	**6.80**	38,311.80
	08/17/04	**23.00**	49.00	21.00	140.00	<5.0	<25	**19.00**	<0.010	252.00
	01/14/05	**565.00**	**9,180.00**	**3,570.00**	**24,400.00**	<1.0	**1,370.00**	**24.00**	**1.75**	39,110.75
	06/29/05	**582.00**	**7,030.00**	**3,480.00**	**23,100.00**	<100	**890.00**	<5.0	**1.70**	35,083.70
	09/16/05	**610.00**	**5,770.00**	**3,280.00**	**21,600.00**	<50	**1,040.00**	NA	**1.90**	32,301.90
	02/28/06	**178.00**	**4,760.00**	**2,480.00**	**19,300.00**	<100	**562.00**	NA	**1.20**	27,281.20
	06/21/06	**500.00**	**3,890.00**	**3,190.00**	**23,200.00**	<100	**916.00**	**23.90**	**0.86**	31,720.76
	10/04/06	**415.00**	**4,640.00**	**3,360.00**	**21,200.00**	<100	**781.00**	**22.60**	**1.60**	30,420.20
	12/04/06	**91.30**	**8.20**	**55.00**	**294.00**	<5.0	**16.30**	NA	0.25	465.05
	03/28/07	**420.00**	**2,810.00**	**2,390.00**	**17,900.00**	<100	**818.00**	NA	**0.73**	24,338.73
	06/28/07	**148.00**	**4,300.00**	**2,910.00**	**2,110.00**	<100	**965.00**	NA	**1.30**	10,434.30
	09/12/07	**216.00**	**4,260.00**	**3,570.00**	**26,900.00**	<100	**1,080.00**	6.60	**1.30**	36,033.90
	SSTL	6.00	1,212.00	850.00	12,123.00	48.00	31.00	18.00	0.66	
	> SSTL	210.00	3,048.00	2,720.00	14,777.00	0.00	1,049.00	0.00	0.64	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-8	01/06/03	**6,770.00**	**84,600.00**	**3,560.00**	**24,740.00**	7.30	**362.00**	**24.00**	**1.90**	120,065.20
	04/02/03	**8,600.00**	**46,000.00**	**3,500.00**	**23,000.00**	**200.00**	**1,000.00**	**49.00**	**190.00**	82,539.00
	08/26/03	**3,800.00**	**10,000.00**	1,200.00	6,800.00	**100.00**	**500.00**	**81.00**	**58.00**	22,539.00
	01/08/04	**5,600.00**	**22,000.00**	**3,400.00**	**20,000.00**	**100.00**	**1,300.00**	**18.00**	**4.70**	52,422.70
	05/10/04	**4,500.00**	**18,000.00**	1,600.00	**18,000.00**	**200.00**	**1,000.00**	**67.00**	**6.30**	43,373.30
	08/17/04	**10,000.00**	**37,000.00**	**2,900.00**	**20,000.00**	<1,000	<5,000	**27.00**	**63.00**	69,990.00
	01/14/05	**6,780.00**	**38,200.00**	**4,340.00**	**28,200.00**	<1.0	**1,600.00**	<5.0	**2.33**	79,122.33
	06/29/05	**6,490.00**	**31,000.00**	**4,320.00**	**27,500.00**	<500	<1,000	<5.0	**2.60**	69,312.60
	09/16/05	**14,300.00**	**50,000.00**	**4,640.00**	**28,000.00**	54.60	**1,040.00**	NA	**22.20**	98,056.80
	02/28/06	**17,100.00**	**52,500.00**	**3,950.00**	**21,800.00**	<500	<1000	NA	**17.00**	95,367.00
	06/21/06	**11,600.00**	**44,300.00**	**3,860.00**	**22,000.00**	<1,000	<2,000	<10	**6.70**	81,766.70
	10/04/06	**18,500.00**	**56,900.00**	**4,480.00**	**24,900.00**	<1,000	<2000	33.50	**16.50**	104,830.00
	12/04/06	**15,900.00**	**51,800.00**	**3,690.00**	**22,400.00**	<1,000	<2000	NA	**15.60**	93,805.60
	03/28/07	**17,600.00**	**56,400.00**	**4,390.00**	**25,900.00**	<1,000	<2000	NA	**21.50**	104,311.50
	06/28/07	**14,800.00**	**45,000.00**	**3,880.00**	**24,200.00**	<1,000	<2000	NA	**36.10**	87,916.10
	09/12/07	**14,900.00**	**57,600.00**	**4,420.00**	**25,500.00**	<1,000	<2000	<5.0	**16.70**	102,436.70
	SSTL	**12.00**	**2,424.00**	**1,700.00**	**16,000.00**	**96.00**	**62.00**	**4.00**	**0.48**	
	> SSTL	14,888.00	55,176.00	2,720.00	9,500.00	0.00	0.00	0.00	16.22	
MW-9	01/06/03	<1.0	2.20	5.70	579.00	<1.0	**109.00**	**24.00**	<0.020	719.90
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	05/10/04	Well Not Located								0.00
	08/17/04	**540.00**	**12,000.00**	**2,800.00**	**23,000.00**	<500	<2,500	**19.00**	**8.40**	38,367.40
	01/14/05	Removed from Sampling Schedule								0.00
	RBSL	**5.00**	**1,000.00**	**700.00**	**10,000.00**	**40.00**	**25.00**	**15.00**	**0.05**	
MW-10	01/06/03	**7,980.00**	**24,900.00**	**3,540.00**	18,180.00	25.00	**299.00**	**35.00**	**78.00**	55,037.00
	04/02/03	**11,000.00**	**23,000.00**	**2,400.00**	13,000.00	**200.00**	**1,000.00**	**49.00**	**190.00**	50,839.00
	08/26/03	**12,000.00**	**33,000.00**	**3,200.00**	17,000.00	**250.00**	**1,200.00**	**210.00**	**450.00**	67,310.00
	01/08/04	**4,200.00**	**14,000.00**	**2,400.00**	12,000.00	**100.00**	**500.00**	6.30	**100.00**	33,306.30
	05/10/04	**8,600.00**	**21,000.00**	**2,400.00**	14,000.00	<250	<1,200	5.70	**210.00**	46,215.70
	08/17/04	**3,500.00**	**16,000.00**	**2,200.00**	14,000.00	<500	<2,500	**25.00**	**67.00**	35,792.00
	01/14/05	**10,200.00**	**34,600.00**	**3,150.00**	**18,400.00**	<1.0	38.00	20.00	**152.00**	66,560.00
	06/29/05	**9,040.00**	**26,000.00**	**3,040.00**	16,600.00	<500	<1,000	6.30	**115.00**	54,801.30
	09/16/05	**8,120.00**	**25,900.00**	**3,130.00**	17,000.00	<200	<400	NA	**143.00**	54,293.00
	02/28/06	**2,410.00**	**9,780.00**	**1,840.00**	7,910.00	<200	<400	NA	**15.90**	21,955.90
	06/21/06	**2,700.00**	**11,800.00**	**2,060.00**	10,000.00	<200	<400	11.10	**23.60**	26,594.70
	10/04/06	**3,400.00**	**13,900.00**	**2,130.00**	10,500.00	<250	<500	**50.90**	**43.40**	30,024.30
	12/04/06	**2,950.00**	**11,900.00**	**2,130.00**	10,100.00	<250	<500	NA	**38.00**	27,118.00
	03/28/07	**2,180.00**	**8,510.00**	**1,880.00**	8,060.00	<100	<200	NA	**18.70**	20,648.70
	06/28/07	**2,960.00**	**11,000.00**	**2,560.00**	11,100.00	<100	239.00	NA	**30.20**	27,889.20
	09/12/07	**3,770.00**	**19,600.00**	**3,030.00**	15,700.00	<200	**350.00**	20.60	**48.70**	42,519.30
	SSTL	**9.00**	**1,819.00**	**1,274.00**	**18,185.00**	**73.00**	**46.00**	**21.00**	**9.00**	
	> SSTL	3,761.00	17,781.00	1,756.00	0.00	0.00	0.00	0.00	39.70	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-11	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	**7.80**	**6.00**	<0.020	13.80
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26.00**	<0.010	26.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**33.00**	**0.29**	33.29
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**46.00**	<0.010	46.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17.00**	<0.010	17.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**10.00**	<0.010	10.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**37.10**	<0.019	37.10
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.07**	0.07
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**30.10**	<0.019	30.10
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**12.40**	<0.019	12.40
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**5.00**	**0.020**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-12	01/06/03	**720.00**	**17.20**	13.40	**1,550.00**	<1.0	**113.00**	6.00	**12.00**	2,431.60
	04/02/03	**12.00**	<5.0	<1.0	1.80	<1.0	<5.0	**38.00**	0.24	52.04
	08/26/03	**51.00**	<5.0	<1.0	72.00	<1.0	5.50	**37.00**	0.37	165.87
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	0.015	0.015
	05/10/04	**23.00**	<5.0	<1.0	43.00	<1.0	<5.0	6.80	0.11	72.91
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**12.00**	0.11	12.11
	01/14/05	**74.20**	<1.0	<1.0	67.60	<1.0	<5.0	6.00	0.23	148.03
	06/29/05	**28.40**	<1.0	<1.0	10.80	<1.0	<2.0	<5.0	0.027	39.227
	09/16/05	Well Not Located								0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	NA	0.018	0.018
	06/21/06	**7.20**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	7.20
	10/04/06	**17.70**	<1.0	<1.0	<3.0	<1.0	<2.0	**12.10**	0.02	29.82
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.03	0.03
	03/28/07	**9.00**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.02	9.02
	06/28/07	**7.20**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.02	7.20
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.02	0.00
	SSTL	**7.00**	**5.00**	**68.00**	**730.00**	**5.00**	**36.00**	**7.00**	**7.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-13	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	1.30	<5.0	<0.020	1.30
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**40.00**	<0.010	40.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45.00**	<0.010	45.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**10.90**	<0.018	10.90
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	21.00	<0.019	21.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	09/12/07	NA	NA	NA	NA	NA	NA	NA	NA	0.00
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**5.00**	**0.020**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-14	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**39.00**	<0.010	39.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100.00**	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45.00**	<0.010	45.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**19.00**	<0.010	19.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**15.00**	<0.020	15.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**6.40**	<0.018	6.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**5.10**	<0.019	5.10
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.042	0.042
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**5.60**	<0.019	5.600
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**5.00**	**0.510**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-15	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	9.00	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120.00**	<0.010	120.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**48.00**	<0.010	48.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26.00**	<0.010	26.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	8.00	<0.020	8.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	7.50	<0.018	7.50
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.038	0.038
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.032	0.032
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.046	0.046
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.50	**0.900**	9.400
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.110**	0.110
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.076**	0.076
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.020	0.000
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	10.10	**0.093**	10.193
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**15.00**	**0.050**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-16	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	18.00	<0.020	18.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	140.00	<0.010	140.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	13.00	<0.010	13.00
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
MW-17	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	**44.00**	<0.020	44.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17.00**	<0.010	17.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**42.00**	<0.010	42.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.020	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	7.30	<0.010	7.30
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	9.00	<0.020	9.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.40	<0.019	5.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.024**	0.024
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	**0.021**	0.021
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	12.00	**0.026**	12.026
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.031**	0.031
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.034**	0.034
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.02	0.000
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.10	0.022	5.122
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.011	
MW-18	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**50.00**	<0.010	50.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100.00**	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**97.00**	<0.010	97.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.90	<0.010	9.90
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**17.00**	<0.020	17.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.70	<0.018	8.70
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	9.10	<0.019	9.10
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	11.50	<0.019	11.50
	12/04/06	Well Not Located								
	03/28/07	Well Not Located								
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.120	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-19	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	6.00	<0.020	6.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18.00**	<0.010	18.00
	01/08/04	<1.0	<5.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18.00**	<0.010	18.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	Well Dry								0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.020	0.00
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-20	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	11.00	<0.020	11.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	130.00	<0.010	130.00
	05/10/04	Removed from Sampling Schedule								
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
TW-1	01/06/03	3,380.00	1,510.00	1,860.00	9,370.00	25.00	160.00	6.00	5.20	16,316.20
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	2,000.00	2,500.00	1,100.00	5,800.00	50.00	250.00	5.00	0.38	11,705.38
	05/10/04	Well Not Located								0.00
	08/17/04	67.00	<50	<10	59.00	<10	<50	30.00	0.52	156.52
	01/14/05	700.00	7.80	82.90	1,700.00	8.10	79.80	<5.0	0.47	2,579.07
	06/29/05	400.00	5.30	22.60	759.00	8.60	72.80	<5.0	0.41	1,268.71
	09/16/05	457.00	13.20	13.20	989.00	<10	60.80	NA	0.77	1,533.97
	02/28/06	95.60	13.30	<2.0	19.20	41.60	<4.0	NA	1.30	171.00
	06/21/06	986.00	11.80	105.00	1,980.00	14.20	153.00	<5.0	0.56	3,250.56
	10/04/06	1,090.00	23.30	174.00	2,530.00	<20	83.20	<5.0	1.20	3,901.70
	12/04/06	502.00	<20	67.00	1,540.00	<20	54.00	NA	0.90	2,163.90
	03/28/07	576.00	23.50	87.50	1,980.00	<10	83.20	NA	1.00	2,751.20
	06/28/07	401.00	15.60	60.50	1,070.00	<10	45.80	NA	0.68	1,593.58
	09/12/07	1,440.00	37.50	411.00	3,370.00	<10	181.00	<5.0	3.30	5,442.80
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
TW-2	01/06/03	**6,620.00**	**6,860.00**	**620.00**	**4,110.00**	**50.20**	**160.00**	**6.00**	**5.20**	18,431.40
	04/02/03	**3,300.00**	**1,500.00**	**220.00**	**2,000.00**	**50.00**	**250.00**	**10.00**	**1.10**	7,331.10
	08/26/03	**3,000.00**	**450.00**	**79.00**	**1,700.00**	**10.00**	**160.00**	**6.80**	**0.35**	5,406.15
	01/08/04	**2,800.00**	**460.00**	**14.00**	**1,000.00**	**22.00**	**34.00**	**5.40**	**1.10**	4,336.50
	05/10/04	**3,700.00**	**640.00**	**160.00**	**1,800.00**	5.00	**170.00**	<5.0	**1.20**	6,476.20
	08/17/04	**1,400.00**	<500	<100	**300.00**	<100	<500	**5.40**	**2.20**	1,707.60
	01/14/05	**3,100.00**	**605.00**	**175.00**	**1,490.00**	**31.90**	**172.00**	<5.0	**0.59**	5,574.49
	06/29/05	**3,670.00**	**241.00**	**148.00**	**1,710.00**	**16.10**	**228.00**	<5.0	**0.40**	6,013.50
	09/16/05	**3,540.00**	**876.00**	**237.00**	**1,010.00**	**36.90**	**160.00**	NA	**0.86**	5,860.76
	02/28/06	**529.00**	**17.20**	**22.00**	**1,130.00**	<10	**31.10**	NA	**0.34**	1,729.64
	06/21/06	**4,050.00**	**1,430.00**	**320.00**	**1,890.00**	**51.20**	**258.00**	<5.0	**1.00**	8,000.20
	10/04/06	**2,390.00**	**778.00**	**116.00**	**581.00**	**59.80**	**<100**	<5.0	**1.30**	3,926.10
	12/04/06	**1,580.00**	**1,040.00**	**76.00**	**463.00**	**66.00**	<100	NA	**0.85**	3,225.85
	03/28/07	**1,730.00**	**1,860.00**	**158.00**	**997.00**	**129.00**	**102.00**	NA	**0.49**	4,976.49
	06/28/07	**23,900.00**	**41,700.00**	**3,220.00**	**17,300.00**	**793.00**	**607.00**	NA	**254.00**	87,774.00
	09/12/07	**15,200.00**	**27,700.00**	**2,240.00**	**11,800.00**	**497.00**	**416.00**	**81.20**	**251.00**	58,185.20
	SSTL	**5.00**	**8.00**	**5.00**	**180.00**	**5.00**	**18.00**	**2.00**	**0.05**	
	> SSTL	15,195.00	27,692.00	2,235.00	11,620.00	492.00	0.00	0.00	1.25	
TW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	**8.90**	<5.0	0.13	9.03
	04/02/03	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<5.0	0.03	0.031
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<0.010	0.00
	05/10/04	2.90	**11.00**	1.80	**12.00**	<1.0	<5.0	<5.0	0.05	27.75
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	0.04	0.04
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.08	0.077
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.04	0.044
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	09/12/07	<1.0	0.39	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.39
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**2.00**	**0.230**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
Crook WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**10.00**	<0.020	10.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**9.80**	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	**12.00**	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	**400.00**	<1.0	<1.0	**110.00**	<1.0	**12.00**	<5.0	2.24	524.24
post		**22.00**	<1.0	<1.0	3.20	<1.0	<5.0	<5.0	0.09	25.29
pre	06/29/05	**193.00**	BDL	BDL	**69.90**	BDL	**9.60**	NA	NA	272.50
post		4.20	BDL	BDL	3.70	BDL	BDL	NA	NA	7.90
pre	09/16/05	**12.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	12.646
post		**342.00**	<10	<10	<30	<10	<20	NA	3.80	345.80
pre	02/28/06	Not Sampled								0.00
post										0.00
pre	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.041	0.041
post		Not Sampled								0.00
pre	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.053	0.053
post		Not Sampled								0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.041	0.041
		Not Sampled								
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.031	0.031
		Not Sampled								
pre	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.053	0.053
post		Not Sampled								
	SSTL	**5.00**	**2.00**	**2.00**	**26.00**	**2.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Swift WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**10.00**	<0.020	10.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**9.80**	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	**12.00**	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	**400.00**	<1.0	<1.0	**110.00**	<1.0	**12.00**	<5.0	2.24	524.24
post		**22.00**	<1.0	<1.0	**3.20**	<1.0	<5.0	<5.0	0.09	25.29
pre	06/29/05	**193.00**	BDL	BDL	**69.90**	BDL	**9.60**	NA	NA	272.50
post		**4.20**	BDL	BDL	**3.70**	BDL	ND	NA	NA	7.90
pre	09/16/05	**12.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.046	12.646
post		**342.00**	<10	<10	<30	<10	<20	NA	3.80	345.80
pre	02/28/06	**169.00**	<1.0	<1.0	**88.60**	<1.0	**9.30**	NA	NA	266.90
post		**7.20**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	7.20
pre	06/21/06	**182.00**	<1.0	<1.0	**114.00**	<1.0	**13.80**	<5.0	1.30	311.10
post		**9.30**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.049	9.349
pre	10/04/06	**86.40**	<1.0	<1.0	**62.20**	<2.0	**6.00**	<5.0	1.90	156.50
post		**30.10**	<1.0	<1.0	**10.40**	<1.0	<2.0	<5.0	0.180	40.680
pre	12/04/06	**81.20**	<1.0	<1.0	**100.00**	<1.0	11.30	NA	2.800	195.300
post		**9.20**	<1.0	<1.0	<1.0	<1.0	<1.0	NA	0.07	9.272
pre	03/28/07	**24.80**	<1.0	<1.0	**38.50**	<1.0	5.30	NA	0.760	69.360
post		**8.10**	<1.0	<1.0	<1.0	<1.0	<1.0	NA	0.04	8.144
pre	06/28/07	**443.00**	<1.0	<1.0	**155.00**	<1.0	21.10	NA	2.400	621.500
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
pre	09/12/07	**738.00**	<1.0	<1.0	<3.0	<1.0	<2.0	5.70	<0.019	743.700
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.70	<0.019	5.700
	SSTL	**2.00**	**2.00**	**2.00**	**2.00**	**5.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	28.10	0.00	0.00	8.40	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
Hill WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**9.00**	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**22.00**	<0.010	22.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**6.10**	<0.010	6.10
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
pre	01/14/05	**2.80**	<1.0	<1.0	<1.0	<1.0	<5.0	**10.00**	0.11	12.91
post		<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
pre	06/29/05	**2.40**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.19	2.59
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.06	0.063
pre	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	0.051
post		**2.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.16	2.76
pre	02/28/06	**9.40**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	9.40
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	0.00
pre	06/21/06	**11.10**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.35	11.45
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.019	0.019
pre	10/04/06	**68.10**	<1.0	<1.0	8.50	<1.0	<2.0	<5.0	0.43	77.03
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.020	0.000
pre	12/04/06	**25.10**	<1.0	<1.0	3.30	<1.0	<2.0	NA	0.36	28.76
post		1.40	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.029	1.429
pre	03/28/07	**24.00**	<1.0	<1.0	3.50	<1.0	<2.0	NA	0.36	27.86
post	04/02/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.000
pre	06/28/07	59.30	<1.0	<1.0	10.90	<1.0	<2.0	NA	0.450	70.650
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.000
pre	09/12/07	41.90	<1.0	<1.0	7.00	<1.0	0.53	10.00	0.420	59.850
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.000
	SSTL	**2.00**	**2.00**	**2.00**	**2.00**	**5.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Smith WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**5.20**	<0.010	5.20
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120.00**	<0.010	120.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**41.00**	<0.010	41.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**51.00**	<0.020	51.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**57.40**	<0.018	57.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	Not Sampled								0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	**2.00**	**2.00**	**2.00**	**2.00**	**5.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL MASS										**308,780.275**
TOTAL SSTL MASS		**117.00**	**10,972.00**	**7,769.00**	**80,330.00**	**503.00**	**391.00**	**199.00**	**53.33**	**100,082.00**
INITIAL MASS ABOVE SSTL										**217,876.56**
CURRENT MASS ABOVE SSTL										**229,175.381**
PERCENT TOTAL MASS REDUCTION ABOVE SSTL										**-5.186**

µg/l - micrograms per liter
ND = Not Detected
NE = Not Established
NA = Not Analyzed
RBSL = Risk Based Screen Level
SSTL = Site Specific Target Levels

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass

Bold denotes concentrations over their respective SSTL or RBSL

* = 09/16/05 Sampling Event SSTL Data Utilized For Reduction Calculation

- Concentration Reduction Calculation is as follows:

$$\frac{\text{[Initial Sample Concentration Above SSTL] - [Subsequent Sample Concentration Above SSTL]}}{\text{[Initial Sample Concentration Above SSTL]}} \times 100 = \%\ \text{Reduction}$$

APPENDIX C
Field Data Sheets

SEI Environmental

SC Monitoring Well Gauging Data Sheet

Site Name: Smith Grocery WO# 300401

Date 9.12.07

Well ID	Total Depth (feet)	Well Dia. (in.)	Depth to Product (feet)	Product Thickness (feet)	Depth to Water (feet)	Notes
MW-1	35.00				29.89	
MW-2	38.00				33.43	
MW-3	35.00				30.54	Gauge Only
MW-4	27.00				CNL	Gauge Only
MW-5	30.00				28.21	Gauge Only
MW-6	37.00				33.57	
MW-7	36.00				33.36	
MW-8	38.00				33.60	
MW-9	36.00				CNL	Gauge Only
MW-10	44.00				39.18	
MW-11	44.00				39.95	
MW-12	44.00				39.38	
MW-13	47.00				CNL	possibly covered over
MW-14	50.00				42.92	
MW-15	50.00				44.06	
MW-16	37.00				31.99	Gauge Only
MW-17	40.00				36.41	
MW-18	46.00				42.03	
MW-19	50.00				44.70	
MW-20	35.00				CNL	Gauge Only
TW-1	61.00				33.59	
TW-2	88.00				33.50	
TW-3	71.00				38.41	

WSW Samples: ~~Creek~~ (Pre/Post), Hill (Pre/Post), Swift (Pre/Post), & Smith (Pre/Post)

Analysis: **EPA Method 8260B for BTEX, MTBE, and Naphthalene** (3→40ml HCl)
EPA Method 8011 for EDB (3→40ml sodium thio)
LEAD (1→250ml plastic w/ Nitric Acid)

2-inch diameter well: Well Volume = (water column) x (0.163 gallon/foot)
4-inch diameter well: Well Volume = (water column) x (0.652 gallon/foot)
Purge amount = Well Volume x 3

APPENDIX D
Laboratory Analytical Results and Chain-of-Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:

ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: SEI Environmental
ADDRESS: 5100 Reagan Dr
CITY: Charlotte STATE: NC ZIP: 28206
SEND REPORT TO: SEI Environmental
PHONE #: 704-596-8624

FACILITY INFORMATION

PROJECT NAME: Smith Grocery
LOCATION: York, SC
PROJECT NO.:
FAX #: 704-596-8605

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION NaOH	PRESERVATION HNO3	PRESERVATION H2SO4	PRESERVATION NONE	PRESERVATION Na2S2O3	EPA Method 8260B for BTEX, MTBE, + Naphthalene	8011 for EDB	3050C Pb	LAB USE ONLY
	Crook Pre	9-12-07	1237	RR	GW	7	3		1			3	X	X	X	X	X	
	Swift Pre		1242										X	X	X	X	X	
	Swift Post		1247										X	X	X	X	X	
	MW-15		1253										X	X	X	X	X	
	MW-14		1302										X	X	X	X	X	
	MW-12		1316										X	X	X	X	X	
	MW-18		1326										X	X	X	X	X	
	MW-17		1337										X	X	X	X	X	
	MW-19		1350										X	X	X	X	X	
	Hill Pre		1402										X	X	X	X	X	
	Hill Post		1408										X	X	X	X	X	

DATA TURNAROUND INFORMATION

- ☐ STANDARD
- ☑ 48 HOUR RUSH
- ☐ 24 HOUR EMERGENCY
- ☐ OTHER _____

APPROVED BY: _____

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☑ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY) _____

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.		1.	2.		2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE _____ C
5.		5.				

09/14/07 06:57 FAX 704 596 8605 SEI ENVIRONMENTAL INC. → RAL SEI 003

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:

ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: SEI Environmental
ADDRESS: 5100 Reagan Dr
CITY: Charlotte STATE: NC ZIP: 28206
SEND REPORT TO: SEI Environmental
PHONE #: 704-596-8624

FACILITY INFORMATION

PROJECT NAME: Smith Grocery
LOCATION: York, SC
PROJECT NO.:
FAX #: 704-596-8605

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	Na2S2O3	EPA Method 8260B for BTEX, MTBE, + Naphthalene	8011 for EDB	3030C Pb	LAB USE ONLY
	MW-8	9-12-07	1035	RR	GW	7	3		1			3	X	X	X	
	MW-1		1050										X	X	X	
	MW-6		1101										X	X	X	
	MW-7		1113										X	X	X	
	Smith Pre		1120										X	X	X	
	TW-2		1133										X	X	X	
	MW-2		1140										X	X	X	
	TW-1		1151										X	X	X	
	MW-10		1203										X	X	X	
	TW-3		1212										X	X	X	
	MW-11		1225										X	X	X	

DATA TURNAROUND INFORMATION

- ☐ STANDARD
- ☑ 48 HOUR RUSH
- ☐ 24 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☑ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.		1.	2.		2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE ____ C
5.		5.				

09/14/07 06:57 FAX 704 596 8605 SEI ENVIRONMENTAL INC. → RAL SEI ☑ 004

Southeast ACCUTEST. Laboratories

IT'S ALL IN THE CHEMISTRY

10/24/07

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F52479

Sampling Date: 09/12/07

Report to:

SEI Environmental-Raleigh

cboggs@sei-environmental.com

ATTN: Chris Boggs

Total number of pages in report: 75

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Table of Contents

Section 1: Sample Summary **3**
Section 2: Sample Results **5**
2.1: F52479-1: MW-8 6
2.2: F52479-2: MW-1 9
2.3: F52479-3: MW-6 12
2.4: F52479-4: MW-7 15
2.5: F52479-5: SMITH PRE 18
2.6: F52479-6: TW-2 21
2.7: F52479-7: MW-2 24
2.8: F52479-8: TW-1 27
2.9: F52479-9: MW-10 30
2.10: F52479-10: TW-3 33
2.11: F52479-11: MW-11 36
2.12: F52479-12: CROOK PRE 39
2.13: F52479-13: SWIFT PRE 42
2.14: F52479-14: SWIFT POST 45
2.15: F52479-15: MW-15 48
2.16: F52479-16: MW-14 51
2.17: F52479-17: MW-12 54
2.18: F52479-18: MW-18 57
2.19: F52479-19: MW-17 60
2.20: F52479-20: MW-19 63
2.21: F52479-21: HILL PRE 66
2.22: F52479-22: HILL POST 69
Section 3: Misc. Forms 72
3.1: Chain of Custody 73

Sample Summary

SEI-Columbia, SC

Job No: F52479

Smith's Grocery; York, SC
Project No: 300401

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F52479-1	09/12/07	10:35	RR	09/13/07	AQ	Ground Water	MW-8
F52479-2	09/12/07	10:50	RR	09/13/07	AQ	Ground Water	MW-1
F52479-3	09/12/07	11:01	RR	09/13/07	AQ	Ground Water	MW-6
F52479-4	09/12/07	11:13	RR	09/13/07	AQ	Ground Water	MW-7
F52479-5	09/12/07	11:20	RR	09/13/07	AQ	Ground Water	SMITH PRE
F52479-6	09/12/07	11:33	RR	09/13/07	AQ	Ground Water	TW-2
F52479-7	09/12/07	11:40	RR	09/13/07	AQ	Ground Water	MW-2
F52479-8	09/12/07	11:51	RR	09/13/07	AQ	Ground Water	TW-1
F52479-9	09/12/07	12:03	RR	09/13/07	AQ	Ground Water	MW-10
F52479-10	09/12/07	12:12	RR	09/13/07	AQ	Ground Water	TW-3
F52479-11	09/12/07	12:25	RR	09/13/07	AQ	Ground Water	MW-11
F52479-12	09/12/07	12:37	RR	09/13/07	AQ	Ground Water	CROOK PRE
F52479-13	09/12/07	12:42	RR	09/13/07	AQ	Ground Water	SWIFT PRE

Sample Summary
(continued)

SEI-Columbia, SC

Job No: F52479

Smith's Grocery; York, SC
Project No: 300401

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F52479-14	09/12/07	12:47	RR	09/13/07	AQ	Ground Water	SWIFT POST
F52479-15	09/12/07	12:53	RR	09/13/07	AQ	Ground Water	MW-15
F52479-16	09/12/07	13:02	RR	09/13/07	AQ	Ground Water	MW-14
F52479-17	09/12/07	13:16	RR	09/13/07	AQ	Ground Water	MW-12
F52479-18	09/12/07	13:26	RR	09/13/07	AQ	Ground Water	MW-18
F52479-19	09/12/07	13:37	RR	09/13/07	AQ	Ground Water	MW-17
F52479-20	09/12/07	13:50	RR	09/13/07	AQ	Ground Water	MW-19
F52479-21	09/12/07	14:02	RR	09/13/07	AQ	Ground Water	HILL PRE
F52479-22	09/12/07	14:08	RR	09/13/07	AQ	Ground Water	HILL POST

Sample Results

Report of Analysis

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	F52479-1	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0050965.D	1000	09/18/07	LD	n/a	n/a	VC2065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	14900	1000	200	ug/l	
108-88-3	Toluene	57600	1000	270	ug/l	
100-41-4	Ethylbenzene	4420	1000	200	ug/l	
1330-20-7	Xylene (total)	25500	3000	560	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1000	250	ug/l	
91-20-3	Naphthalene	581	2000	440	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		87-116%
17060-07-0	1,2-Dichloroethane-D4	88%		76-127%
2037-26-5	Toluene-D8	105%		86-112%
460-00-4	4-Bromofluorobenzene	95%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	F52479-1	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD41269.D	40	09/20/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	16.7	0.77	0.39	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	0% [b]		63-137%

(a) All hits confirmed by dual column analysis.
(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	F52479-1	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	F52479-2	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0050957.D	10	09/18/07	LD	n/a	n/a	VC2065
Run #2	B048585.D	20	09/20/07	LD	n/a	n/a	VB2042

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	275	10	2.0	ug/l	
108-88-3	Toluene	417	10	2.7	ug/l	
100-41-4	Ethylbenzene	782	10	2.0	ug/l	
1330-20-7	Xylene (total)	3560 [a]	60	11	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	2.5	ug/l	
91-20-3	Naphthalene	155	20	4.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%	100%	87-116%
17060-07-0	1,2-Dichloroethane-D4	85%	107%	76-127%
2037-26-5	Toluene-D8	104%	98%	86-112%
460-00-4	4-Bromofluorobenzene	92%	101%	84-120%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	F52479-2	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD41272.D	1	09/20/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		63-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	F52479-2	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	13.5	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	F52479-3	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0050956.D	5	09/18/07	LD	n/a	n/a	VC2065
Run #2	B048584.D	10	09/20/07	LD	n/a	n/a	VB2042

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	397	5.0	1.0	ug/l	
108-88-3	Toluene	29.1	5.0	1.4	ug/l	
100-41-4	Ethylbenzene	321	5.0	1.0	ug/l	
1330-20-7	Xylene (total)	1750 [a]	30	5.6	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.3	ug/l	
91-20-3	Naphthalene	107	10	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%	101%	87-116%
17060-07-0	1,2-Dichloroethane-D4	86%	106%	76-127%
2037-26-5	Toluene-D8	106%	98%	86-112%
460-00-4	4-Bromofluorobenzene	93%	103%	84-120%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	F52479-3	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD41273.D	1	09/20/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	0.49	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	F52479-3	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	36.3	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	F52479-4	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0050959.D	100	09/18/07	LD	n/a	n/a	VC2065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	216	100	20	ug/l	
108-88-3	Toluene	4260	100	27	ug/l	
100-41-4	Ethylbenzene	3570	100	20	ug/l	
1330-20-7	Xylene (total)	26900	300	56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	100	25	ug/l	
91-20-3	Naphthalene	1080	200	44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		87-116%
17060-07-0	1,2-Dichloroethane-D4	86%		76-127%
2037-26-5	Toluene-D8	106%		86-112%
460-00-4	4-Bromofluorobenzene	96%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	F52479-4	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD41276.D	4	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	37.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	1.3	0.075	0.038	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	338% [b]		63-137%

(a) All hits confirmed by dual column analysis.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	F52479-4	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	6.6	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	SMITH PRE		
Lab Sample ID:	F52479-5	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0050966.D	1	09/18/07	LD	n/a	n/a	VC2065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		87-116%
17060-07-0	1,2-Dichloroethane-D4	87%		76-127%
2037-26-5	Toluene-D8	108%		86-112%
460-00-4	4-Bromofluorobenzene	97%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	SMITH PRE		
Lab Sample ID:	F52479-5	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD41277.D	1	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		63-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	SMITH PRE		
Lab Sample ID:	F52479-5	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	TW-2		
Lab Sample ID:	F52479-6	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0050963.D	500	09/18/07	LD	n/a	n/a	VC2065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	15200	500	100	ug/l	
108-88-3	Toluene	27700	500	140	ug/l	
100-41-4	Ethylbenzene	2240	500	100	ug/l	
1330-20-7	Xylene (total)	11800	1500	280	ug/l	
1634-04-4	Methyl Tert Butyl Ether	497	500	130	ug/l	J
91-20-3	Naphthalene	416	1000	220	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		87-116%
17060-07-0	1,2-Dichloroethane-D4	88%		76-127%
2037-26-5	Toluene-D8	107%		86-112%
460-00-4	4-Bromofluorobenzene	97%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	TW-2		
Lab Sample ID:	F52479-6	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD41278.D	1000	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	37.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	251	19	9.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	0% [b]		63-137%

(a) All hits confirmed by dual column analysis.
(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	TW-2		
Lab Sample ID:	F52479-6	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	81.2	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	F52479-7	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0050964.D	500	09/18/07	LD	n/a	n/a	VC2065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	15400	500	100	ug/l	
108-88-3	Toluene	28100	500	140	ug/l	
100-41-4	Ethylbenzene	2300	500	100	ug/l	
1330-20-7	Xylene (total)	12900	1500	280	ug/l	
1634-04-4	Methyl Tert Butyl Ether	991	500	130	ug/l	
91-20-3	Naphthalene	551	1000	220	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		87-116%
17060-07-0	1,2-Dichloroethane-D4	88%		76-127%
2037-26-5	Toluene-D8	106%		86-112%
460-00-4	4-Bromofluorobenzene	98%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	F52479-7	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD41279.D	1000	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	37.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	477	19	9.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	0% [b]		63-137%

(a) All hits confirmed by dual column analysis.
(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	F52479-7	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	994	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	TW-1		
Lab Sample ID:	F52479-8	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0050958.D	10	09/18/07	LD	n/a	n/a	VC2065
Run #2	B048586.D	25	09/20/07	LD	n/a	n/a	VB2042

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1440 [a]	25	5.0	ug/l	
108-88-3	Toluene	37.5	10	2.7	ug/l	
100-41-4	Ethylbenzene	411	10	2.0	ug/l	
1330-20-7	Xylene (total)	3370 [a]	75	14	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	2.5	ug/l	
91-20-3	Naphthalene	181	20	4.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%	101%	87-116%
17060-07-0	1,2-Dichloroethane-D4	86%	107%	76-127%
2037-26-5	Toluene-D8	106%	101%	86-112%
460-00-4	4-Bromofluorobenzene	94%	103%	84-120%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	TW-1		
Lab Sample ID:	F52479-8	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD41280.D	5	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	3.3	0.096	0.048	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	115%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	TW-1		
Lab Sample ID:	F52479-8	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	F52479-9	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0050962.D	200	09/18/07	LD	n/a	n/a	VC2065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	3770	200	40	ug/l	
108-88-3	Toluene	19600	200	54	ug/l	
100-41-4	Ethylbenzene	3030	200	40	ug/l	
1330-20-7	Xylene (total)	15700	600	110	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	200	50	ug/l	
91-20-3	Naphthalene	350	400	88	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		87-116%
17060-07-0	1,2-Dichloroethane-D4	90%		76-127%
2037-26-5	Toluene-D8	106%		86-112%
460-00-4	4-Bromofluorobenzene	96%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	F52479-9	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD41281.D	100	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	48.7	1.9	0.96	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	0% [b]		63-137%

(a) All hits confirmed by dual column analysis.
(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	F52479-9	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	20.6	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	TW-3		
Lab Sample ID:	F52479-10	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0050967.D	1	09/18/07	LD	n/a	n/a	VC2065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	0.39	1.0	0.27	ug/l	J
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		87-116%
17060-07-0	1,2-Dichloroethane-D4	86%		76-127%
2037-26-5	Toluene-D8	107%		86-112%
460-00-4	4-Bromofluorobenzene	99%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	TW-3		
Lab Sample ID:	F52479-10	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD41282.D	1	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	35.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		63-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	TW-3		
Lab Sample ID:	F52479-10	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	F52479-11	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0022268.D	1	09/18/07	MM	n/a	n/a	VM913
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		87-116%
17060-07-0	1,2-Dichloroethane-D4	98%		76-127%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	101%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	F52479-11	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD41283.D	1	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		63-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	F52479-11	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	CROOK PRE		
Lab Sample ID:	F52479-12	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0022269.D	1	09/18/07	MM	n/a	n/a	VM913
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		87-116%
17060-07-0	1,2-Dichloroethane-D4	99%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	CROOK PRE		
Lab Sample ID:	F52479-12	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD41284.D	1	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	0.053	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	CROOK PRE		
Lab Sample ID:	F52479-12	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	SWIFT PRE		
Lab Sample ID:	F52479-13	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B048610.D	1	09/21/07	LD	n/a	n/a	VB2043
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		87-116%
17060-07-0	1,2-Dichloroethane-D4	107%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	109%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	SWIFT PRE		
Lab Sample ID:	F52479-13	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD41285.D	1	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		63-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	SWIFT PRE		
Lab Sample ID:	F52479-13	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	5.7	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	SWIFT POST		
Lab Sample ID:	F52479-14	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0022291.D	10	09/19/07	MM	n/a	n/a	VM914
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	738	10	2.0	ug/l	
108-88-3	Toluene	ND	10	2.7	ug/l	
100-41-4	Ethylbenzene	ND	10	2.0	ug/l	
1330-20-7	Xylene (total)	119	30	5.6	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	2.5	ug/l	
91-20-3	Naphthalene	14.6	20	4.4	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		87-116%
17060-07-0	1,2-Dichloroethane-D4	105%		76-127%
2037-26-5	Toluene-D8	107%		86-112%
460-00-4	4-Bromofluorobenzene	93%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	SWIFT POST		
Lab Sample ID:	F52479-14	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD41288.D	5	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	35.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	2.9	0.098	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	SWIFT POST		
Lab Sample ID:	F52479-14	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-15		
Lab Sample ID:	F52479-15	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0022319.D	1	09/20/07	MM	n/a	n/a	VM915
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		87-116%
17060-07-0	1,2-Dichloroethane-D4	93%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	100%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-15		
Lab Sample ID:	F52479-15	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD41289.D	1	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	0.093	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		63-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-15		
Lab Sample ID:	F52479-15	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	10.1	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-14		
Lab Sample ID:	F52479-16	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0022276.D	1	09/19/07	MM	n/a	n/a	VM914
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		87-116%
17060-07-0	1,2-Dichloroethane-D4	94%		76-127%
2037-26-5	Toluene-D8	108%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-14		
Lab Sample ID:	F52479-16	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD41290.D	1	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		63-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-14		
Lab Sample ID:	F52479-16	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	5.6	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	F52479-17	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0022277.D	1	09/19/07	MM	n/a	n/a	VM914
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		87-116%
17060-07-0	1,2-Dichloroethane-D4	96%		76-127%
2037-26-5	Toluene-D8	108%		86-112%
460-00-4	4-Bromofluorobenzene	99%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	F52479-17	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD41291.D	1	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	37.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		63-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	F52479-17	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-18		
Lab Sample ID:	F52479-18	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0022283.D	1	09/19/07	MM	n/a	n/a	VM914
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		87-116%
17060-07-0	1,2-Dichloroethane-D4	98%		76-127%
2037-26-5	Toluene-D8	107%		86-112%
460-00-4	4-Bromofluorobenzene	98%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-18		
Lab Sample ID:	F52479-18	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD41292.D	1	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		63-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-18		
Lab Sample ID:	F52479-18	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-17		
Lab Sample ID:	F52479-19	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0022294.D	1	09/19/07	MM	n/a	n/a	VM914
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		87-116%
17060-07-0	1,2-Dichloroethane-D4	99%		76-127%
2037-26-5	Toluene-D8	107%		86-112%
460-00-4	4-Bromofluorobenzene	97%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-17		
Lab Sample ID:	F52479-19	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD41293.D	1	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	0.022	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-17		
Lab Sample ID:	F52479-19	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	5.1	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12937

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-19		
Lab Sample ID:	F52479-20	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0022287.D	1	09/19/07	MM	n/a	n/a	VM914
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		87-116%
17060-07-0	1,2-Dichloroethane-D4	95%		76-127%
2037-26-5	Toluene-D8	107%		86-112%
460-00-4	4-Bromofluorobenzene	99%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-19		
Lab Sample ID:	F52479-20	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD41294.D	1	09/21/07	AA	09/18/07	OP22385	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		63-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	MW-19		
Lab Sample ID:	F52479-20	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12938

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	HILL PRE		
Lab Sample ID:	F52479-21	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0022288.D	1	09/19/07	MM	n/a	n/a	VM914
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	41.9	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	7.0	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	0.53	2.0	0.44	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		87-116%
17060-07-0	1,2-Dichloroethane-D4	99%		76-127%
2037-26-5	Toluene-D8	107%		86-112%
460-00-4	4-Bromofluorobenzene	96%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	HILL PRE		
Lab Sample ID:	F52479-21	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	DD41299.D	1	09/21/07	AA	09/18/07	OP22386	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	0.42	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		63-137%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	HILL PRE		
Lab Sample ID:	F52479-21	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	10.0	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12938

RL = Reporting Limit

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	HILL POST		
Lab Sample ID:	F52479-22	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0022289.D	1	09/19/07	MM	n/a	n/a	VM914
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		87-116%
17060-07-0	1,2-Dichloroethane-D4	97%		76-127%
2037-26-5	Toluene-D8	107%		86-112%
460-00-4	4-Bromofluorobenzene	98%		84-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	HILL POST		
Lab Sample ID:	F52479-22	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD41302.D	1	09/21/07	AA	09/18/07	OP22386	GDD1130
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	86%		63-137%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@70104 10:08 24-Oct-2007

Report of Analysis

Client Sample ID:	HILL POST		
Lab Sample ID:	F52479-22	**Date Sampled:**	09/12/07
Matrix:	AQ - Ground Water	**Date Received:**	09/13/07
		Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	09/14/07	09/17/07	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA5981
(2) Prep QC Batch: MP12938

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- **Chain of Custody**

23529

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F52479
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: SEI Environmental
ADDRESS: 5100 Reagan Dr
CITY: Charlotte STATE: NC ZIP: 28206
SEND REPORT TO: SEI Environmental
PHONE #: 704-596-8624

FACILITY INFORMATION

PROJECT NAME: Smith Grocery
LOCATION: York, SC
PROJECT NO.:
FAX #: 704-596-8605

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION NaOH	PRESERVATION H2SO4	PRESERVATION NONE	VOCs EPA Method 8260B for BTEX, MTBE, + Naphthalene	8011 for EDB	3050C Pb
1	MW-8	9-12-07	1035	RR	GW	3	1			3	X	X	X
2	MW-1		1050								X	X	X
3	MW-6		1101								X	X	X
4	MW-7		1113								X	X	X
5	Smith Pre		1120								X	X	X
6	TW-2		1133								X	X	X
7	MW-2		1140								X	X	X
8	TW-1		1151								X	X	X
9	MW-10		1203								X	X	X
10	TW-3		1212								X	X	X
11	MW-11	↓	1225	↓	↓	↓	↓	↓	↓	↓	X	X	X

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

LAB USE ONLY

DATA TURNAROUND INFORMATION

☐ STANDARD
☑ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER
APPROVED BY:
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☑ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☐ OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:
1. Zach C Smith	9-12-07/1500	1. FX
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
5.		6.

RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
2. FX		2. E Tomy 9.13.07
RELINQUISHED BY:	DATE TIME:	RECEIVED BY: 09:00
4.		4.

SEAL # | PRESERVE WHERE APPLICABLE ☐ | ON ICE ☐ | TEMPERATURE 1.4 C

1.2

3.1 3

F52479: Chain of Custody
Page 1 of 3

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F52479
ACCUTEST QUOTE #:

CLIENT INFORMATION
NAME: SEI Environmental
ADDRESS: 5100 Reagan Dr
CITY: Charlotte STATE: NC ZIP: 28206
SEND REPORT TO: SEI Environmental
PHONE #: 704-596-8624

FACILITY INFORMATION
PROJECT NAME: Smith Grocery
LOCATION: York, SC
PROJECT NO.:
FAX #: 704-596-8605

ANALYTICAL INFORMATION

MATRIX CODES
DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION MeOH	PRESERVATION HNO3	PRESERVATION NONE	OTHER	EPA Method 8260B for BTEX, MTBE, + Naphthalene	8011 for EDB	3050c Pb	LAB USE ONLY
12	Creek Pre	9.12.07	1237	RR	GW	7	3		1		3	X	X	X	X	X	
13	Swift Pre		1242									X	X	X	X	X	
14	Swift Post		1247									X	X	X	X	X	
15	MW-15		1253									X	X	X	X	X	
16	MW-14		1302									X	X	X	X	X	
17	MW-12		1316									X	X	X	X	X	
18	MW-18		1326									X	X	X	X	X	
19	MW-17		1337									X	X	X	X	X	
20	MW-19		1350									X	X	X	X	X	
21	Hill Pre		1402									X	X	X	X	X	
22	Hill Post		1408									X	X	X	X	X	

DATA TURNAROUND INFORMATION
- ☐ STANDARD
- ☑ 48 HOUR RUSH
- ☐ 24 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION
- ☑ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

1. RELINQUISHED BY SAMPLER: Leigh C. Smith	DATE TIME: 9.12.07 1900	1. RECEIVED BY: FX	2. RELINQUISHED BY: FX	DATE TIME:	2. RECEIVED BY: E. Towes 9.13.07
3. RELINQUISHED BY:	DATE TIME:	3. RECEIVED BY:	4. RELINQUISHED BY:	DATE TIME:	4. RECEIVED BY: 09:20
5. RELINQUISHED BY:	DATE TIME:	5. RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE 1.4 C

12

F52479: Chain of Custody
Page 2 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F52479 CLIENT: SEI PROJECT: Smith Grocery

DATE/TIME RECEIVED: 9.13.07 09:00 # OF COOLERS RECEIVED: 2 COOLER TEMPS: 1.4 1.2

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 8536 3067 9690

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] TIMES ON COC DOES NOT MATCH LABEL(S)
- [ ] ID'S ON COC DOES NOT MATCH LABEL(S)
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

MISC. INFORMATION

NUMBER OF ENCORES ? Ø

NUMBER OF 5035 FIELD KITS ? Ø

NUMBER OR LAB FILTERED METALS ? Ø

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE E.T. 9.13.07 TECHNICIAN SIGNATURE/DATE JC 9-13-07 ASBD 10/03/06

3.1 3

F52479: Chain of Custody
Page 3 of 3

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

CHRIS BOGGS
SEI ENVIRONMENTAL INC
2025 PROGRESS PLACE
RALEIGH NC 27608

NOV 29 2007

Re: **CASE Report Review**
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received November 26, 2007
York County

Dear Mr. Boggs:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced document. The UST Program remains concerned about the high concentrations of petroleum chemicals present in MW-2, MW-8, TW-1, and TW-2. The recommendation by SEI to continue quarterly monitoring to evaluate the reduction of chemicals of concern in the monitoring wells is unacceptable to the UST Program as there has been no reduction in these wells. The UST Program requests that a more aggressive approach to the remediation be proposed and implemented or the UST Program may consider declaring SEI Environmental in default for non-performance. The next CASE report **(3 copies)** must be submitted by February 25, 2008.

Please remember that SEI is responsible for maintaining the granulated activated carbon units. For any well that has detection in post-GAC samples, the GAC filter should be changed immediately and such work documented in the submitted reports. SEI should establish a GAC filter change schedule such that the breakthrough is minimized. Documentation of all GAC filter changes should be included in future CASE Reports.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Lois Smith, 3176 Charlotte Hwy., York, SC, 29745
Technical file

[illegible] DOCKETING # 9

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

NOV 29 2007

FRONTIS HEMPHILL
2146 OLD MCKINNEY RD
YORK SC 29745

Re: **CASE Report Review**
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received November 26, 2007
York County

Dear Mr. Hemphill

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

UST PROGRAM
DOCKETING # _____

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

NOV 29 2007

GARY WIGGAM
3043 CLOVER CIR
YORK SC 29745

Re: **CASE Report Review**
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received November 26, 2007
York County

Dear Mr. Wiggam:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

NOV 29 2007

EVERETTE & JANET CROOK
3035 CLOVER CIR
YORK SC 29745

Re: **CASE Report Review**
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received November 26, 2007
York County

Dear Mr. & Mrs. Crook:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

NOV 29 2007

TONY & SUSAN HILL
3049 CLOVER CIR
YORK SC 29745

Re: **CASE Report Review**
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received November 26, 2007
York County

Dear Mr. & Mrs. Hill:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

05/01/08

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F56791

Sampling Date: 04/09/08

Report to:

SEI-Daytona Beach, FL

dbrewster@sei-environmental.com

ATTN: David Brewster

Total number of pages in report: 70

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

SEI Environmental, Inc.
2025 Progress Court
Raleigh, North Carolina 27608
800.474.7049
919.832.2535
Fax 832.5914

May 16, 2008

Ms. Louis Smith
Smith's Grocery
3176 Charlotte Highway
York, South Carolina 29745

RE: Corrective Action System Evaluation Report
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Dear Ms. Smith:

Enclosed is the quarterly Corrective Action System Evaluation (C.A.S.E.) Report for the April 9, 2008, sampling event at the above referenced site. A copy of this report has been sent to the Underground Storage Tank Program, Assessment & Corrective Action Division, of the South Carolina Department of Health and Environmental Control (DHEC) to satisfy their reporting requirements.

SEI Environmental, Inc. appreciates the opportunity to be of service to you. If you have any questions or comments, please do not hesitate to contact me at (919) 832-2535.

Sincerely,
SEI Environmental, Inc.

Douglas S. Parker
Staff Scientist

SEI Environmental, Inc.
2025 Progress Court
Raleigh, North Carolina 27608
800.474.7049
919.832.2535
Fax 832.5914

May 16, 2008

Ms. Debra L. Thoma, Hydrogeologist
South Carolina Department of Health and Environmental Control
Assessment & Corrective Action Section, Underground Storage Tank Program
2600 Bull Street
Columbia, South Carolina 29201

RE: Corrective Action System Evaluation Report
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Dear Ms. Thoma:

Please find enclosed the quarterly Corrective Action System Evaluation (C.A.S.E) Report for the April 9, 2008, groundwater sampling event at the above referenced site. If you have any questions or comments, please contact me at (919) 832-2535.

Sincerely,
SEI Environmental, Inc.

Douglas S. Parker
Staff Scientist

cc: Ms. Louis Smith, Smith's Grocery

SEI
Environmental, Inc.

CORRECTIVE ACTION SYSTEM EVALUATION REPORT
October 2007 through April 2008

Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

PREPARED FOR:

Ms. Louis Smith
Smith's Grocery
3176 Charlotte Highway
York, South Carolina 29745

PREPARED BY:

SEI ENVIRONMENTAL, INC.
2025 Progress Court
Raleigh, North Carolina 27608
UST Site Rehabilitation Contractor No. 354

May 16, 2008

SEI Environmental, Inc.

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: May 16, 2008
Monitoring Report Number: 13
For Period Covering: September 13, 2007 to April 9, 2008
Facility Name : Smith's Grocery
Street Address: 176 Charlotte Highway (49)
UST Permit Number: 09322
City: York, South Carolina
County: York
Zip Code: 29745
Latitude: N 35°02'30.59"
Longitude: W 81°08'47.98"

Submitted by UST Owner/Operator:	Prepared by Consultant/Contractor:
Name: Louis Smith	Name: Randy Casey, PE
Company: Smith's Grocery	Company: SEI Environmental, Inc.
Address: 3176 Charlotte Highway	Address: 2025 Progress Court
City: York State: SC	City: Raleigh State: NC
Zip Code: 29745	Zip Code: 27608
Telephone: (803) 684-6289	Telephone: (919) 832-2535
SEI Project Number: 300401	UST Site Rehabilitation Contractor No. 354

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: Randy Casey, PE
SC Reg. No. 21054
Signature: Randy Casey
Date: 5/16/08

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 21054 RANDY R. CASEY

TABLE OF CONTENTS

LIMITATIONS..... iii

1.0 INTRODUCTION.....1

2.0 FIELD MEASUREMENTS AND SAMPLING.....1

2.1 GROUNDWATER SAMPLING.....1

2.2 WATER SUPPLY WELL SAMPLING.....2

3.0 LABORATORY ANALYTICAL RESULTS.....3

3.1 GROUNDWATER ANALYTICAL RESULTS.....3

3.2 WATER SUPPLY WELL ANALYTICAL RESULTS.....3

3.3 SITE SPECIFIC TARGET LEVELS.....3

4.0 REMEDIATION SYSTEM EFFECTIVENESS.....4

5.0 CONCLUSIONS AND RECOMMENDATIONS.....4

LIST OF TABLES

TABLE 1 Historical Groundwater Elevation and Product Thickness Data
TABLE 2 Historical Groundwater Analytical Results

LIST OF FIGURES

FIGURE 1 USGS Quadrangle Map
FIGURE 2 Site Map
FIGURE 3 Potentiometric Surface Map
FIGURE 4 Groundwater Chemicals of Concern Site Map

LIST OF APPENDICES

APPENDIX A Figures
APPENDIX B Tables
APPENDIX C Field Data Information Sheets for Groundwater Sampling

LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Engineer registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by AccuTest Laboratories.

1.0 INTRODUCTION

Smith's Grocery is a convenience and retail fuel store located at 3176 Charlotte Highway (SC Highway 49) in York, York County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- May 10, 2004 – Groundwater Sampling Event
- August 17, 2004 – Groundwater Sampling Event
- January 14, 2005 – Groundwater Sampling Event
- June 29, 2005 – Groundwater Sampling Event
- September 16, 2005 – Groundwater Sampling Event
- February 28, 2006 – Groundwater Sampling Event
- June 21, 2006 – Groundwater Sampling Event
- October 4, 2006 – Groundwater Sampling Event
- December 4, 2006 – Groundwater Sampling Event
- March 28, 2007 – Groundwater Sampling Event
- June 20, 2007- PTS injection
- June 28, 2007- Groundwater Sampling Event
- September 12, 2007 – Groundwater Sampling Event
- April 9, 2008 – Groundwater Sampling Event

On April 9, 2008, thirteen of the twenty-three groundwater monitoring wells and four water supply wells were sampled in accordance with the requirements of the PFP contract. This report provides details of the groundwater sampling event.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On April 9, 2008, groundwater samples were collected from thirteen (MW-1, MW-2, MW-6, MW-7, MW-8, MW-11, MW-12, MW-14, MW-17, MW-19, TW-1, TW-2, and TW-3) of twenty-three existing groundwater monitoring wells. Three (MW-10, MW-13, and MW-15)

of the twenty-three monitoring wells were either found to be dry or contained insufficient water for sampling. One (MW-18) of the twenty-three monitoring wells could not be located. Six (MW-3, MW-4, MW-5, MW-9, MW-16, and MW-20) of the twenty-three monitoring wells were removed from the sampling schedule.

Prior to sampling, groundwater monitoring wells were gauged utilizing an oil-water interface probe to measure depth to groundwater, and to detect any free product present. The depth to groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction. Figure 2 in Appendix A is a site map depicting monitoring well locations.

Free product was not currently and has not historically been detected in any of the monitoring wells. Figure 3 in Appendix A presents a groundwater potentiometric map for the current sampling event. Table 1 in Appendix B summarizes groundwater measurement data.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead. Appendix C contains the Field Data Information Sheet for Groundwater Sampling.

2.2 Water Supply Well Sampling

On April 9, 2008, groundwater samples were collected from four (Crook, Smith, Swift and Hill) water supply wells. Two (Swift and Hill) of the four water supply wells (Crook are fitted with granular activated carbon (GAC) filters. As such, samples were collected from the Swift and Hill wells before (pre) and after (post) the GAC filters. The Crook GAC filter was removed at the property owner's request.

Prior to sampling, the water was allowed to run for at least ten minutes. The samples were placed into laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

Chemicals of Concern (CoC) were detected in seven (MW-1, MW-2, MW-6, MW-7, MW-8, MW-17 and TW-2) of the thirteen monitoring wells sampled at concentrations exceeding their respective SSTL. Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.2 Water Supply Well Analytical Results

CoC were detected in both the Hill and Swift pre-GAC filter samples at concentrations exceeding their respective SSTLs. CoC were detected in the both the Hill and Swift post-GAC filter samples collected at concentrations exceeding their respective SSTLs in the lab results.

Figure 4 in Appendix A is a site map presenting water supply well locations and their CoC concentrations. Table 2 in Appendix B summarizes historical water supply well analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.3 Site Specific Target Levels

Site Specific Target Levels (SSTLs) have been designated for sixteen (MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-17 through MW-19, TW-2, and TW-3)

monitoring wells and all four (Crook, Swift, Hill, and Smith) water supply wells. For three (Crook, Swift, and Hill) water supply wells with GAC filters, the SSTLs apply to the pre-GAC filter samples. Table 4 in Appendix B summarizes SSTL information.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target concentrations for seven (benzene, toluene, ethylbenzene, xylenes, MTBE, naphthalene, lead, and EDB) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial January 6, 2003, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. The formula is a follows:

$$\left[\frac{\text{[01/06/03 Sample Concentration Above SSTL]} - \text{[Current Sample Concentration Above SSTL]}}{\text{[01/06/03 Sample Concentration Above SSTL]}}\right] * 100 = \% \text{ Reduction}$$

Using the current analytical results, the concentration reduction is 41.20 %.

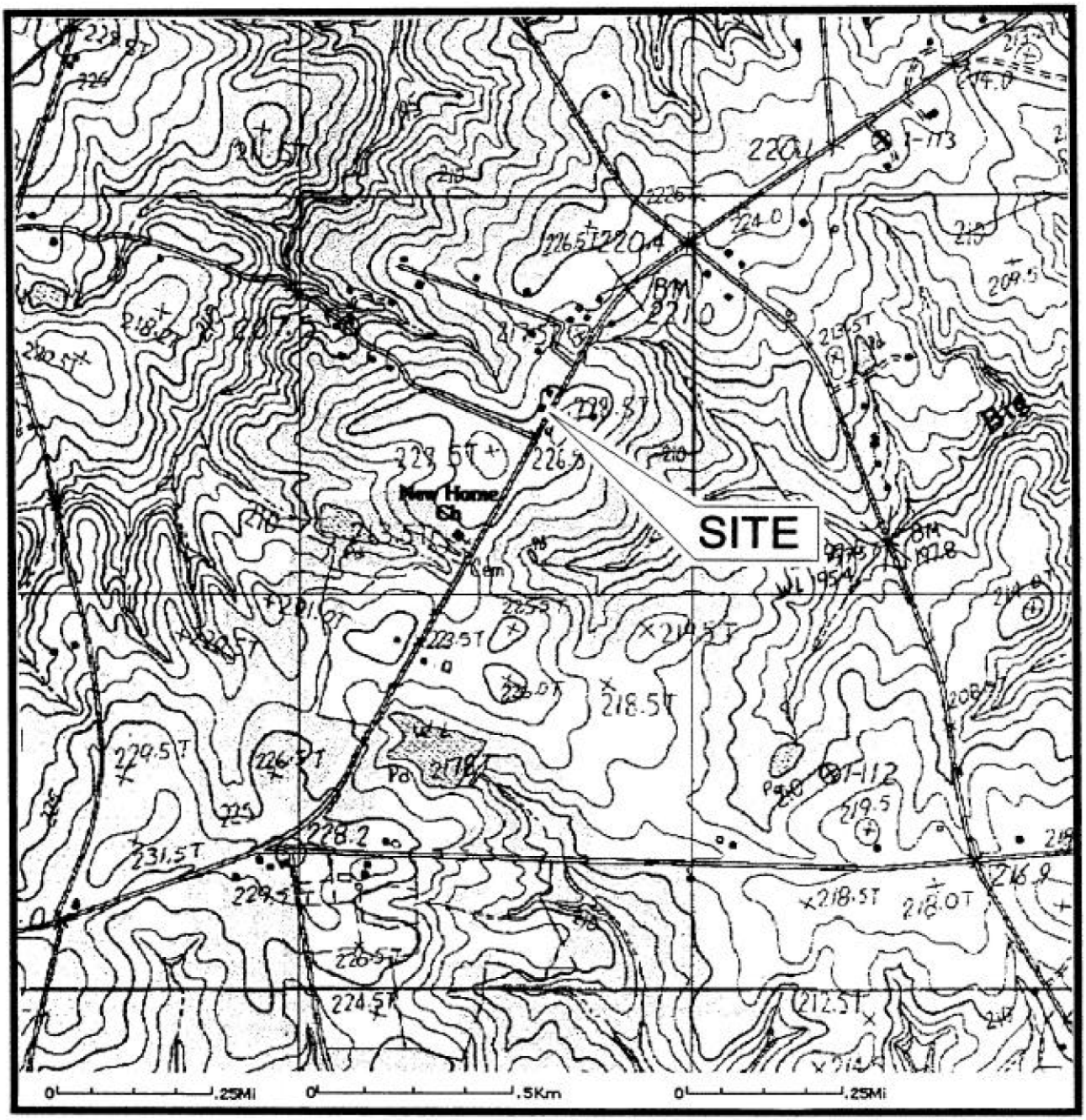
5.0 CONCLUSIONS

Free product was not detected. CoC were detected in seven monitoring wells and two water supply wells above their respective SSTLs. The percent concentration reduction has been calculated at 42.20%.

SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. The next sampling event will occur in July 2008.

APPENDIX A
FIGURES

7.5 MINUTE SERIES(TOPOGRAPHIC)

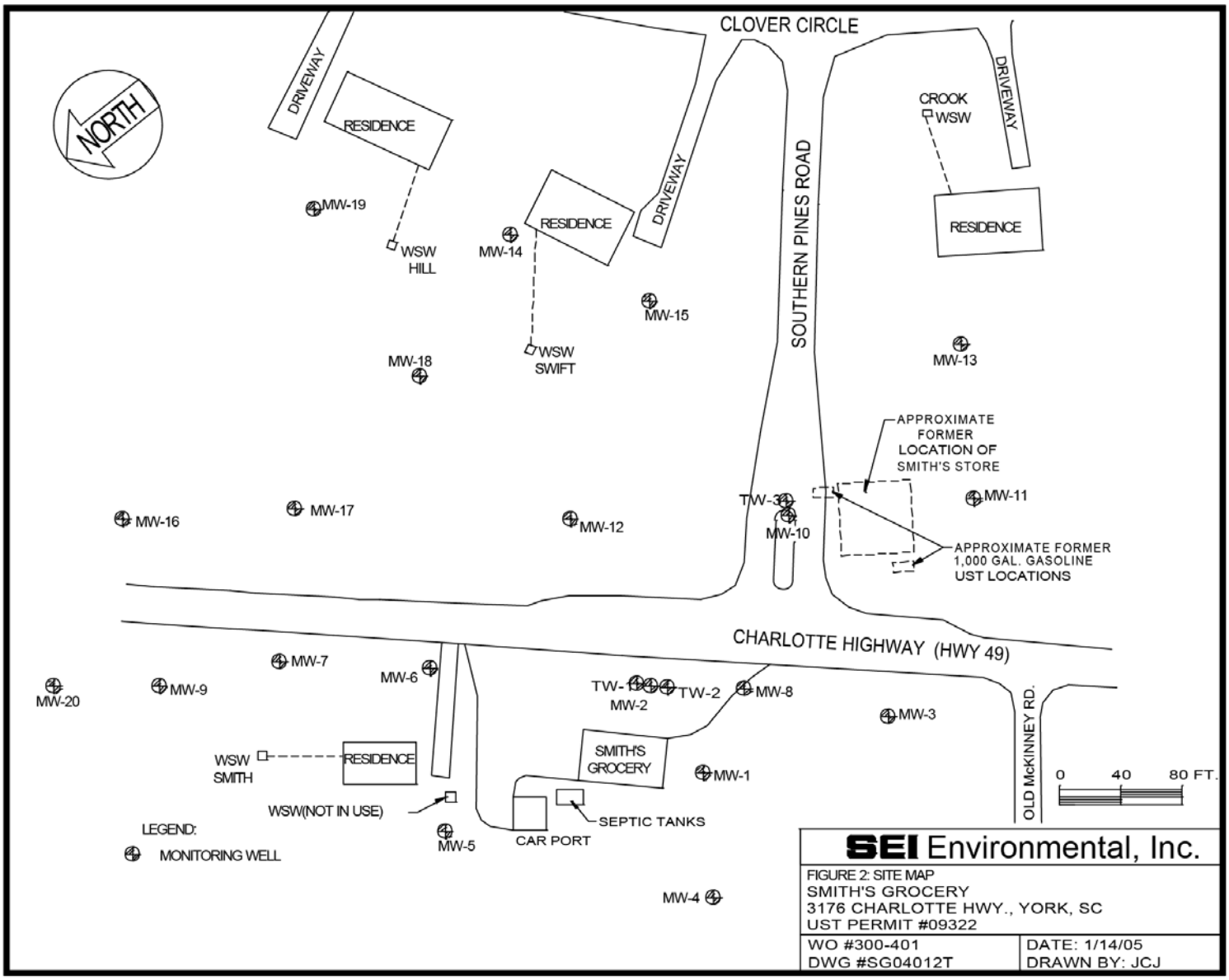


NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP(U.S.G.S. TOPO)
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

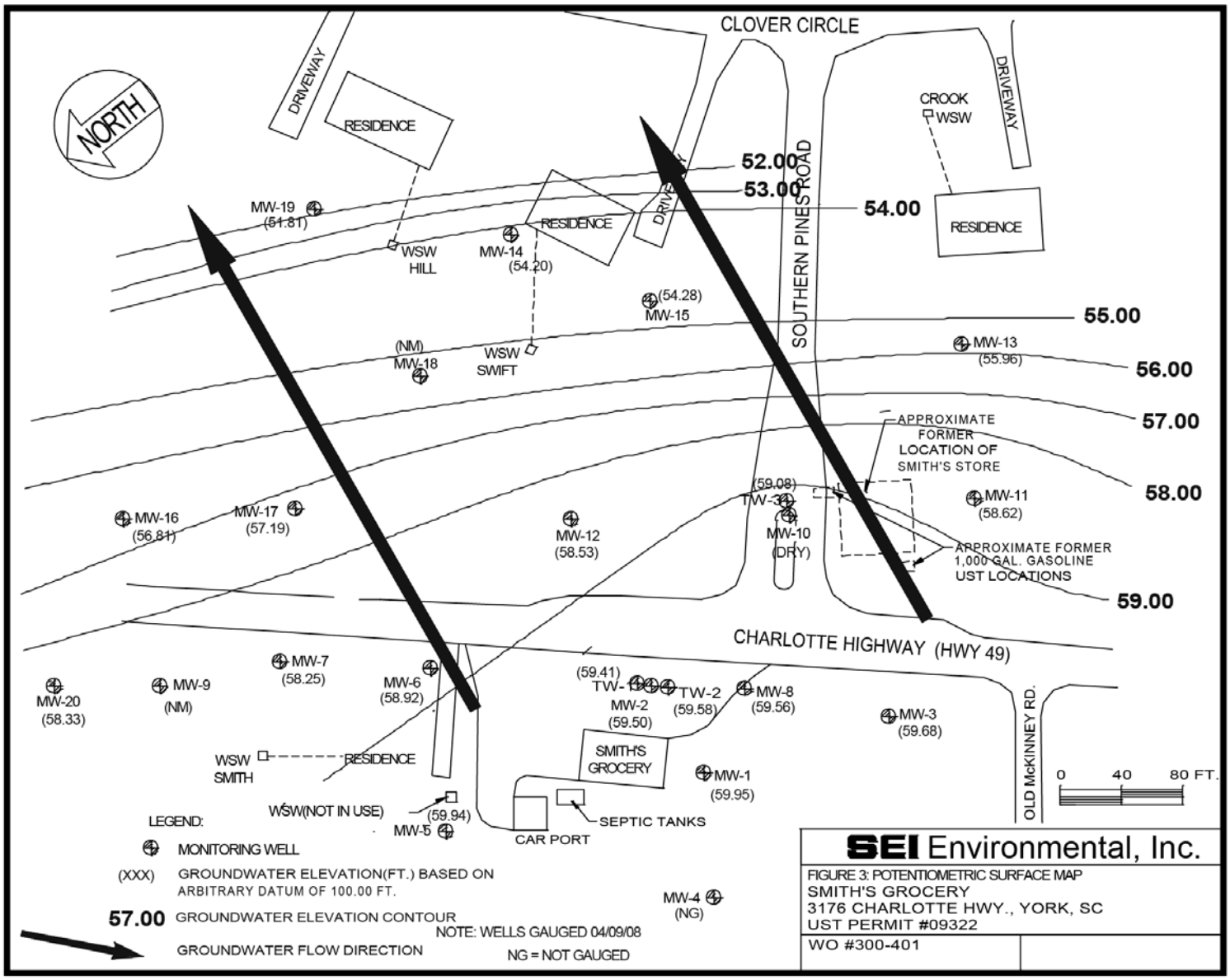
W.O. #: 300-401	DATE: 9/8/05
DWG #	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

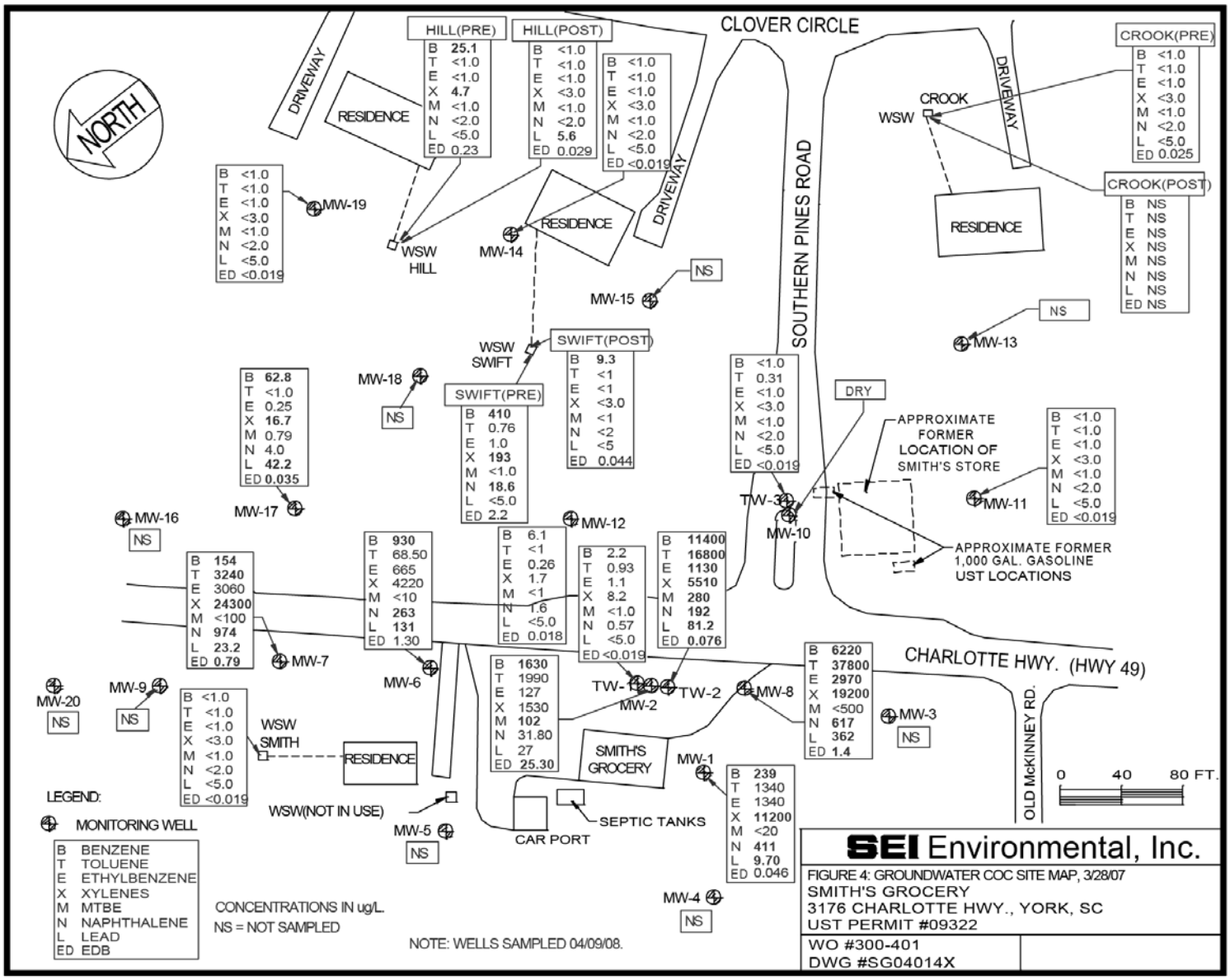
WO #300-401	DATE: 1/14/05
DWG #SG04012T	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: POTENTIOMETRIC SURFACE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP, 3/28/07
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401
DWG #SG04014X

APPENDIX B
TABLES

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-1	01/06/03	29.88			91.16	61.28
	04/02/03	28.05				63.11
	08/26/03	24.07				67.09
	01/08/04	25.46				65.70
	05/10/04	26.90				64.26
	08/17/04	27.03				64.13
	01/14/05	27.06				64.10
	06/29/05	25.67				65.49
	09/16/05	28.10				63.06
	02/28/06	Well Not Located				N/A
	06/21/06	29.16				62.00
	10/04/06	30.24				60.92
	12/04/06	30.51				60.65
	03/28/07	27.91				63.25
	06/28/07	28.30				62.86
	09/12/07	29.89				61.27
	04//09/08	31.21				59.95
MW-2	01/06/03	33.76			94.57	60.81
	04/02/03	31.92				62.65
	08/26/03	27.81				66.76
	01/08/04	29.40				65.17
	05/10/04	26.68				67.89
	08/17/04	30.71				63.86
	01/14/05	30.78				63.79
	06/29/05	29.35				65.22
	09/16/05	30.61				63.96
	02/28/06	31.19				63.38
	06/21/06	31.67				62.90
	10/04/06	32.76				61.81
	12/04/06	33.08				61.49
	03/28/07	31.67				62.90
	06/28/07	31.86				62.71
	09/12/07	33.43				61.14
	04/09/08	35.07				59.50
MW-3	01/06/03	30.87			91.91	61.04
	04/02/03	29.02				62.89
	08/26/03	25.98				65.93
	01/08/04	26.46				65.45
	05/10/04	28.83				63.08
	08/17/04	27.76				64.15
	01/14/05	27.86				64.05
	06/29/05	26.39				65.52
	09/16/05	27.67				64.24
	02/28/06	29.10				62.81
	06/21/06	28.79				63.12
	10/04/06	29.85				62.06
	12/04/06	30.19				61.72
	03/28/07	28.77				63.14
	06/28/07	28.94				62.97
	09/12/07	30.54				61.37
	04/09/08	32.23				59.68

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-4	01/06/03	24.58			86.20	61.62
	04/02/03	22.73				63.47
	08/26/03	15.07				71.13
	01/08/04	20.73				65.47
	05/10/04	25.94				60.26
	08/17/04	Well Not Located				N/A
	01/14/05	21.83				64.37
	06/29/05	20.51				65.69
	09/16/05	Well Not Located				N/A
	02/28/06	Well Not Located				N/A
	06/21/06	Well Not Located				N/A
	10/04/06	Well Not Located				N/A
	12/04/06	Well Not Located				N/A
	03/28/07	Well Destroyed				N/A
MW-5	01/06/03	27.96			89.29	61.33
	04/02/03	25.00				64.29
	08/26/03	22.70				66.59
	01/08/04	24.49				64.80
	05/10/04	25.57				63.72
	08/17/04	25.75				63.54
	01/14/05	25.44				63.85
	06/29/05	24.30				64.99
	09/16/05	25.86				63.43
	02/28/06	27.63				61.66
	06/21/06	26.64				62.65
	10/04/06	27.75				61.54
	12/04/06	27.73				61.56
	03/28/07	26.11				63.18
	06/28/07	26.96				62.33
	09/12/07	28.21				61.08
	04/09/08	29.35				59.94
MW-6	01/06/03	33.57			93.91	60.34
	04/02/03	31.66				62.25
	08/26/03	27.51				66.40
	01/08/04	29.58				64.33
	05/10/04	29.91				64.00
	08/17/04	29.50				64.41
	01/14/05	30.77				63.14
	06/29/05	29.74				64.17
	09/16/05	30.81				63.10
	02/28/06	31.07				62.84
	06/21/06	31.72				62.19
	10/04/06	32.86				61.05
	12/04/06	32.06				61.85
	03/28/07	31.56				62.35
	06/28/07	31.92				61.99
	09/12/07	33.57				60.34
	04/09/08	34.99				58.92

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-7	01/06/03	31.57			91.68	60.11
	04/02/03	29.40				62.28
	08/26/03	26.88				64.80
	01/08/04	28.40				63.28
	05/10/04	27.78				63.90
	08/17/04	29.85				61.83
	01/14/05	29.28				62.40
	06/29/05	28.17				63.51
	09/16/05	29.66				62.02
	02/28/06	29.50				62.18
	06/21/06	30.48				61.20
	10/04/06	31.47				60.21
	12/04/06	31.34				60.34
	03/28/07	29.74				61.94
	06/28/07	30.58				61.10
	09/12/07	33.36				58.32
	04/09/08	33.43				58.25
MW-8	01/06/03	33.84			94.72	60.88
	04/02/03	32.02				62.70
	08/26/03	27.58				67.14
	01/08/04	29.47				65.25
	05/10/04	29.90				64.82
	08/17/04	30.88				63.84
	01/14/05	30.85				63.87
	06/29/05	29.50				65.22
	09/16/05	30.76				63.96
	02/28/06	31.30				63.42
	06/21/06	31.84				62.88
	10/04/06	32.93				61.79
	12/04/06	33.24				61.48
	03/28/07	31.85				62.87
	06/28/07	32.06				62.66
	09/12/07	33.60				61.12
	04/09/08	35.16				59.56
MW-9	01/06/03	30.41			90.54	60.13
	04/02/03	28.20				62.34
	08/26/03	26.10				64.44
	01/08/04	27.33				63.21
	05/10/04	28.69				61.85
	08/17/04	29.50				61.04
	01/14/05	28.14				62.40
	06/29/05	26.97				63.57
	09/16/05	26.38				64.16
	02/28/06	Well Not Located				N/A
	06/21/06	27.13				63.41
	10/04/06	Well Not Located				NA
	12/04/06	Well Not Located				NA
	03/28/07	Well Destroyed				NA

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-10	01/06/03	39.71			99.77	60.06
	04/02/03	37.77				62.00
	08/26/03	33.36				66.41
	01/08/04	35.04				64.73
	05/10/04	35.50				64.27
	08/17/04	36.49				63.28
	01/14/05	36.66				63.11
	06/29/05	35.04				64.73
	09/16/05	36.34				63.43
	02/28/06	37.02				62.75
	06/21/06	37.40				62.37
	10/04/06	38.56				61.21
	12/04/06	38.94				60.83
	03/28/07	37.51				62.26
	06/28/07	37.51				62.26
	09/12/07	39.18				60.59
	04/09/08	Dry				Dry
MW-11	01/06/03	40.37			100.46	60.09
	04/02/03	38.36				62.10
	08/26/03	33.88				66.58
	01/08/04	35.70				64.76
	05/10/04	36.19				64.27
	08/17/04	37.17				63.29
	01/14/05	36.79				63.67
	06/29/05	35.68				64.78
	09/16/05	37.11				63.35
	02/28/06	37.75				62.71
	06/21/06	38.10				62.36
	10/04/06	39.35				61.11
	12/04/06	39.69				60.77
	03/28/07	38.18				62.28
	06/28/07	38.18				62.28
	09/12/07	39.95				60.51
	04/09/08	41.84				58.62
MW-12	01/06/03	39.64			99.61	59.97
	04/02/03	37.78				61.83
	08/26/03	33.78				65.83
	01/08/04	35.44				64.17
	05/10/04	35.75				63.86
	08/17/04	36.72				62.89
	01/14/05	37.18				62.43
	06/29/05	35.34				64.27
	09/16/05	Well Not Located				N/A
	02/28/06	37.12				62.49
	06/21/06	37.68				61.93
	10/04/06	38.79				60.82
	12/04/06	Not Measured				
	03/28/07	37.93				61.68
	06/28/07	37.79				61.82
	09/12/07	39.38				60.23
	04/09/08	41.08				58.53

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-13	01/06/03	42.87			100.39	57.52
	04/02/03	41.13				59.26
	08/26/03	37.20				63.19
	01/08/04	38.70				61.69
	05/10/04	39.27				61.12
	08/17/04	40.27				60.12
	01/14/05	40.12				60.27
	06/29/05	37.96				62.43
	09/16/05	40.11				60.28
	02/28/06	40.76				59.63
	10/04/06	40.91				59.48
	06/21/06	42.05				58.34
	12/04/06	Not Measured				
	03/28/07	41.05				59.34
	06/28/07	40.97				59.42
	09/12/07	Not Measured				NM
	04/09/08	44.43				55.96
MW-14	01/06/03	43.66			98.89	55.23
	04/02/03	42.10				56.79
	08/26/03	38.39				60.50
	01/08/04	39.40				59.49
	05/10/04	40.06				58.83
	08/17/04	41.12				57.77
	01/14/05	40.75				58.14
	06/29/05	39.77				59.12
	09/16/05	40.65				58.24
	02/28/06	41.42				57.47
	06/21/06	41.52				57.37
	10/04/06	42.74				56.15
	12/04/06	Not Measured				
	03/28/07	41.82				57.07
	06/28/07	42.38				56.51
	09/12/07	42.92				55.97
	04/09/08	44.69				54.20
MW-15	01/06/03	44.97			100.18	55.21
	04/02/03	43.24				56.94
	08/26/03	39.58				60.60
	01/08/04	46.55				53.63
	05/10/04	41.19				58.99
	08/17/04	42.11				58.07
	01/14/05	43.06				57.12
	06/29/05	40.92				59.26
	09/16/05	41.80				58.38
	02/28/06	42.54				57.64
	06/21/06	42.64				57.54
	10/04/06	43.61				56.57
	12/04/06	Not Measured				
	03/28/07	42.98				57.20
	06/28/07	41.43				58.75
	09/12/07	44.06				56.12
	04/09/08	45.90				54.28

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-16	01/06/03	31.07			89.91	58.84
	04/02/03	29.00				60.91
	08/26/03	27.54				62.37
	01/08/04	28.03				61.88
	05/10/04	27.83				62.08
	08/17/04	29.23				60.68
	01/14/05	28.92				60.99
	06/29/05	27.86				62.05
	09/16/05	29.23				60.68
	02/28/06	28.35				61.56
	06/21/06	29.89				60.02
	10/04/06	31.18				58.73
	12/04/06	Not Measured				
	03/28/07	30.71				59.20
	06/28/07	30.29				59.62
	09/12/07	31.99				57.92
	04/09/08	33.10				56.81
MW-17	01/06/03	36.81			94.46	57.65
	04/02/03	34.63				59.83
	08/26/03	37.08				57.38
	01/08/04	32.56				61.90
	05/10/04	32.93				61.53
	08/17/04	34.87				59.59
	01/14/05	33.83				60.63
	06/29/05	32.60				61.86
	09/16/05	33.84				60.62
	02/28/06	34.21				60.25
	06/21/06	34.73				59.73
	10/04/06	35.78				58.68
	12/04/06	Not Measured				
	03/28/07	34.73				59.73
	06/28/07	34.83				59.63
	09/12/07	36.41				58.05
	04/09/08	37.27				57.19
MW-18	01/06/03	42.83			98.14	55.31
	04/02/03	41.26				56.88
	08/26/03	37.47				60.67
	01/08/04	38.14				60.00
	05/10/04	39.09				59.05
	08/17/04	35.43				62.71
	01/14/05	40.04				58.10
	06/29/05	38.93				59.21
	09/16/05	39.77				58.37
	02/28/06	40.54				57.60
	06/21/06	40.69				57.45
	10/04/06	41.64				56.50
	12/04/06	Not Located				
	03/28/07	Not Located				
	06/28/07	40.50				57.64
	09/12/07	42.03				56.11
	o4/09/08	NL				NL

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-19	01/06/03	45.14			98.27	53.13
	04/02/03	43.31				54.96
	08/26/03	39.24				59.03
	01/08/04	40.83				57.44
	05/10/04	41.47				56.80
	08/17/04	42.01				56.26
	01/14/05	42.18				56.09
	06/29/05	41.17				57.10
	09/16/05	42.25				56.02
	02/28/06	42.76				55.51
	06/21/06	42.97				55.30
	10/04/06	44.12				54.15
	12/04/06	Not Measured				
	03/28/07	Dry				
	06/28/07	42.91				55.36
	09/12/07	44.70				53.57
	04/09/08	46.46				51.81
MW-20	01/06/03	28.09			88.35	60.26
	04/02/03	25.79				62.56
	08/26/03	24.98				63.37
	01/08/04	25.10				63.25
	05/10/04	28.41				59.94
	08/17/04	Well Not Located				N/A
	01/14/05	25.85				62.50
	06/29/05	24.63				63.72
	09/16/05	Well Not Located				N/A
	02/28/06	25.88				62.47
	06/21/06	Well Not Located				N/A
	10/04/06	Well Not Located				N/A
	12/04/06	Well Not Located				N/A
	03/28/07	26.30				62.05
	06/28/07	Well Not Located				
	09/12/07	Not Measured				
	04/09/08	30.02				58.33
TW-1	01/06/03	34.33			94.72	60.39
	04/02/03	31.86				62.86
	08/26/03	27.96				66.76
	01/08/04	29.48				65.24
	05/10/04	30.31				64.41
	08/17/04	30.40				64.32
	01/14/05	30.75				63.97
	06/29/05	29.56				65.16
	09/16/05	30.76				63.96
	02/28/06	31.46				63.26
	06/21/06	31.64				63.08
	10/04/06	32.89				61.83
	12/04/06	33.03				61.69
	03/28/07	31.92				62.80
	06/28/07	31.99				62.73
	09/12/07	33.59				61.13
	04/09/08	35.31				59.41

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
TW-2	01/06/03	33.91			94.72	60.81
	04/02/03	32.04				62.68
	08/26/03	27.54				67.18
	01/08/04	29.45				65.27
	05/10/04	29.89				64.83
	08/17/04	30.87				63.85
	01/14/05	30.94				63.78
	06/29/05	29.52				65.20
	09/16/05	30.67				64.05
	02/28/06	31.36				63.36
	06/21/06	31.86				62.86
	10/04/06	32.94				61.78
	12/04/06	33.24				61.48
	03/28/07	31.82				62.90
	06/28/07	31.95				62.77
	09/12/07	33.50				61.22
	04/09/08	35.14				59.58
TW-3	01/06/03	38.81			99.21	60.40
	04/02/03	36.97				62.24
	08/26/03	32.80				66.41
	01/08/04	34.40				64.81
	05/10/04	34.79				64.42
	08/17/04	35.75				63.46
	01/14/05	38.75				60.46
	06/29/05	34.33				64.88
	09/16/05	30.59				68.62
	02/28/06	36.26				62.95
	06/21/06	36.68				62.53
	10/04/06	37.77				61.44
	12/04/06	38.07				61.14
	03/28/07	36.73				62.48
	06/28/07	36.81				62.40
	09/12/07	38.41				60.80
	04/09/08	40.13				59.08

N/A = Not Applicable

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-1*	01/06/03	**911.00**	**9,810.00**	**2,660.00**	**18,650.00**	**250.00**	**743.00**	**56.00**	<0.010	33,080.00
	04/02/03	**590.00**	**2,900.00**	960.00	7,400.00	27.00	**200.00**	**10.00**	<0.010	12,087.00
	08/26/03	**610.00**	1,200.00	640.00	4,800.00	**100.00**	**500.00**	**33.00**	<0.010	7,883.00
	01/08/04	**620.00**	850.00	340.00	3,800.00	**100.00**	**500.00**	**5.00**	0.17	6,215.17
	05/10/04	**330.00**	1,100.00	459.00	3,700.00	25.00	**130.00**	**40.00**	<0.010	5,784.00
	08/17/04	**380.00**	970.00	670.00	3,600.00	<25	**120.00**	**63.00**	<0.010	5,803.00
	01/14/05	**270.00**	1,440.00	900.00	5,620.00	<1.0	**268.00**	<5.0	0.09	8,498.09
	06/29/05	**273.00**	1,200.00	601.00	3,640.00	<20	**136.00**	**29.50**	<0.019	5,879.50
	09/16/05	**23,300.00**	**59,100.00**	**4,700.00**	**28,400.00**	<500	<1,000	NA	**27.20**	115,527.20
	02/28/06	Well Not Located								0.00
	06/21/06	**19,500.00**	**59,900.00**	**4,070.00**	**24,400.00**	<1,000	<2,000	**47.60**	**17.70**	107,870.00
	10/04/06	**22,400.00**	**64,500.00**	**4,100.00**	**22,000.00**	<1,000	<2,000	**41.40**	**27.60**	113,000.00
	12/04/06	**18,900.00**	**60,700.00**	**3,830.00**	**22,000.00**	<1,000	<2,000	**NA**	**29.50**	105,430.00
	03/28/07	**149.00**	153.00	279.00	1,780.00	<10	55.00	NA	<0.019	2,416.00
	06/28/07	**235.00**	186.00	343.00	1,900.00	<5.0	**76.60**	NA	<0.019	2,740.60
	09/12/07	**275.00**	417.00	782.00	3,560.00	<10.0	**155.00**	**13.50**	<0.019	5,189.00
	04/09/08	**239.00**	1,340.00	1,340.00	**11,200.00**	<20	**411.00**	**9.70**	0.046	14,530.00
	SSTL	**11.00**	**2,223.00**	**1,558.00**	**10,000.00**	**90.00**	**56.00**	**2.00**	**0.32**	
	> SSTL	228.00	0.00	0.00	1,200.00	0.00	355.00	7.70	0.00	
MW-2	01/06/03	**18,400.00**	**31,100.00**	**3,180.00**	**18,920.00**	**395.00**	**514.00**	28.00	0.02	72,537.02
	04/02/03	**13,000.00**	1,800.00	**1,600.00**	9,500.00	**480.00**	**500.00**	**190.00**	**160.00**	27,230.00
	08/26/03	**16,000.00**	**26,000.00**	**2,200.00**	13,000.00	**480.00**	**540.00**	**190.00**	**120.00**	58,530.00
	01/08/04	**18,000.00**	**33,000.00**	**2,200.00**	12,000.00	**880.00**	**1,200.00**	**1,000.00**	**150.00**	68,430.00
	05/10/04	**17,000.00**	**24,000.00**	**2,000.00**	11,000.00	**750.00**	**2,500.00**	**1,200.00**	**260.00**	58,710.00
	08/17/04	**19,000.00**	**29,000.00**	**2,900.00**	14,000.00	**1,200.00**	**2,500.00**	**2,100.00**	**500.00**	71,200.00
	01/14/05	**20,600.00**	**36,400.00**	**2,960.00**	**17,200.00**	**940.00**	**862.00**	**1,230.00**	**186.00**	80,378.00
	06/29/05	**18,500.00**	**27,300.00**	**2,600.00**	14,400.00	**952.00**	<500	**792.00**	**151.00**	64,695.00
	09/16/05	**24,300.00**	**34,500.00**	**2,870.00**	**15,500.00**	**1,130.00**	**645.00**	NA	0.083	78,945.083
	02/28/06	**24,400.00**	**36,200.00**	**2,700.00**	12,400.00	**847.00**	<500	NA	**310.00**	76,857.00
	06/21/06	**19,500.00**	**26,300.00**	**2,420.00**	12,600.00	**859.00**	<1,000	**1,010.00**	**320.00**	63,009.00
	10/04/06	**18,100.00**	**25,600.00**	**2,010.00**	9,820.00	**1,020.00**	<1,000	**1,480.00**	**664.00**	58,694.00
	12/04/06	**8,530.00**	**12,300.00**	**895.00**	4,980.00	**584.00**	<1,000	NA	**318.00**	27,607.00
	03/28/07	**17,500.00**	**27,900.00**	**2,090.00**	11,700.00	**534.00**	<400	NA	**184.00**	59,908.00
	06/28/07	**20,600.00**	**29,600.00**	**2,880.00**	14,200.00	**1,340.00**	<1000	NA	**463.00**	69,083.00
	09/12/07	**15,400.00**	**28,100.00**	**2,300.00**	12,900.00	**991.00**	**551.00**	**994.00**	**477.00**	61,713.00
	04/09/08	**1,630.00**	1,990.00	127.00	1,530.00	**102.00**	31.80	27.00	**25.30**	5,463.10
	SSTL	**10.00**	**2,021.00**	**1,416.00**	**15,000.00**	**81.00**	**51.00**	**30.00**	**10.00**	
	> SSTL	1,620.00	0.00	0.00	0.00	21.00	0.00	0.00	15.30	
MW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	350.00	<0.020	350.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	8.50	0.00	8.50
	01/14/05	Removed from Sampling Schedule								0.00
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	
MW-4	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	12.00	<0.020	12.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Removed from Sampling Schedule								0.00
	05/10/04	Removed from Sampling Schedule								0.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-5	01/06/03	<1.0	<1.0	<1.0	5.40	<1.0	<1.0	12.00	<0.020	17.40
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	5.40	<0.010	5.40
	01/14/05	Removed from Sampling Schedule								0.00
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	0.00
MW-6	01/06/03	**4,840.00**	**20,400.00**	**3,540.00**	**19,020.00**	25.00	**640.00**	11.00	**7.00**	48,483.00
	04/02/03	**2,600.00**	**11,000.00**	**1,800.00**	**9,000.00**	**250.00**	**1,200.00**	**54.00**	2.60	25,906.60
	08/26/03	**1,400.00**	**5,800.00**	**1,100.00**	6,600.00	**250.00**	**1,200.00**	**37.00**	<0.010	16,387.00
	01/08/04	**350.00**	1,200.00	240.00	1,300.00	<1.0	**77.00**	<5.0	1.20	3,168.20
	05/10/04	**640.00**	**2,200.00**	300.00	1,900.00	<5.0	**150.00**	**36.00**	1.80	5,227.80
	08/17/04	**1,100.00**	**2,200.00**	730.00	3,400.00	<50	<250	13.00	<0.010	7,443.00
	01/14/05	**1,070.00**	**2,960.00**	718.00	3,990.00	<1.0	**116.00**	**107.00**	1.67	8,962.67
	06/29/05	**413.00**	500.00	290.00	1,480.00	<10	**77.30**	<5.0	0.55	2,760.85
	09/16/05	**323.00**	273.00	194.00	1,010.00	<10	**63.60**	NA	0.76	1,864.36
	02/28/06	**1,020.00**	1,150.00	619.00	2,980.00	<10	**141.00**	NA	1.00	5,911.00
	06/21/06	**316.00**	109.00	200.00	1,020.00	<10	**81.20**	15.50	0.42	1,742.12
	10/04/06	**585.00**	76.30	327.00	1,510.00	<10	**75.80**	**26.70**	0.75	2,601.55
	12/04/06	**332.00**	**3,340.00**	**2,940.00**	**19,900.00**	<10	**937.00**	NA	1.10	27,450.10
	03/28/07	**792.00**	64.70	529.00	2,590.00	<10	**156.00**	NA	0.82	4,132.52
	06/28/07	**190.00**	12.50	126.00	382.00	<2.0	**40.70**	NA	0.07	751.27
	09/12/07	**397.00**	29.10	321.00	1,750.00	<5.0	**107.00**	**36.60**	0.49	2,641.19
	04/09/08	**930.00**	68.50	665.00	4,220.00	<10	**263.00**	**131.00**	1.30	6,278.80
	SSTL	**6.00**	**1,212.00**	**850.00**	**8,000.00**	**48.00**	**31.00**	**18.00**	**4.83**	
	> SSTL	924.00	0.00	0.00	0.00	0.00	232.00	113.00	0.00	
MW-7	01/06/03	**1,020.00**	1.00	**2,290.00**	**16,940.00**	1.00	**826.00**	5.00	**1.70**	21,084.70
	04/02/03	**240.00**	110.00	120.00	38.00	**210.00**	**120.00**	**240.00**	**1.70**	1,079.70
	08/26/03	**740.00**	250.00	110.00	1,600.00	**50.00**	**250.00**	**160.00**	0.09	3,160.09
	01/08/04	**630.00**	**13,000.00**	**2,400.00**	**25,000.00**	**100.00**	**1,000.00**	5.00	**3.50**	42,138.50
	05/10/04	**700.00**	**10,000.00**	**3,400.00**	**23,000.00**	**200.00**	**1,000.00**	5.00	**6.80**	38,311.80
	08/17/04	**23.00**	49.00	21.00	140.00	<5.0	<25	**19.00**	<0.010	252.00
	01/14/05	**565.00**	**9,180.00**	**3,570.00**	**24,400.00**	<1.0	**1,370.00**	**24.00**	**1.75**	39,110.75
	06/29/05	**582.00**	**7,030.00**	**3,480.00**	**23,100.00**	<100	**890.00**	<5.0	**1.70**	35,083.70
	09/16/05	**610.00**	**5,770.00**	**3,280.00**	**21,600.00**	<50	**1,040.00**	NA	**1.90**	32,301.90
	02/28/06	**178.00**	**4,760.00**	**2,480.00**	**19,300.00**	<100	**562.00**	NA	**1.20**	27,281.20
	06/21/06	**500.00**	**3,890.00**	**3,190.00**	**23,200.00**	<100	**916.00**	**23.90**	**0.86**	31,720.76
	10/04/06	**415.00**	**4,640.00**	**3,360.00**	**21,200.00**	<100	**781.00**	**22.60**	**1.60**	30,420.20
	12/04/06	**91.30**	**8.20**	**55.00**	**294.00**	<5.0	**16.30**	NA	0.25	465.05
	03/28/07	**420.00**	**2,810.00**	**2,390.00**	**17,900.00**	<100	**818.00**	NA	**0.73**	24,338.73
	06/28/07	**148.00**	**4,300.00**	**2,910.00**	**2,110.00**	<100	**965.00**	NA	**1.30**	10,434.30
	09/12/07	**216.00**	**4,260.00**	**3,570.00**	**26,900.00**	<100	**1,080.00**	6.60	**1.30**	36,033.90
	04/09/08	**154.00**	**3,240.00**	**3,060.00**	**24,300.00**	<100	**974.00**	**23.20**	**0.79**	31,751.99
	SSTL	**6.00**	**1,212.00**	**850.00**	**12,123.00**	**48.00**	**31.00**	**18.00**	**0.66**	
	> SSTL	148.00	2,028.00	2,210.00	12,177.00	0.00	943.00	5.20	0.13	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-8	01/06/03	**6,770.00**	**84,600.00**	**3,560.00**	**24,740.00**	7.30	**362.00**	**24.00**	**1.90**	120,065.20
	04/02/03	**8,600.00**	**46,000.00**	**3,500.00**	**23,000.00**	**200.00**	**1,000.00**	**49.00**	**190.00**	82,539.00
	08/26/03	**3,800.00**	**10,000.00**	1,200.00	6,800.00	**100.00**	**500.00**	**81.00**	**58.00**	22,539.00
	01/08/04	**5,600.00**	**22,000.00**	**3,400.00**	**20,000.00**	**100.00**	**1,300.00**	**18.00**	**4.70**	52,422.70
	05/10/04	**4,500.00**	**18,000.00**	1,600.00	**18,000.00**	**200.00**	**1,000.00**	**67.00**	**6.30**	43,373.30
	08/17/04	**10,000.00**	**37,000.00**	**2,900.00**	**20,000.00**	<1,000	<5,000	**27.00**	**63.00**	69,990.00
	01/14/05	**6,780.00**	**38,200.00**	**4,340.00**	**28,200.00**	<1.0	**1,600.00**	<5.0	**2.33**	79,122.33
	06/29/05	**6,490.00**	**31,000.00**	**4,320.00**	**27,500.00**	<500	<1,000	<5.0	**2.60**	69,312.60
	09/16/05	**14,300.00**	**50,000.00**	**4,640.00**	**28,000.00**	54.60	**1,040.00**	NA	**22.20**	98,056.80
	02/28/06	**17,100.00**	**52,500.00**	**3,950.00**	**21,800.00**	<500	<1000	NA	**17.00**	95,367.00
	06/21/06	**11,600.00**	**44,300.00**	**3,860.00**	**22,000.00**	<1,000	<2,000	<10	**6.70**	81,766.70
	10/04/06	**18,500.00**	**56,900.00**	**4,480.00**	**24,900.00**	<1,000	<2000	33.50	**16.50**	104,830.00
	12/04/06	**15,900.00**	**51,800.00**	**3,690.00**	**22,400.00**	<1,000	<2000	NA	**15.60**	93,805.60
	03/28/07	**17,600.00**	**56,400.00**	**4,390.00**	**25,900.00**	<1,000	<2000	NA	**21.50**	104,311.50
	06/28/07	**14,800.00**	**45,000.00**	**3,880.00**	**24,200.00**	<1,000	<2000	NA	**36.10**	87,916.10
	09/12/07	**14,900.00**	**57,600.00**	**4,420.00**	**25,500.00**	<1,000	<2000	<5.0	**16.70**	102,436.70
	04/09/08	**6,220.00**	**37,800.00**	**2,970.00**	**19,200.00**	<500	**617.00**	**362.00**	**1.40**	67,170.40
	SSTL	**12.00**	**2,424.00**	**1,700.00**	**16,000.00**	**96.00**	**62.00**	**4.00**	**0.48**	
	> SSTL	6,208.00	35,376.00	1,270.00	3,200.00	0.00	555.00	358.00	0.92	
MW-9	01/06/03	<1.0	2.20	5.70	579.00	<1.0	**109.00**	**24.00**	<0.020	719.90
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	05/10/04	Well Not Located								0.00
	08/17/04	**540.00**	**12,000.00**	**2,800.00**	**23,000.00**	<500	<2,500	**19.00**	**8.40**	38,367.40
	01/14/05	Removed from Sampling Schedule								0.00
	RBSL	**5.00**	**1,000.00**	**700.00**	**10,000.00**	**40.00**	**25.00**	**15.00**	**0.05**	
MW-10	01/06/03	**7,980.00**	**24,900.00**	**3,540.00**	18,180.00	25.00	**299.00**	**35.00**	**78.00**	55,037.00
	04/02/03	**11,000.00**	**23,000.00**	**2,400.00**	13,000.00	**200.00**	**1,000.00**	**49.00**	**190.00**	50,839.00
	08/26/03	**12,000.00**	**33,000.00**	**3,200.00**	17,000.00	**250.00**	**1,200.00**	**210.00**	**450.00**	67,310.00
	01/08/04	**4,200.00**	**14,000.00**	**2,400.00**	12,000.00	**100.00**	**500.00**	6.30	**100.00**	33,306.30
	05/10/04	**8,600.00**	**21,000.00**	**2,400.00**	14,000.00	<250	<1,200	5.70	**210.00**	46,215.70
	08/17/04	**3,500.00**	**16,000.00**	**2,200.00**	14,000.00	<500	<2,500	**25.00**	**67.00**	35,792.00
	01/14/05	**10,200.00**	**34,600.00**	**3,150.00**	**18,400.00**	<1.0	38.00	20.00	**152.00**	66,560.00
	06/29/05	**9,040.00**	**26,000.00**	**3,040.00**	16,600.00	<500	<1,000	6.30	**115.00**	54,801.30
	09/16/05	**8,120.00**	**25,900.00**	**3,130.00**	17,000.00	<200	<400	NA	**143.00**	54,293.00
	02/28/06	**2,410.00**	**9,780.00**	**1,840.00**	7,910.00	<200	<400	NA	**15.90**	21,955.90
	06/21/06	**2,700.00**	**11,800.00**	**2,060.00**	10,000.00	<200	<400	11.10	**23.60**	26,594.70
	10/04/06	**3,400.00**	**13,900.00**	**2,130.00**	10,500.00	<250	<500	**50.90**	**43.40**	30,024.30
	12/04/06	**2,950.00**	**11,900.00**	**2,130.00**	10,100.00	<250	<500	NA	**38.00**	27,118.00
	03/28/07	**2,180.00**	**8,510.00**	**1,880.00**	8,060.00	<100	<200	NA	**18.70**	20,648.70
	06/28/07	**2,960.00**	**11,000.00**	**2,560.00**	11,100.00	<100	239.00	NA	**30.20**	27,889.20
	09/12/07	**3,770.00**	**19,600.00**	**3,030.00**	15,700.00	<200	**350.00**	20.60	**48.70**	42,519.30
	04/09/08	**DRY**								
	SSTL	**9.00**	**1,819.00**	**1,274.00**	**18,185.00**	**73.00**	**46.00**	**21.00**	**9.00**	
	> SSTL	3,761.00	17,781.00	1,756.00	0.00	0.00	304.00	0.00	39.70	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-11	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	**7.80**	**6.00**	<0.020	13.80
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26.00**	<0.010	26.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**33.00**	**0.29**	33.29
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**46.00**	<0.010	46.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17.00**	<0.010	17.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**10.00**	<0.010	10.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**37.10**	<0.019	37.10
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.07**	0.07
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**30.10**	<0.019	30.10
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**12.40**	<0.019	12.40
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	04/09/08	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**5.00**	**0.020**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-12	01/06/03	**720.00**	**17.20**	13.40	**1,550.00**	<1.0	**113.00**	6.00	**12.00**	2,431.60
	04/02/03	**12.00**	<5.0	<1.0	1.80	<1.0	<5.0	**38.00**	0.24	52.04
	08/26/03	**51.00**	<5.0	<1.0	72.00	<1.0	5.50	**37.00**	0.37	165.87
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	0.015	0.015
	05/10/04	**23.00**	<5.0	<1.0	43.00	<1.0	<5.0	6.80	0.11	72.91
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**12.00**	0.11	12.11
	01/14/05	**74.20**	<1.0	<1.0	67.60	<1.0	<5.0	6.00	0.23	148.03
	06/29/05	**28.40**	<1.0	<1.0	10.80	<1.0	<2.0	<5.0	0.027	39.227
	09/16/05	Well Not Located								0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	NA	0.018	0.018
	06/21/06	**7.20**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	7.20
	10/04/06	**17.70**	<1.0	<1.0	<3.0	<1.0	<2.0	**12.10**	0.02	29.82
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.03	0.03
	03/28/07	**9.00**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.02	9.02
	06/28/07	**7.20**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.02	7.20
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.02	0.00
	04/09/08	6.10	<1.0	0.26	1.70	<1.0	1.60	<5.0	0.018	9.68
	SSTL	**7.00**	**5.00**	**68.00**	**730.00**	**5.00**	**36.00**	**7.00**	**7.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-13	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	1.30	<5.0	<0.020	1.30
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**40.00**	<0.010	40.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45.00**	<0.010	45.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**10.90**	<0.018	10.90
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	21.00	<0.019	21.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	09/12/07	NA	NA	NA	NA	NA	NA	NA	NA	0.00
	04/0/08	NA	NA	NA	NA	NA	NA	NA	NA	0.00
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**5.00**	**0.020**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-14	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**39.00**	<0.010	39.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100.00**	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45.00**	<0.010	45.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**19.00**	<0.010	19.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**15.00**	<0.020	15.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**6.40**	<0.018	6.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**5.10**	<0.019	5.10
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.042	0.042
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**5.60**	<0.019	5.600
	04/09/08	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.000
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**5.00**	**0.510**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-15	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	9.00	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120.00**	<0.010	120.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**48.00**	<0.010	48.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26.00**	<0.010	26.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	8.00	<0.020	8.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	7.50	<0.018	7.50
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.038	0.038
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.032	0.032
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.046	0.046
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.50	**0.900**	9.400
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.110**	0.110
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.076**	0.076
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.020	0.000
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	10.10	**0.093**	10.193
	04/09/08	NA	NA	NA	NA	NA	NA	NA	NA	0.000
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**15.00**	**0.050**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-16	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	18.00	<0.020	18.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	140.00	<0.010	140.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	13.00	<0.010	13.00
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	
MW-17	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	**44.00**	<0.020	44.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17.00**	<0.010	17.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**42.00**	<0.010	42.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.020	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	7.30	<0.010	7.30
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	9.00	<0.020	9.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.40	<0.019	5.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.024**	0.024
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	**0.021**	0.021
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	12.00	**0.026**	12.026
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.031**	0.031
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.034**	0.034
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.02	0.000
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.10	0.022	5.122
	04/08/09	**62.80**	<1.0	0.25	**16.70**	0.79	4.00	**42.20**	**0.035**	126.775
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**15.00**	**0.020**	
	> SSTL	57.80	0.00	0.00	6.70	0.00	0.00	27.20	0.011	
MW-18	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**50.00**	<0.010	50.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100.00**	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**97.00**	<0.010	97.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.90	<0.010	9.90
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**17.00**	<0.020	17.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.70	<0.018	8.70
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	9.10	<0.019	9.10
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	11.50	<0.019	11.50
	12/04/06	Well Not Located								
	03/28/07	Well Not Located								
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	04/09/08	NA	NA	NA	NA	NA	NA	NA	NA	0.00
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**15.00**	**0.120**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-19	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	6.00	<0.020	6.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18.00**	<0.010	18.00
	01/08/04	<1.0	<5.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18.00**	<0.010	18.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	Well Dry								0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.020	0.00
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	04/09/08	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**15.00**	**0.020**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-20	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	11.00	<0.020	11.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	130.00	<0.010	130.00
	05/10/04	Removed from Sampling Schedule								
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	
TW-1	01/06/03	3,380.00	1,510.00	1,860.00	9,370.00	25.00	160.00	6.00	5.20	16,316.20
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	2,000.00	2,500.00	1,100.00	5,800.00	50.00	250.00	5.00	0.38	11,705.38
	05/10/04	Well Not Located								0.00
	08/17/04	67.00	<50	<10	59.00	<10	<50	30.00	0.52	156.52
	01/14/05	700.00	7.80	82.90	1,700.00	8.10	79.80	<5.0	0.47	2,579.07
	06/29/05	400.00	5.30	22.60	759.00	8.60	72.80	<5.0	0.41	1,268.71
	09/16/05	457.00	13.20	13.20	989.00	<10	60.80	NA	0.77	1,533.97
	02/28/06	95.60	13.30	<2.0	19.20	41.60	<4.0	NA	1.30	171.00
	06/21/06	986.00	11.80	105.00	1,980.00	14.20	153.00	<5.0	0.56	3,250.56
	10/04/06	1,090.00	23.30	174.00	2,530.00	<20	83.20	<5.0	1.20	3,901.70
	12/04/06	502.00	<20	67.00	1,540.00	<20	54.00	NA	0.90	2,163.90
	03/28/07	576.00	23.50	87.50	1,980.00	<10	83.20	NA	1.00	2,751.20
	06/28/07	401.00	15.60	60.50	1,070.00	<10	45.80	NA	0.68	1,593.58
	09/12/07	1,440.00	37.50	411.00	3,370.00	<10	181.00	<5.0	3.30	5,442.80
	04/09/08	2.20	0.93	1.10	8.20	<1.0	0.57	<5.0	<0.019	13.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
TW-2	01/06/03	**6,620.00**	**6,860.00**	**620.00**	**4,110.00**	**50.20**	**160.00**	**6.00**	**5.20**	18,431.40
	04/02/03	**3,300.00**	**1,500.00**	**220.00**	**2,000.00**	**50.00**	**250.00**	**10.00**	**1.10**	7,331.10
	08/26/03	**3,000.00**	**450.00**	**79.00**	**1,700.00**	**10.00**	**160.00**	**6.80**	**0.35**	5,406.15
	01/08/04	**2,800.00**	**460.00**	**14.00**	**1,000.00**	**22.00**	**34.00**	**5.40**	**1.10**	4,336.50
	05/10/04	**3,700.00**	**640.00**	**160.00**	**1,800.00**	5.00	**170.00**	<5.0	**1.20**	6,476.20
	08/17/04	**1,400.00**	<500	<100	**300.00**	<100	<500	**5.40**	**2.20**	1,707.60
	01/14/05	**3,100.00**	**605.00**	**175.00**	**1,490.00**	**31.90**	**172.00**	<5.0	**0.59**	5,574.49
	06/29/05	**3,670.00**	**241.00**	**148.00**	**1,710.00**	**16.10**	**228.00**	<5.0	**0.40**	6,013.50
	09/16/05	**3,540.00**	**876.00**	**237.00**	**1,010.00**	**36.90**	**160.00**	NA	**0.86**	5,860.76
	02/28/06	**529.00**	**17.20**	**22.00**	**1,130.00**	<10	**31.10**	NA	**0.34**	1,729.64
	06/21/06	**4,050.00**	**1,430.00**	**320.00**	**1,890.00**	**51.20**	**258.00**	<5.0	**1.00**	8,000.20
	10/04/06	**2,390.00**	**778.00**	**116.00**	**581.00**	**59.80**	**<100**	<5.0	**1.30**	3,926.10
	12/04/06	**1,580.00**	**1,040.00**	**76.00**	**463.00**	**66.00**	<100	NA	**0.85**	3,225.85
	03/28/07	**1,730.00**	**1,860.00**	**158.00**	**997.00**	**129.00**	**102.00**	NA	**0.49**	4,976.49
	06/28/07	**23,900.00**	**41,700.00**	**3,220.00**	**17,300.00**	**793.00**	**607.00**	NA	**254.00**	87,774.00
	09/12/07	**15,200.00**	**27,700.00**	**2,240.00**	**11,800.00**	**497.00**	**416.00**	**81.20**	**251.00**	58,185.20
	04/09/08	**11,400.00**	**16,800.00**	**1,130.00**	**5,510.00**	**280.00**	**192.00**	**81.20**	**0.076**	35,393.28
	SSTL	**5.00**	**8.00**	**5.00**	**180.00**	**5.00**	**18.00**	**2.00**	**0.05**	
	> SSTL	11,395.00	16,792.00	1,125.00	5,330.00	275.00	174.00	79.20	0.026	
TW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	**8.90**	<5.0	0.13	9.03
	04/02/03	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<5.0	0.03	0.031
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<0.010	0.00
	05/10/04	2.90	**11.00**	1.80	**12.00**	<1.0	<5.0	<5.0	0.05	27.75
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	0.04	0.04
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.08	0.077
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.04	0.044
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	09/12/07	<1.0	0.39	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.39
	04/09/08	<1.0	0.31	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.31
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**2.00**	**0.230**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
Crook	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**10.00**	<0.020	10.00
WSW	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**9.80**	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	**12.00**	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
	01/14/05	**400.00**	<1.0	<1.0	**110.00**	<1.0	**12.00**	<5.0	2.24	524.24
		22.00	<1.0	<1.0	3.20	<1.0	<5.0	<5.0	0.09	25.29
	06/29/05	**193.00**	BDL	BDL	**69.90**	BDL	**9.60**	NA	NA	272.50
		4.20	BDL	BDL	3.70	BDL	BDL	NA	NA	7.90
	09/16/05	**12.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	12.646
		342.00	<10	<10	<30	<10	<20	NA	3.80	345.80
	02/28/06	Not Sampled								0.00
										0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.041	0.041
		Not Sampled								0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.053	0.053
		Not Sampled								0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.041	0.041
		Not Sampled								
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.031	0.031
		Not Sampled								
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.053	0.053
		Not Sampled								
	04/09/08	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.025	0.025
	SSTL	**5.00**	**2.00**	**2.00**	**26.00**	**2.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Swift	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**10.00**	<0.020	10.00
WSW	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**9.80**	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	**12.00**	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
	01/14/05	**400.00**	<1.0	<1.0	**110.00**	<1.0	**12.00**	<5.0	2.24	524.24
		22.00	<1.0	<1.0	**3.20**	<1.0	<5.0	<5.0	0.09	25.29
	06/29/05	**193.00**	BDL	BDL	**69.90**	BDL	**9.60**	NA	NA	272.50
		4.20	BDL	BDL	**3.70**	BDL	ND	NA	NA	7.90
	09/16/05	**12.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.046	12.646
		342.00	<10	<10	<30	<10	<20	NA	3.80	345.80
	02/28/06	**169.00**	<1.0	<1.0	**88.60**	<1.0	**9.30**	NA	NA	266.90
		7.20	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	7.20
	06/21/06	**182.00**	<1.0	<1.0	**114.00**	<1.0	**13.80**	<5.0	1.30	311.10
		9.30	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.049	9.349
	10/04/06	**86.40**	<1.0	<1.0	**62.20**	<2.0	**6.00**	<5.0	1.90	156.50
		30.10	<1.0	<1.0	**10.40**	<1.0	<2.0	<5.0	0.180	40.680
	12/04/06	**81.20**	<1.0	<1.0	**100.00**	<1.0	11.30	NA	2.800	195.300
		9.20	<1.0	<1.0	<1.0	<1.0	<1.0	NA	0.07	9.272
	03/28/07	**24.80**	<1.0	<1.0	**38.50**	<1.0	5.30	NA	0.760	69.360
		8.10	<1.0	<1.0	<1.0	<1.0	<1.0	NA	0.04	8.144
	06/28/07	**443.00**	<1.0	<1.0	**155.00**	<1.0	21.10	NA	2.400	621.500
		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	09/12/07	**738.00**	<1.0	<1.0	<3.0	<1.0	<2.0	5.70	<0.019	743.700
		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.70	<0.019	5.700
	04/09/08	**410.00**	0.76	1.00	**193.00**	<1.0	**18.60**	<5.0	2.200	625.560
		9.30	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.044	9.344
	SSTL	**2.00**	**2.00**	**2.00**	**2.00**	**5.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
Hill WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**9.00**	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**22.00**	<0.010	22.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**6.10**	<0.010	6.10
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
pre	01/14/05	**2.80**	<1.0	<1.0	<1.0	<1.0	<5.0	**10.00**	0.11	12.91
post		<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
pre	06/29/05	**2.40**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.19	2.59
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.06	0.063
pre	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	0.051
post		**2.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.16	2.76
pre	02/28/06	**9.40**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	9.40
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	0.00
pre	06/21/06	**11.10**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.35	11.45
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.019	0.019
pre	10/04/06	**68.10**	<1.0	<1.0	8.50	<1.0	<2.0	<5.0	0.43	77.03
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.020	0.000
pre	12/04/06	**25.10**	<1.0	<1.0	3.30	<1.0	<2.0	NA	0.36	28.76
post		1.40	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.029	1.429
pre	03/28/07	**24.00**	<1.0	<1.0	3.50	<1.0	<2.0	NA	0.36	27.86
post	04/02/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.000
pre	06/28/07	59.30	<1.0	<1.0	10.90	<1.0	<2.0	NA	0.450	70.650
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.000
pre	09/12/07	**41.90**	<1.0	<1.0	**7.00**	<1.0	0.53	10.00	0.420	59.850
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.000
pre	04/09/08	**25.10**	<1.0	<1.0	**4.70**	<1.0	<2.0	<5.0	0.230	30.030
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**5.60**	<0.019	5.600
	SSTL	**2.00**	**2.00**	**2.00**	**2.00**	**5.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	
Smith WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**5.20**	<0.010	5.20
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120.00**	<0.010	120.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**41.00**	<0.010	41.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**51.00**	<0.020	51.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**57.40**	<0.018	57.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	Not Sampled								0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	09/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	04/09/08	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	**2.00**	**2.00**	**2.00**	**2.00**	**5.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL MASS										**203,284.389**
TOTAL SSTL MASS		**117.00**	**10,972.00**	**7,769.00**	**80,330.00**	**503.00**	**391.00**	**199.00**	**53.33**	**100,082.00**
INITIAL MASS ABOVE SSTL										**217,876.56**
CURRENT MASS ABOVE SSTL										**128,106.847**
PERCENT TOTAL MASS REDUCTION ABOVE SSTL										**41.202**

µg/l - micrograms per liter
ND = Not Detected
NE = Not Established
NA = Not Analyzed

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass

RBSL = Risk Based Screen Level
SSTL = Site Specific Target Levels
Bold denotes concentrations over their respective SSTL or RBSL
* = 09/16/05 Sampling Event SSTL Data Utilized For Reduction Calculation

- Concentration Reduction Calculation is as follows:

$$\frac{\text{[Initial Sample Concentration Above SSTL] - [Subsequent Sample Concentration Above SSTL]}}{\text{[Initial Sample Concentration Above SSTL]}} \times 100 = \%\ \text{Reduction}$$

APPENDIX C
Field Data Sheets

SEI Environmental

SC Monitoring Well Gauging Data Sheet

Site Name: Smith Grocery **WO#** 300401

Date 4/9/08

Well ID	Total Depth (feet)	Well Dia. (in.)	Depth to Product (feet)	Product Thickness (feet)	Depth to Water (feet)	Notes
MW-1	35.00	2			31.21	
MW-2	38.00	2			35.07	
MW-3	35.00	2			32.23	Gauge Only
MW-4	27.00	2			Gone	Gauge Only
MW-5	30.00	2			29.35	Gauge Only Dry Not enough to Sample
MW-6	37.00	2			34.99	
MW-7	36.00	2			33.43	
MW-8	38.00	2			35.16	
MW-9	36.00	2		Destroyed		Gauge Only
MW-10	44.00	2			Dry	
MW-11	44.00	2			41.84	
MW-12	44.00	2			41.08	
MW-13	47.00	2			44.43	
MW-14	50.00	2			44.69	
MW-15	50.00	2			45.90	Dry, not enough to sample
MW-16	37.00	2			33.10	Gauge Only
MW-17	40.00	2			37.97	
MW-18	46.00	2		Could	not Find, covered up	
MW-19	50.00	2			46.46	
MW-20	35.00	2			30.02	Gauge Only
TW-1	61.00	2			35.31	
TW-2	88.00	2			35.14	
TW-3	71.00	2			40.13	
WSW Samples: Crook (Pre/Post), Hill (Pre/Post), Swift (Pre/Post), & Smith (Pre/Post)						

Analysis: **EPA Method 8260B for BTEX, MTBE, and Naphthalene**
EPA Method 8011 for EDB
LEAD

2-inch diameter well: Well Volume = (water column) x (0.163 gallon/foot)
4-inch diameter well: Well Volume = (water column) x (0.652 gallon/foot)
Purge amount = Well Volume x 3

Crook - Carbon Unit removed

APPENDIX D
Laboratory Analytical Results and Chain-of-Custody

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

RANDY CASEY
SEI ENVIRONMENTAL INC
2025 PROGRESS PLACE
RALEIGH NC 27608

JUN 12 2008

Re: **CASE Report Review**
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received May 28, 2008
York County

Dear Mr. Casey:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced document. The UST Program remains concerned about the high concentrations of petroleum chemicals present in MW-2, MW-8, TW-1, and TW-2. The recommendation by SEI to continue quarterly monitoring to evaluate the reduction of chemicals of concern in the monitoring wells is unacceptable to the UST Program due to the persistent high concentrations. The UST Program requests that a more aggressive approach to the remediation be proposed and implemented or the UST Program may consider declaring SEI Environmental in default for non-performance. The next CASE report must be submitted by August 28, 2008.

Please remember that SEI is responsible for maintaining the granulated activated carbon units. For any well that has detection in post-GAC samples, the GAC filter should be changed immediately and such work documented in the submitted reports. SEI should establish a GAC filter change schedule such that the breakthrough is minimized. Documentation of all GAC filter changes should be included in future CASE Reports. The CASE report noted that the Swift and Hill water supply wells had chemicals detected in the post-GAC samples. However, no mention was made in the report if the filters had been changed as a result of the detection.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Lois Smith, 3176 Charlotte Hwy., York, SC, 29745
Technical file

UST DOCKET
11

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

OCT 24 2008

DAVID BREWSTER
SEI ENVIRONMENTAL
2506 GRANDVIEW DR
NASHVILLE TN 37211

Re: **Pay-for-Performance Corrective Action Update**

10t Pantry 3229, 3741 Hwy 17 Byp., Murrells Inlet, SC
UST Permit #03713

5t Captain Dicks's Marina, 4123 US Hwy 17 Bus., Murrells Inlet, SC
UST Permit #14457

6t Rock Hill Maintenance Facility, 1115 Camden Ave., Rock Hill, SC
UST Permit #09160

12t Smiths Grocery, SC Hwy 49, York, SC
UST Permit #09322

11t Hot Spot 2005, 1915 Hwy 321 N., Clover, SC
UST Permit #09370

24t Neelys Country Corner, 2150 Neely Store Rd., Rock Hill, SC
UST Permit #14541

Dear Mr. Brewster:

The Underground Storage Tank Program has reviewed the files for the referenced pay-for-performance corrective action sites. All of the sites listed have Corrective Action Status Evaluation Reports that are past due. The contract for each site requires that reports be submitted on a quarterly basis. In order to reestablish the required schedule, a report for each site must be submitted within 45 days from the date of this letter

If you have any questions or need additional information, please feel free to contact me at (803) 896-6397 or via e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma,Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

UST DOCKET

Cc: Technical Files

GAC Unit Installation and Maintenance

Date 1-30-09

UST Permit number #09322 CA# 35174

Street Address 3049 Clover Cir. York SC.

GAC Unit serial and model number and meter reading

N/A
Missing Controller

NEW INSTALLATION

FEB 05 2009
UNDERGROUND STORAGE TANK PROGRAM

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☑ **FILTER CHANGE**

Filter Disposal method: land fill

Condition of GAC Unit ✓ in need of repair* _____ good

Condition of GAC Unit housing _____ in need of repair* ✓ good

*Repair needed: CONTROLLER MISSING

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☐ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

Comments _____

UST DOCKET
13 tech

GAC Unit Installation and Maintenance

Date 1-30-09

UST Permit number #09322 CA# 35174

Street Address 3043 Clover Cir. York S.C.

GAC Unit serial and model number and meter reading

380.45 GPD

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☑ **FILTER CHANGE**

Filter Disposal method: Land Fill

Condition of GAC Unit _____in need of repair* ✓ good

Condition of GAC Unit housing _____in need of repair* ✓ good

*Repair needed: _____

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☐ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

Comments _____

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

FEB 17 2009

JIMMY COOPER
PALMETTO ENVIRONMENTAL GROUP
PO BOX 427
ELGIN SC 29045

Re: Notice to Proceed-GAC Change
Smith Grocery, SC Hwy 49, Clover, SC
UST Permit #09322; CA#35174
IFB-31733-5/1/07-EMW; PO #680378
York County

Dear Mr. Cooper:

Under the terms and conditions of the referenced contract, a GAC filter replacement has been approved for the Hill and Wiggam Residences residence located at 3049 and 3043 Clover Circle. The contact people are Tony Hill (803) 684-5425 and Gary Wiggam (803) 628-5464. This facility has been assigned an individual Cost Agreement (CA) number as listed above. Please reference the **CA number and Purchase Order #680378** on the invoice submitted for payment. Palmetto Environmental Group should complete the work in accordance with the contract specifications.

If you have any questions or need further assistance, please contact me at (803) 896-6397 or by email at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

enc: Site Information

cc: Technical File (w/o enc.)
Minda Johnson, UST Program

Approved Cost Agreement 35174

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB						
		A	EQUIPMENT	1.0000	85.00	85.00
24 GAC SYSTEM						
		C	FILTER REPLACEMENT/REMOVAL	2.0000	390.00	780.00
				Total Amount		865.00

GAC Unit Installation and Maintenance

UST
MAY 08 2009
PROGRAM

Date 4/16/09

UST Permit number 09322 CA# 35174

Street Address 3049 Clover Cir. York S.C. The Pines

GAC Unit serial and model number and meter reading

5012 Unit 5561 GAC5

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☐ **FILTER CHANGE**

Filter Disposal method: _____

Condition of GAC Unit _____in need of repair* _____good

Condition of GAC Unit housing _____in need of repair* _____good

*Repair needed: Replace head on unit

☑ **SERVICE/REPAIR CALL**

Service or repair provided _____

☐ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

Comments _____

UST
DOCKET
151

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAY 19 2009

JIMMY COOPER
PALMETTO ENVIRONMENTAL GROUP
PO BOX 427
ELGIN SC 29045

Re: Notice to Proceed-GAC Unit Repair
Smith Grocery, SC Hwy 49, Clover, SC
UST Permit #09322; CA#36236
IFB-31733-5/1/07-EMW; PO #680378
York County

Dear Mr. Cooper:

Under the terms and conditions of the referenced contract, a GAC unit repair has been approved for the Hill Residence located at 3049 Clover Circle. The contact person is Tony Hill (803) 684-5425. This facility has been assigned an individual Cost Agreement (CA) number as listed above. Please reference the **CA number and Purchase Order #680378** on the invoice submitted for payment. Palmetto Environmental Group should complete the work in accordance with the contract specifications.

If you have any questions or need further assistance, please contact me at (803) 896-6397 or by email at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Site Information

cc: Technical File (w/o enc.)
Minda Johnson, UST Program

16tech
UST
DOCKET

Approved Cost Agreement 36236

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB					
		B PERSONNEL	1.0000	85.00	85.00
18 MISCELLANEOUS					
		GAC UNIT REPAIR	1.0000	500.00	500.00
			Total Amount		585.00

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BRYAN SHANE
MIDLANDS ENVIRONMENTAL CONSULTANTS
PO BOX 854
LEXINGTON SC 29071

JUN 10 2009

Re: **Notice to Proceed-Groundwater Sampling**
Bid # IFB-33335-3/11/08-EMW; PO# 719459

Dear Mr. Shane:

Based on the award of the referenced bid package, enclosed are the information packets to conduct nine (9) groundwater-sampling events. The packets contain all necessary information for work to begin. The facility has been assigned an individual Cost Agreement (CA) number as listed below. Please reference the CA number and Purchase Order # 719459 on the appropriate invoice submitted for payment against the facility.

UST Permit #	Facility	County	# wells	UST Project Manager	Sampling Due Date	Parameters-Groundwater	PACE CA#	MECI CA#
09317	Ft Mill 66	York	56	D. Thoma	07/03/09	BTEXMN, DCA, EDB, & Oxygenates	36319	36320
11505	Harshaw Farms	York	19	D. Thoma	07/03/09	BTEXMN, DCA, & EDB	36107	36108
14541	Neelys Country Store	York	26	D. Thoma	07/03/09	BTEXMN, DCA, & EDB	36199	36200
09322	Smiths Grocery	York	29	D. Thoma	07/03/09	BTEXMN, DCA, & EDB	36193	36194
09370	Hot Spot 2005	York	13	D. Thoma	07/03/09	BTEXMN, DCA, & EDB	36197	36198
09160	Rock Hill Maintenance	York	15	D. Thoma	07/03/09	BTEXMN, DCA, & EDB	36195	36196
02017	Hamrick Kwik Stop	Cherokee	30	S. Fulmer	07/03/09	BTEXMN, DCA, & Oxygenates	36099	36098
15724	Burnette Cleaners	Richland	18	S. Fulmer	07/03/09	BTEXMN, DCA, & EDB	35931	35930
09947	Camden Shell	Kershaw	20	D. Thoma	07/03/09	BTEXMN & DCA	36256	36257

MECI will perform services at the sites on behalf of the site's responsible party (RP); however, payment will be made from the SUPERB Account. The site's RP has no obligation for payment for this scope of work. Please coordinate access to the facility with the property owner. Contact information has been provided in the information packet. The Department grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included with the final report. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs. **Please note, the final report is due within 3 weeks from the date the site is sampled. If the site is not sampled by the specified due date or the report is not received in the specified time period, a late fee may be imposed.**

UST DOCKET 17ee

Please contact me with the sampling schedule before commencing work at these facilities. If you have any questions or need further assistance, please contact me at (803) 896-6397 or thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Information Packets
Approved Cost Agreements

cc: Renee Spencer, PACE Analytical, 9800 Kincey Ave. Ste. 100, Huntersville, NC, 28078 (w/ Approved CAs)
Technical Files (w/o. enc.)

Midlands Environmental Consultants, Inc.

July 14, 2009

UST
JUL 16 2009
PROGRAM

Ms. Debra Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Report of Groundwater Sampling
Smith Grocery
York, South Carolina
SCDHEC Site ID Number 09322, CA # 36194
MECI Project Number 09-2322

Dear Ms. Thoma,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached Report of Sampling for the referenced site.

On July 1, 2009, twenty monitoring wells and six water supply wells (WSW-Hill (Pre-GAC), WSW-Hill (Post-GAC), WSW-Swift (Pre-GAC), WSW-Swift (Post-GAC), WSW-Crock and WSW-Smith) were sampled. Three monitoring wells (TW-1, TW-2, and TW-3) were purged prior to sampling. One monitoring well (MW-20) was gauged and determined to be obstructed. Two monitoring wells (MW-4 and MW-13) were not located at the time of sampling. Groundwater samples obtained were transported to Pace Analytical Services, Inc. of Huntersville, NC for analysis.

Purge water produced by the purging process was treated on-site utilizing a granular activated carbon unit. A total of 37.0 gallons of purge water was disposed of in this manner. A disposal manifest for the referenced purge water is attached at the end of this report.

If you have any question or comments please feel free to contact us at 803-808-2043.

Sincerely,
Midlands Environmental Consultants, Inc.

Brendon P. Kelly for
Staff Scientist

Jeff L. Coleman
Project Scientist

UST
DOCKET
#18

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

Site Activity Summary

UST Permit #: 09322
Facility Name: Smith Grocery
County: York
Field Personnel: John Womack, Logan McConnahey

Midlands Environmental Consultants, Inc.
235-B Dooley Road, Lexington, SC 29073
(803) 808-2043 fax: 808-2048

Sample ID	Sampled?	Date	Time	Screened Interval	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	# Gals. Purged	Comments
MW-1	Y	7/1/09	14:26	25-35	***	33.11	***	***	No Odor
MW-2	Y	7/1/09	14:40	23-38	***	30.46	***	***	Slight Odor
MW-3	Y	7/1/09	15:22	25-35	***	31.80	***	***	No Odor
MW-4	N	***	***	17-27	***	***	***	***	Not Located: Covered by Garden
MW-5	Y	7/1/09	13:55	20-30	***	29.15	***	***	No Odor
MW-6	Y	7/1/09	13:27	27-37	***	34.44	***	***	No Odor
MW-7	Y	7/1/09	13:33	26-36	***	33.35	***	***	No Odor
MW-8	Y	7/1/09	14:33	23-38	***	34.72	***	***	No Odor
MW-9	Y	7/1/09	13:38	21.36	***	32.80	***	***	Odor
MW-10	Y	7/1/09	11:09	29-44	***	40.36	***	***	No Odor
MW-11	Y	7/1/09	11:16	29-44	***	41.10	***	***	No Odor
MW-12	Y	7/1/09	11:35	29-44	***	43.80	***	***	Odor
MW-13	N	***	***	32-47	***	***	***	***	Not Located: Metal Dectector Ineffective
MW-14	Y	7/1/09	10:10	35-50	***	43.90	***	***	No Odor
MW-15	Y	7/1/09	10:08	35-50	***	45.07	***	***	No Odor
								0.0	**TOTAL GALLONS PURGED**

Site Activity Summary

UST Permit #: 09322
Facility Name: Smith Grocery
County: York
Field Personnel: John Womack, Logan McConnahey

Midlands Environmental Consultants, Inc.
235-B Dooley Road, Lexington, SC 29073
(803) 808-2043 fax: 808-2048

Sample ID	Sampled?	Date	Time	Screened Interval	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	# Gals. Purged	Comments
MW-16	Y	7/1/09	11:51	22-37	***	40.50	***	***	No Odor
MW-17	Y	7/1/09	11:44	25-40	***	42.77	***	***	Odor
MW-18	Y	7/1/09	12:20	31-46	***	43.22	***	***	No Odor
MW-19	Y	7/1/09	12:08	35-50	***	45.36	***	***	No Odor
MW-20	N	***	***	20-35	***	***	***	***	Well Obstructed at 1' / Filled in with Dirt
TW-1	Y	7/1/09	14:59	56-61	***	34.75	***	13.0	No Odor
TW-2	Y	7/1/09	15:09	86-88	***	34.90	***	8.5	No Odor
TW-3	Y	7/1/09	11:02	66-71	***	39.63	***	15.5	No Odor
WSW-Hill (Pre)	Y	7/1/09	12:38	***	***	***	***	***	No Odor
WSW-Hill (Post)	Y	7/1/09	12:18	***	***	***	***	***	No Odor
WSW-Swift (Pre)	Y	7/1/09	12:42	***	***	***	***	***	No Odor
WSW-Swift (Post)	Y	7/1/09	10:30	***	***	***	***	***	No Odor
WSW-Crock	Y	7/1/09	10:36	***	***	***	***	***	No Odor
WSW-Smith	Y	7/1/09	13:56	***	***	***	***	***	No Odor
								37.0	**TOTAL GALLONS PURGED**

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 7/1/2009

Field Personnel: John Womack, Logan McConnahey

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith Grocery

Site ID#: 09322 **Monitoring Well #** TW-1

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Free Product (DFP)			feet
Depth to Ground Water (DGW)	34.75		feet
Total Well Depth (TWD)	61		feet
Length of the water column (LWC=TWD-DGW)		26.25	feet
1 casing volume (CV=LWC X C)= _____ X	0.163	4.28	gallons
3 casing volume (3 X CV)=	3	12.84	gallons

Total Volume of Water Purged Before Sampling 13 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	14:47	14:52	14:56	15:00				
pH (s.u.)	5.81	5.73	5.53	5.08				
Specific Conductivity (µmhos/cm)	144.1	166.5	132.2	138.1				
Water Temperature (°C)	22.5	21.0	20.4	20.3				
Dissolved Oxygen	1.72	2.43	1.78	2.30				
PID readings, if required								

Remarks: Sample Time: 14:59

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 7/1/2009

Field Personnel: John Womack, Logan McConnahey

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time

Received by Date/Time

Facility Name: Smith Grocery

Site ID#: 09322 **Monitoring Well #** TW-2

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Free Product (DFP)			feet
Depth to Ground Water (DGW)	34.90		feet
Total Well Depth (TWD)	88		feet
Length of the water column (LWC=TWD-DGW)		53.1	feet
1 casing volume (CV=LWC X C)= ____ X	0.163	8.66	gallons
3 casing volume (3 X CV)=	3	25.97	gallons

Total Volume of Water Purged Before Sampling 8.5 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	15:04	15:09						
pH (s.u.)	4.90	10.43						
Specific Conductivity (µmhos/cm)	256.5	231.4						
Water Temperature (°C)	20.0	20.3						
Dissolved Oxygen	1.37	1.49						
PID readings, if required								

Remarks: Sample Time: 15:09 Dry @ 8.5 Gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 7/1/2009

Field Personnel: John Womack, Logan McConnahey

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith Grocery

Site ID#: 09322 **Monitoring Well #** TW-3

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Free Product (DFP)			feet
Depth to Ground Water (DGW)	39.63		feet
Total Well Depth (TWD)	71		feet
Length of the water column (LWC=TWD-DGW)		31.37	feet
1 casing volume (CV=LWC X C)= ____ X	0.163	5.11	gallons
3 casing volume (3 X CV)=	3	15.34	gallons

Total Volume of Water Purged Before Sampling 15.5 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	10:47	10:54	10:58	11:03				
pH (s.u.)	6.84	6.42	6.07	5.78				
Specific Conductivity (µmhos/cm)	51.4	47.1	49.2	50.8				
Water Temperature (°C)	22.7	21.1	20.3	20.2				
Dissolved Oxygen	1.60	2.48	2.83	3.10				
PID readings, if required								

Remarks: Sample Time: 11:02

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical®
www.pacelabs.com

Page: 1 of 3

1162490

Section A — **Required** Client Information:

Company:	SCDHEC - UST
Address:	2600 Bull St
	Cola SC 29201
Email To:	
Phone: 803-896-6740	Fax:
Requested Due Date/TAT:	

Section B — **Required** Project Information:

Report To:	D Thoma
Copy To:	
Purchase Order No.:	
Project Name:	Smith's Corner
Project Number:	09322/ 36193

Section C — Invoice Information:

Attention:	Finance (D. Thoma)
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	R Spencer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: SC

Section D — **Required** Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE)

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	BTEX, Naph, MTBE	1,2-DCA (8260)	EDB soil	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-1	WT	G			9/1/09	1426		6				6						X	X	X		no oder
2	MW-2						1440		6				6						X	X	X		slight oder
3	MW-3						1522		6				6						X	X	X		no oder
4	MW-4																						not located
5	MW-5						1355		6				6						X	X	X		no oder
6	MW-6						1327																
7	MW-7						1333																
8	MW-8						1433																no oder
9	MW-9						1338																PT oder
10	MW-10						1104																no
11	MW-11						1116																no
12	MW-12	WT	G			7/1/09	1135		6				6						X	X	X		PT oder

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John Womack

SIGNATURE of SAMPLER: John Womack — DATE Signed (MM/DD/YY): 7-1-09

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

2

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 3

117426O

Section A Required Client Information:

Company: SCDHEC - UST
Address: 2600 Bull Street
Columbia, SC 29201
Email To:
Phone: 803-896-6 Fax: 803-896-6941
Requested Due Date/TAT:

Section B Required Project Information:

Report To: D. Thoma
Copy To:
Purchase Order No.:
Project Name: Smith Gidden
Project Number: 09322 CA 36193

Section C Invoice Information:

Attention: Finance (D. Thoma)
Company Name: SCDHEC - UST
Address:
Pace Quote Reference:
Pace Project Manager: R. Spencer
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-13	WT	G			7/1			6				X							Not located
2	MW-14						10 10		6											No odor
3	MW-15						10 08		3											No odor, 3 VOAs
4	MW-16						11 51		6											No WB
5	MW-17						11 44													PJ odor
6	MW-18						12 10													No odor
7	MW-19						12 08													No odor
8	MW-20																			Obstructed at 1'
9	TW-1						1~~0~~	14	5											No odor
10	TW-2						1~~0~~	15	0											No odor
11	TW-3						11 07													No odor
12	WSW - Hill PDH GAC	WT	G			7/1	12 18		6				X							Flow hose at back

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Logan Mulvaney		7/1/09				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Logan Mulvaney
SIGNATURE of SAMPLER: Logan Mulvaney
DATE Signed (MM/DD/YY): 7/1/09

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

2

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 3

117426 2

Section A Required Client Information:

Company:	SCDHEC-UST
Address:	2600 Bull St
	Cola, SC 29201
Email To:	
Phone: 803-896-6240	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	D Thoma
Copy To:	
Purchase Order No.:	
Project Name:	Smith Grx
Project Number:	09322/36193

Section C Invoice Information:

Attention:	Finance (D Thoma)
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	R Spencer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

ITEM #	Sample ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	BTEX Naph, 124 PRE	1,2-DCA (8260m)	EDB 8011	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WSW-Swift Post GAC	WT	G			7-1-09			6				6					X	X		X		no odor
2	WSW-Crock	"	"			"			6				6					"	"		"		no odor
3	WSW-Smith	"	"			"			6				6					"	"		"		no odor
4	WSW-Hill Pre GAC	"	"			7-1-09			6				6					X	X		X		no odor
5	~~WSW-Hill Post GAC~~	"	"																				
6	WSW-Swift Pre GAC	WT	G			7/1/09			6				6					X	X		X		no odor
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John Womack

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7-1-09

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

July 14, 2009

Midlands Environmental Consultants, Inc.

Re: Treatment of Purge Water
Smith Grocery
York, South Carolina
SCDHEC Site ID Number 09322
MECI Project Number 09-2322

To Whom It May Concern;

Midlands Environmental Consultants, Inc. is providing the following letter as certification that treatment of the referenced purge water complied with the conditions of "Proposed Conditions for Use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater", as described in the following:

Applicability:

Groundwater treated was obtained as a result development of wells and sampling.

Conditions:

1. The purge/bail water from all wells is mixed before usage of the Activated Carbon Unit.
2. No free-product was detected in any of the purge water drums.
3. Analytical results of from well sampling show average concentrations of petroleum hydrocarbon constituents less than 5000 parts per billion (ppb) Benzene and less than 20,000 ppb total BTEX.
4. The existing carbon pack will be replaced/reactivated every 5,000 gallons.
5. Record of usage is maintained by Contractor.
6. Any and all recommendations and conditions issued by the Manufacturer have been adhered to.
7. Any and all recommendations and conditions (even on a site by site basis) issued by the SCDHEC must be adhered to.

All purge waters were treated on-site using an up-flow treatment drum loaded with 30 pounds of activated carbon. Carbon will be loaded to a maximum of 3 pounds of total organic compounds or 5,000 gallons of development/purge water, whichever occurs first.

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

A total of 37.0 gallons were treated on July 1, 2009 at the referenced site.

Midlands Environmental also tracks cumulative organic compounds adsorbed on the activated carbon to ensure the capacity of carbon mass is not over-charged. This data is available upon request.

Should you have any questions or comments, please contact the undersigned.

Sincerely,
Midlands Environmental Consultants, Inc.

for

Brendon P. Kelly
Staff Scientist

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

July 10, 2009

Ms. Debra Thoma
SCDHEC
UST Program
2600 Bull Street
Columbia, SC 29201

RE: Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Dear Ms. Thoma:
Enclosed are the analytical results for sample(s) received by the laboratory on July 02, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Renee Spencer

renee.spencer@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Charlotte Certification IDs
West Virginia Certification #: 357
Virginia Certification #: 00213
Tennessee Certification #: 04010
South Carolina Drinking Water Cert. #: 990060003
South Carolina Certification #: 990060001
Pennsylvania Certification #: 68-00784
Connecticut Certification #: PH-0104
North Carolina Field Services Certification #: 5342
North Carolina Drinking Water Certification #: 37706
New Jersey Certification #: NC012
Louisiana/LELAP Certification #: 04034
Kentucky UST Certification #: 84
Florida/NELAP Certification #: E87627
North Carolina Wastewater Certification #: 12

Asheville Certification IDs
West Virginia Certification #: 356
Virginia Certification #: 00072
Connecticut Certification #: PH-0106
Florida/NELAP Certification #: E87648
Tennessee Certification #: 2980
South Carolina Certification #: 99030001
South Carolina Bioassay Certification #: 99030002
Pennsylvania Certification #: 68-03578
North Carolina Wastewater Certification #: 40
North Carolina Drinking Water Certification #: 37712
North Carolina Bioassay Certification #: 9
New Jersey Certification #: NC011
Massachusetts Certification #: M-NC030
Louisiana/LELAP Certification #: 03095

Eden Certification IDs
North Carolina Wastewater Certification #: 633
Virginia Drinking Water Certification #: 00424
North Carolina Drinking Water Certification #: 37738

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9247805001	MW-1	Water	07/01/09 14:26	07/02/09 09:10
9247805002	MW-2	Water	07/01/09 14:40	07/02/09 09:10
9247805003	MW-3	Water	07/01/09 15:22	07/02/09 09:10
9247805004	MW-5	Water	07/01/09 13:55	07/02/09 09:10
9247805005	MW-6	Water	07/01/09 13:27	07/02/09 09:10
9247805006	MW-7	Water	07/01/09 13:33	07/02/09 09:10
9247805007	MW-8	Water	07/01/09 14:33	07/02/09 09:10
9247805008	MW-9	Water	07/01/09 13:38	07/02/09 09:10
9247805009	MW-10	Water	07/01/09 11:04	07/02/09 09:10
9247805010	MW-11	Water	07/01/09 11:16	07/02/09 09:10
9247805011	MW-12	Water	07/01/09 11:35	07/02/09 09:10
9247805012	MW-14	Water	07/01/09 10:10	07/02/09 09:10
9247805013	MW-15	Water	07/01/09 10:08	07/02/09 09:10
9247805014	MW-16	Water	07/01/09 11:51	07/02/09 09:10
9247805015	MW-17	Water	07/01/09 11:44	07/02/09 09:10
9247805016	MW-18	Water	07/01/09 12:20	07/02/09 09:10
9247805017	MW-19	Water	07/01/09 12:08	07/02/09 09:10
9247805018	TW-1	Water	07/01/09 14:59	07/02/09 09:10
9247805019	TW-2	Water	07/01/09 15:09	07/02/09 09:10
9247805020	TW-3	Water	07/01/09 11:02	07/02/09 09:10
9247805021	WSW-HILL POST GAC	Water	07/01/09 12:18	07/02/09 09:10
9247805022	WSW-SWIFT POST GAC	Water	07/01/09 10:30	07/02/09 09:10
9247805023	WSW-CROCK	Water	07/01/09 10:36	07/02/09 09:10
9247805024	WSW-SMITH	Water	07/01/09 13:56	07/02/09 09:10
9247805025	WSW-HILL PRE GAC	Water	07/01/09 12:38	07/02/09 09:10
9247805026	WSW-SMITH PRE GAC	Water	07/01/09 12:42	07/02/09 09:10

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Lab ID	Sample ID	Method	Analysts	Analytes Reported
9247805001	MW-1	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805002	MW-2	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805003	MW-3	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805004	MW-5	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805005	MW-6	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805006	MW-7	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805007	MW-8	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805008	MW-9	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805009	MW-10	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805010	MW-11	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805011	MW-12	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805012	MW-14	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805013	MW-15	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805014	MW-16	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805015	MW-17	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805016	MW-18	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805017	MW-19	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805018	TW-1	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805019	TW-2	EPA 8011	CAH	2

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 8260	MCK	13
9247805020	TW-3	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805021	WSW-HILL POST GAC	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805022	WSW-SWIFT POST GAC	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805023	WSW-CROCK	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805024	WSW-SMITH	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805025	WSW-HILL PRE GAC	EPA 8011	CAH	2
		EPA 8260	MCK	13
9247805026	WSW-SMITH PRE GAC	EPA 8011	CAH	2
		EPA 8260	MCK	13

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-1 **Lab ID: 9247805001** Collected: 07/01/09 14:26 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	07/02/09 16:43	07/08/09 12:42	106-93-4	
1-Chloro-2-bromopropane (S)	110	%	60-140		1	07/02/09 16:43	07/08/09 12:42	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**813**	ug/L	250	60.0	50		07/04/09 17:56	71-43-2	
1,2-Dichloroethane	ND	ug/L	250	65.0	50		07/04/09 17:56	107-06-2	
Ethylbenzene	**4620**	ug/L	250	55.0	50		07/04/09 17:56	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	250	100	50		07/04/09 17:56	1634-04-4	
Naphthalene	**1300**	ug/L	250	145	50		07/04/09 17:56	91-20-3	
Toluene	**2960**	ug/L	250	90.0	50		07/04/09 17:56	108-88-3	
Xylene (Total)	**25300**	ug/L	2000	540	200		07/05/09 19:52	1330-20-7	
m&p-Xylene	**18000**	ug/L	2000	540	200		07/05/09 19:52	1330-20-7	
o-Xylene	**7370**	ug/L	250	85.0	50		07/04/09 17:56	95-47-6	
4-Bromofluorobenzene (S)	102	%	87-109		50		07/04/09 17:56	460-00-4	
Dibromofluoromethane (S)	99	%	85-115		50		07/04/09 17:56	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	79-120		50		07/04/09 17:56	17060-07-0	
Toluene-d8 (S)	100	%	70-120		50		07/04/09 17:56	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-2 **Lab ID: 9247805002** Collected: 07/01/09 14:40 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**188**	ug/L	9.7	9.7	500	07/02/09 16:43	07/08/09 12:55	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		500	07/02/09 16:43	07/08/09 12:55	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**16800**	ug/L	500	120	100		07/04/09 18:35	71-43-2	
1,2-Dichloroethane	**726**	ug/L	500	130	100		07/04/09 18:35	107-06-2	
Ethylbenzene	**2580**	ug/L	500	110	100		07/04/09 18:35	100-41-4	
Methyl-tert-butyl ether	**840**	ug/L	500	200	100		07/04/09 18:35	1634-04-4	
Naphthalene	**820**	ug/L	500	290	100		07/04/09 18:35	91-20-3	
Toluene	**45900**	ug/L	2500	900	500		07/05/09 11:55	108-88-3	
Xylene (Total)	**12900**	ug/L	1000	270	100		07/04/09 18:35	1330-20-7	
m&p-Xylene	**8620**	ug/L	1000	270	100		07/04/09 18:35	1330-20-7	
o-Xylene	**4300**	ug/L	500	170	100		07/04/09 18:35	95-47-6	
4-Bromofluorobenzene (S)	101	%	87-109		100		07/04/09 18:35	460-00-4	
Dibromofluoromethane (S)	99	%	85-115		100		07/04/09 18:35	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	79-120		100		07/04/09 18:35	17060-07-0	
Toluene-d8 (S)	101	%	70-120		100		07/04/09 18:35	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-3 **Lab ID: 9247805003** Collected: 07/01/09 15:22 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	07/02/09 16:44	07/07/09 14:15	106-93-4	
1-Chloro-2-bromopropane (S)	98	%	60-140		1	07/02/09 16:44	07/07/09 14:15	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/04/09 13:04	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/04/09 13:04	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/04/09 13:04	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/04/09 13:04	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/04/09 13:04	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/04/09 13:04	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/04/09 13:04	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/04/09 13:04	1330-20-7	
o-Xylene	ND	ug/L	5.0	1.7	1		07/04/09 13:04	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109		1		07/04/09 13:04	460-00-4	
Dibromofluoromethane (S)	100	%	85-115		1		07/04/09 13:04	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	79-120		1		07/04/09 13:04	17060-07-0	
Toluene-d8 (S)	98	%	70-120		1		07/04/09 13:04	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-5 **Lab ID: 9247805004** Collected: 07/01/09 13:55 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	07/02/09 16:44	07/07/09 14:29	106-93-4	
1-Chloro-2-bromopropane (S)	101	%	60-140		1	07/02/09 16:44	07/07/09 14:29	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/04/09 13:23	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/04/09 13:23	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/04/09 13:23	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/04/09 13:23	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/04/09 13:23	91-20-3	
Toluene	**5.7**	ug/L	5.0	1.8	1		07/04/09 13:23	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/04/09 13:23	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/04/09 13:23	1330-20-7	
o-Xylene	ND	ug/L	5.0	1.7	1		07/04/09 13:23	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109		1		07/04/09 13:23	460-00-4	
Dibromofluoromethane (S)	100	%	85-115		1		07/04/09 13:23	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	79-120		1		07/04/09 13:23	17060-07-0	
Toluene-d8 (S)	96	%	70-120		1		07/04/09 13:23	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-6 **Lab ID: 9247805005** Collected: 07/01/09 13:27 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**1.1**	ug/L	0.019	0.019	1	07/02/09 16:44	07/07/09 14:43	106-93-4	
1-Chloro-2-bromopropane (S)	96	%	60-140		1	07/02/09 16:44	07/07/09 14:43	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**385**	ug/L	25.0	6.0	5		07/06/09 11:14	71-43-2	
1,2-Dichloroethane	ND	ug/L	25.0	6.5	5		07/06/09 11:14	107-06-2	
Ethylbenzene	**300**	ug/L	25.0	5.5	5		07/06/09 11:14	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	25.0	10.0	5		07/06/09 11:14	1634-04-4	
Naphthalene	**95.6**	ug/L	25.0	14.5	5		07/06/09 11:14	91-20-3	
Toluene	**34.5**	ug/L	25.0	9.0	5		07/06/09 11:14	108-88-3	
Xylene (Total)	**1310**	ug/L	50.0	13.5	5		07/06/09 11:14	1330-20-7	
m&p-Xylene	**1000**	ug/L	50.0	13.5	5		07/06/09 11:14	1330-20-7	
o-Xylene	**313**	ug/L	25.0	8.5	5		07/06/09 11:14	95-47-6	
4-Bromofluorobenzene (S)	101	%	87-109		5		07/06/09 11:14	460-00-4	
Dibromofluoromethane (S)	100	%	85-115		5		07/06/09 11:14	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	79-120		5		07/06/09 11:14	17060-07-0	
Toluene-d8 (S)	100	%	70-120		5		07/06/09 11:14	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-7 **Lab ID: 9247805006** Collected: 07/01/09 13:33 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.52**	ug/L	0.019	0.019	1	07/02/09 16:45	07/07/09 14:56	106-93-4	
1-Chloro-2-bromopropane (S)	88	%	60-140		1	07/02/09 16:45	07/07/09 14:56	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**669**	ug/L	250	60.0	50		07/06/09 04:19	71-43-2	
1,2-Dichloroethane	ND	ug/L	250	65.0	50		07/06/09 04:19	107-06-2	
Ethylbenzene	**1530**	ug/L	250	55.0	50		07/06/09 04:19	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	250	100	50		07/06/09 04:19	1634-04-4	
Naphthalene	**710**	ug/L	250	145	50		07/06/09 04:19	91-20-3	
Toluene	**1250**	ug/L	250	90.0	50		07/06/09 04:19	108-88-3	
Xylene (Total)	**6780**	ug/L	500	135	50		07/06/09 04:19	1330-20-7	
m&p-Xylene	**4710**	ug/L	500	135	50		07/06/09 04:19	1330-20-7	
o-Xylene	**2070**	ug/L	250	85.0	50		07/06/09 04:19	95-47-6	
4-Bromofluorobenzene (S)	102	%	87-109		50		07/06/09 04:19	460-00-4	
Dibromofluoromethane (S)	99	%	85-115		50		07/06/09 04:19	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	79-120		50		07/06/09 04:19	17060-07-0	
Toluene-d8 (S)	101	%	70-120		50		07/06/09 04:19	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-8 **Lab ID: 9247805007** Collected: 07/01/09 14:33 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**3.3**	ug/L	0.095	0.095	5	07/02/09 16:45	07/08/09 13:22	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		5	07/02/09 16:45	07/08/09 13:22	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**2100**	ug/L	500	120	100		07/06/09 05:18	71-43-2	
1,2-Dichloroethane	ND	ug/L	500	130	100		07/06/09 05:18	107-06-2	
Ethylbenzene	**883**	ug/L	500	110	100		07/06/09 05:18	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	500	200	100		07/06/09 05:18	1634-04-4	
Naphthalene	**743**	ug/L	500	290	100		07/06/09 05:18	91-20-3	
Toluene	**13800**	ug/L	500	180	100		07/06/09 05:18	108-88-3	
Xylene (Total)	**11600**	ug/L	1000	270	100		07/06/09 05:18	1330-20-7	
m&p-Xylene	**6730**	ug/L	1000	270	100		07/06/09 05:18	1330-20-7	
o-Xylene	**4890**	ug/L	500	170	100		07/06/09 05:18	95-47-6	
4-Bromofluorobenzene (S)	102	%	87-109		100		07/06/09 05:18	460-00-4	
Dibromofluoromethane (S)	102	%	85-115		100		07/06/09 05:18	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	79-120		100		07/06/09 05:18	17060-07-0	
Toluene-d8 (S)	101	%	70-120		100		07/06/09 05:18	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-9 **Lab ID: 9247805008** Collected: 07/01/09 13:38 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**1.0**	ug/L	0.020	0.020	1	07/02/09 16:45	07/07/09 15:24	106-93-4	
1-Chloro-2-bromopropane (S)	91	%	60-140		1	07/02/09 16:45	07/07/09 15:24	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	250	60.0	50		07/06/09 04:40	71-43-2	
1,2-Dichloroethane	ND	ug/L	250	65.0	50		07/06/09 04:40	107-06-2	
Ethylbenzene	**3040**	ug/L	250	55.0	50		07/06/09 04:40	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	250	100	50		07/06/09 04:40	1634-04-4	
Naphthalene	**1480**	ug/L	250	145	50		07/06/09 04:40	91-20-3	
Toluene	**2100**	ug/L	250	90.0	50		07/06/09 04:40	108-88-3	
Xylene (Total)	**27200**	ug/L	1000	270	100		07/06/09 12:16	1330-20-7	
m&p-Xylene	**18100**	ug/L	500	135	50		07/06/09 04:40	1330-20-7	
o-Xylene	**9080**	ug/L	500	170	100		07/06/09 12:16	95-47-6	
4-Bromofluorobenzene (S)	103	%	87-109		50		07/06/09 04:40	460-00-4	
Dibromofluoromethane (S)	100	%	85-115		50		07/06/09 04:40	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	79-120		50		07/06/09 04:40	17060-07-0	
Toluene-d8 (S)	100	%	70-120		50		07/06/09 04:40	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-10 **Lab ID: 9247805009** Collected: 07/01/09 11:04 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**41.0**	ug/L	1.9	1.9	100	07/02/09 16:45	07/09/09 10:42	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		100	07/02/09 16:45	07/09/09 10:42	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**5120**	ug/L	250	60.0	50		07/06/09 05:00	71-43-2	
1,2-Dichloroethane	**106J**	ug/L	250	65.0	50		07/06/09 05:00	107-06-2	
Ethylbenzene	**3300**	ug/L	250	55.0	50		07/06/09 05:00	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	250	100	50		07/06/09 05:00	1634-04-4	
Naphthalene	**705**	ug/L	250	145	50		07/06/09 05:00	91-20-3	
Toluene	**17500**	ug/L	1250	450	250		07/06/09 12:35	108-88-3	
Xylene (Total)	**16500**	ug/L	500	135	50		07/06/09 05:00	1330-20-7	
m&p-Xylene	**11100**	ug/L	500	135	50		07/06/09 05:00	1330-20-7	
o-Xylene	**5340**	ug/L	250	85.0	50		07/06/09 05:00	95-47-6	
4-Bromofluorobenzene (S)	101	%	87-109		50		07/06/09 05:00	460-00-4	
Dibromofluoromethane (S)	100	%	85-115		50		07/06/09 05:00	1868-53-7	
1,2-Dichloroethane-d4 (S)	98	%	79-120		50		07/06/09 05:00	17060-07-0	
Toluene-d8 (S)	100	%	70-120		50		07/06/09 05:00	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-11 **Lab ID: 9247805010** Collected: 07/01/09 11:16 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	07/02/09 16:45	07/07/09 15:52	106-93-4	
1-Chloro-2-bromopropane (S)	119	%	60-140		1	07/02/09 16:45	07/07/09 15:52	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/04/09 13:41	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/04/09 13:41	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/04/09 13:41	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/04/09 13:41	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/04/09 13:41	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/04/09 13:41	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/04/09 13:41	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/04/09 13:41	1330-20-7	
o-Xylene	ND	ug/L	5.0	1.7	1		07/04/09 13:41	95-47-6	
4-Bromofluorobenzene (S)	102	%	87-109		1		07/04/09 13:41	460-00-4	
Dibromofluoromethane (S)	100	%	85-115		1		07/04/09 13:41	1868-53-7	
1,2-Dichloroethane-d4 (S)	95	%	79-120		1		07/04/09 13:41	17060-07-0	
Toluene-d8 (S)	97	%	70-120		1		07/04/09 13:41	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-12 **Lab ID: 9247805011** Collected: 07/01/09 11:35 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.90**	ug/L	0.020	0.020	1	07/02/09 16:46	07/07/09 16:05	106-93-4	
1-Chloro-2-bromopropane (S)	399	%	60-140		1	07/02/09 16:46	07/07/09 16:05	301-79-56	S2
8260 MSV	Analytical Method: EPA 8260								
Benzene	**3600**	ug/L	100	24.0	20		07/06/09 03:37	71-43-2	
1,2-Dichloroethane	**197**	ug/L	100	26.0	20		07/06/09 03:37	107-06-2	
Ethylbenzene	**170**	ug/L	100	22.0	20		07/06/09 03:37	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	100	40.0	20		07/06/09 03:37	1634-04-4	
Naphthalene	**167**	ug/L	100	58.0	20		07/06/09 03:37	91-20-3	
Toluene	ND	ug/L	100	36.0	20		07/06/09 03:37	108-88-3	
Xylene (Total)	**1120**	ug/L	200	54.0	20		07/06/09 03:37	1330-20-7	
m&p-Xylene	**867**	ug/L	200	54.0	20		07/06/09 03:37	1330-20-7	
o-Xylene	**254**	ug/L	100	34.0	20		07/06/09 03:37	95-47-6	
4-Bromofluorobenzene (S)	101	%	87-109		20		07/06/09 03:37	460-00-4	
Dibromofluoromethane (S)	99	%	85-115		20		07/06/09 03:37	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	79-120		20		07/06/09 03:37	17060-07-0	
Toluene-d8 (S)	100	%	70-120		20		07/06/09 03:37	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-14 **Lab ID: 9247805012** Collected: 07/01/09 10:10 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	07/02/09 16:46	07/07/09 16:19	106-93-4	
1-Chloro-2-bromopropane (S)	110	%	60-140		1	07/02/09 16:46	07/07/09 16:19	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/04/09 14:00	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/04/09 14:00	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/04/09 14:00	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/04/09 14:00	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/04/09 14:00	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/04/09 14:00	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/04/09 14:00	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/04/09 14:00	1330-20-7	
o-Xylene	ND	ug/L	5.0	1.7	1		07/04/09 14:00	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109		1		07/04/09 14:00	460-00-4	
Dibromofluoromethane (S)	101	%	85-115		1		07/04/09 14:00	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	79-120		1		07/04/09 14:00	17060-07-0	
Toluene-d8 (S)	97	%	70-120		1		07/04/09 14:00	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-15 **Lab ID: 9247805013** Collected: 07/01/09 10:08 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.093**	ug/L	0.019	0.019	1	07/02/09 16:46	07/07/09 16:33	106-93-4	
1-Chloro-2-bromopropane (S)	92	%	60-140		1	07/02/09 16:46	07/07/09 16:33	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/04/09 14:18	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/04/09 14:18	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/04/09 14:18	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/04/09 14:18	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/04/09 14:18	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/04/09 14:18	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/04/09 14:18	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/04/09 14:18	1330-20-7	
o-Xylene	ND	ug/L	5.0	1.7	1		07/04/09 14:18	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109		1		07/04/09 14:18	460-00-4	
Dibromofluoromethane (S)	100	%	85-115		1		07/04/09 14:18	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	79-120		1		07/04/09 14:18	17060-07-0	
Toluene-d8 (S)	98	%	70-120		1		07/04/09 14:18	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-16 **Lab ID: 9247805014** Collected: 07/01/09 11:51 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.049**	ug/L	0.019	0.019	1	07/02/09 16:46	07/07/09 16:47	106-93-4	
1-Chloro-2-bromopropane (S)	92	%	60-140		1	07/02/09 16:46	07/07/09 16:47	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**7.3**	ug/L	5.0	1.2	1		07/04/09 14:36	71-43-2	
1,2-Dichloroethane	**1.4J**	ug/L	5.0	1.3	1		07/04/09 14:36	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/04/09 14:36	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/04/09 14:36	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/04/09 14:36	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/04/09 14:36	108-88-3	
Xylene (Total)	**13.2**	ug/L	10.0	2.7	1		07/04/09 14:36	1330-20-7	
m&p-Xylene	**8.8J**	ug/L	10.0	2.7	1		07/04/09 14:36	1330-20-7	
o-Xylene	**4.4J**	ug/L	5.0	1.7	1		07/04/09 14:36	95-47-6	
4-Bromofluorobenzene (S)	97	%	87-109		1		07/04/09 14:36	460-00-4	
Dibromofluoromethane (S)	100	%	85-115		1		07/04/09 14:36	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	79-120		1		07/04/09 14:36	17060-07-0	
Toluene-d8 (S)	95	%	70-120		1		07/04/09 14:36	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-17 **Lab ID: 9247805015** Collected: 07/01/09 11:44 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**10.2**	ug/L	0.38	0.38	20	07/02/09 16:47	07/08/09 14:04	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		20	07/02/09 16:47	07/08/09 14:04	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**8350**	ug/L	500	120	100		07/06/09 11:38	71-43-2	
1,2-Dichloroethane	**164**	ug/L	50.0	13.0	10		07/06/09 02:55	107-06-2	
Ethylbenzene	**1770**	ug/L	50.0	11.0	10		07/06/09 02:55	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	50.0	20.0	10		07/06/09 02:55	1634-04-4	
Naphthalene	**267**	ug/L	50.0	29.0	10		07/06/09 02:55	91-20-3	
Toluene	**3640**	ug/L	500	180	100		07/06/09 11:38	108-88-3	
Xylene (Total)	**7370**	ug/L	1000	270	100		07/06/09 11:38	1330-20-7	
m&p-Xylene	**5760**	ug/L	1000	270	100		07/06/09 11:38	1330-20-7	
o-Xylene	**1610**	ug/L	50.0	17.0	10		07/06/09 02:55	95-47-6	
4-Bromofluorobenzene (S)	103	%	87-109		10		07/06/09 02:55	460-00-4	
Dibromofluoromethane (S)	99	%	85-115		10		07/06/09 02:55	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	79-120		10		07/06/09 02:55	17060-07-0	
Toluene-d8 (S)	101	%	70-120		10		07/06/09 02:55	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-18 **Lab ID: 9247805016** Collected: 07/01/09 12:20 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	07/06/09 12:15	07/08/09 16:05	106-93-4	
1-Chloro-2-bromopropane (S)	73	%	60-140		1	07/06/09 12:15	07/08/09 16:05	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/04/09 14:55	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/04/09 14:55	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/04/09 14:55	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/04/09 14:55	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/04/09 14:55	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/04/09 14:55	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/04/09 14:55	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/04/09 14:55	1330-20-7	
o-Xylene	ND	ug/L	5.0	1.7	1		07/04/09 14:55	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109		1		07/04/09 14:55	460-00-4	
Dibromofluoromethane (S)	101	%	85-115		1		07/04/09 14:55	1868-53-7	
1,2-Dichloroethane-d4 (S)	92	%	79-120		1		07/04/09 14:55	17060-07-0	
Toluene-d8 (S)	98	%	70-120		1		07/04/09 14:55	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: MW-19 **Lab ID: 9247805017** Collected: 07/01/09 12:08 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	07/06/09 12:15	07/08/09 16:19	106-93-4	
1-Chloro-2-bromopropane (S)	79	%	60-140		1	07/06/09 12:15	07/08/09 16:19	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/04/09 15:13	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/04/09 15:13	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/04/09 15:13	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/04/09 15:13	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/04/09 15:13	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/04/09 15:13	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/04/09 15:13	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/04/09 15:13	1330-20-7	
o-Xylene	ND	ug/L	5.0	1.7	1		07/04/09 15:13	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109		1		07/04/09 15:13	460-00-4	
Dibromofluoromethane (S)	100	%	85-115		1		07/04/09 15:13	1868-53-7	
1,2-Dichloroethane-d4 (S)	95	%	79-120		1		07/04/09 15:13	17060-07-0	
Toluene-d8 (S)	96	%	70-120		1		07/04/09 15:13	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: TW-1 **Lab ID: 9247805018** Collected: 07/01/09 14:59 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**12.4**	ug/L	0.48	0.48	25	07/06/09 12:16	07/09/09 14:16	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		25	07/06/09 12:16	07/09/09 14:16	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**5940**	ug/L	250	60.0	50		07/06/09 11:35	71-43-2	
1,2-Dichloroethane	**40.1**	ug/L	25.0	6.5	5		07/06/09 02:13	107-06-2	
Ethylbenzene	**1410**	ug/L	250	55.0	50		07/06/09 11:35	100-41-4	
Methyl-tert-butyl ether	**45.8**	ug/L	25.0	10.0	5		07/06/09 02:13	1634-04-4	
Naphthalene	**330**	ug/L	25.0	14.5	5		07/06/09 02:13	91-20-3	
Toluene	**199**	ug/L	25.0	9.0	5		07/06/09 02:13	108-88-3	
Xylene (Total)	**7110**	ug/L	500	135	50		07/06/09 11:35	1330-20-7	
m&p-Xylene	**5390**	ug/L	500	135	50		07/06/09 11:35	1330-20-7	
o-Xylene	**1720**	ug/L	250	85.0	50		07/06/09 11:35	95-47-6	
4-Bromofluorobenzene (S)	101	%	87-109		5		07/06/09 02:13	460-00-4	
Dibromofluoromethane (S)	99	%	85-115		5		07/06/09 02:13	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	79-120		5		07/06/09 02:13	17060-07-0	
Toluene-d8 (S)	100	%	70-120		5		07/06/09 02:13	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: TW-2 **Lab ID: 9247805019** Collected: 07/01/09 15:09 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	07/06/09 12:16	07/08/09 17:14	106-93-4	
1-Chloro-2-bromopropane (S)	83	%	60-140		1	07/06/09 12:16	07/08/09 17:14	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**8770**	ug/L	1000	240	200		07/06/09 11:57	71-43-2	
1,2-Dichloroethane	**165**	ug/L	100	26.0	20		07/06/09 03:58	107-06-2	
Ethylbenzene	**978**	ug/L	100	22.0	20		07/06/09 03:58	100-41-4	
Methyl-tert-butyl ether	**215**	ug/L	100	40.0	20		07/06/09 03:58	1634-04-4	
Naphthalene	**379**	ug/L	100	58.0	20		07/06/09 03:58	91-20-3	
Toluene	**13800**	ug/L	1000	360	200		07/06/09 11:57	108-88-3	
Xylene (Total)	**7320**	ug/L	200	54.0	20		07/06/09 03:58	1330-20-7	
m&p-Xylene	**4580**	ug/L	200	54.0	20		07/06/09 03:58	1330-20-7	
o-Xylene	**2740**	ug/L	100	34.0	20		07/06/09 03:58	95-47-6	
4-Bromofluorobenzene (S)	106	%	87-109		20		07/06/09 03:58	460-00-4	
Dibromofluoromethane (S)	100	%	85-115		20		07/06/09 03:58	1868-53-7	
1,2-Dichloroethane-d4 (S)	95	%	79-120		20		07/06/09 03:58	17060-07-0	
Toluene-d8 (S)	102	%	70-120		20		07/06/09 03:58	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: TW-3 **Lab ID: 9247805020** Collected: 07/01/09 11:02 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.36**	ug/L	0.019	0.019	1	07/06/09 12:16	07/08/09 17:27	106-93-4	
1-Chloro-2-bromopropane (S)	106	%	60-140		1	07/06/09 12:16	07/08/09 17:27	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**25.3**	ug/L	5.0	1.2	1		07/04/09 15:31	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/04/09 15:31	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/04/09 15:31	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/04/09 15:31	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/04/09 15:31	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/04/09 15:31	108-88-3	
Xylene (Total)	**12.9**	ug/L	10.0	2.7	1		07/04/09 15:31	1330-20-7	
m&p-Xylene	**8.6J**	ug/L	10.0	2.7	1		07/04/09 15:31	1330-20-7	
o-Xylene	**4.4J**	ug/L	5.0	1.7	1		07/04/09 15:31	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109		1		07/04/09 15:31	460-00-4	
Dibromofluoromethane (S)	99	%	85-115		1		07/04/09 15:31	1868-53-7	
1,2-Dichloroethane-d4 (S)	95	%	79-120		1		07/04/09 15:31	17060-07-0	
Toluene-d8 (S)	99	%	70-120		1		07/04/09 15:31	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: WSW-HILL POST GAC **Lab ID: 9247805021** Collected: 07/01/09 12:18 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	07/06/09 12:17	07/08/09 17:54	106-93-4	
1-Chloro-2-bromopropane (S)	103	%	60-140		1	07/06/09 12:17	07/08/09 17:54	301-79-56	
8260 MSV Low Level	Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	0.25	1		07/05/09 11:13	71-43-2	
1,2-Dichloroethane	**0.32J**	ug/L	1.0	0.12	1		07/05/09 11:13	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/05/09 11:13	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		07/05/09 11:13	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		07/05/09 11:13	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		07/05/09 11:13	108-88-3	
Xylene (Total)	ND	ug/L	2.0	0.66	1		07/05/09 11:13	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/05/09 11:13	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/05/09 11:13	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109		1		07/05/09 11:13	460-00-4	
Dibromofluoromethane (S)	105	%	85-115		1		07/05/09 11:13	1868-53-7	
1,2-Dichloroethane-d4 (S)	103	%	79-120		1		07/05/09 11:13	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		07/05/09 11:13	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: WSW-SWIFT POST GAC **Lab ID: 9247805022** Collected: 07/01/09 10:30 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.91**	ug/L	0.019	0.019	1	07/06/09 12:17	07/08/09 18:08	106-93-4	
1-Chloro-2-bromopropane (S)	128	%	60-140		1	07/06/09 12:17	07/08/09 18:08	301-79-56	
8260 MSV Low Level	Analytical Method: EPA 8260								
Benzene	**1.5**	ug/L	1.0	0.25	1		07/05/09 11:32	71-43-2	
1,2-Dichloroethane	**12.2**	ug/L	1.0	0.12	1		07/05/09 11:32	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/05/09 11:32	100-41-4	
Methyl-tert-butyl ether	**0.38J**	ug/L	1.0	0.21	1		07/05/09 11:32	1634-04-4	
Naphthalene	**4.4**	ug/L	1.0	0.24	1		07/05/09 11:32	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		07/05/09 11:32	108-88-3	
Xylene (Total)	**12.5**	ug/L	2.0	0.66	1		07/05/09 11:32	1330-20-7	
m&p-Xylene	**6.5**	ug/L	2.0	0.66	1		07/05/09 11:32	1330-20-7	
o-Xylene	**6.0**	ug/L	1.0	0.23	1		07/05/09 11:32	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109		1		07/05/09 11:32	460-00-4	
Dibromofluoromethane (S)	107	%	85-115		1		07/05/09 11:32	1868-53-7	
1,2-Dichloroethane-d4 (S)	106	%	79-120		1		07/05/09 11:32	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		07/05/09 11:32	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: WSW-CROCK **Lab ID: 9247805023** Collected: 07/01/09 10:36 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	07/06/09 12:17	07/08/09 18:22	106-93-4	
1-Chloro-2-bromopropane (S)	113	%	60-140		1	07/06/09 12:17	07/08/09 18:22	301-79-56	
8260 MSV Low Level	Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	0.25	1		07/05/09 11:51	71-43-2	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/05/09 11:51	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/05/09 11:51	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		07/05/09 11:51	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		07/05/09 11:51	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		07/05/09 11:51	108-88-3	
Xylene (Total)	ND	ug/L	2.0	0.66	1		07/05/09 11:51	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/05/09 11:51	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/05/09 11:51	95-47-6	
4-Bromofluorobenzene (S)	101	%	87-109		1		07/05/09 11:51	460-00-4	
Dibromofluoromethane (S)	105	%	85-115		1		07/05/09 11:51	1868-53-7	
1,2-Dichloroethane-d4 (S)	104	%	79-120		1		07/05/09 11:51	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		07/05/09 11:51	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: WSW-SMITH **Lab ID: 9247805024** Collected: 07/01/09 13:56 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	07/06/09 12:17	07/08/09 18:35	106-93-4	
1-Chloro-2-bromopropane (S)	97	%	60-140		1	07/06/09 12:17	07/08/09 18:35	301-79-56	
8260 MSV Low Level	Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	0.25	1		07/05/09 12:10	71-43-2	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/05/09 12:10	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/05/09 12:10	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		07/05/09 12:10	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		07/05/09 12:10	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		07/05/09 12:10	108-88-3	
Xylene (Total)	ND	ug/L	2.0	0.66	1		07/05/09 12:10	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/05/09 12:10	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/05/09 12:10	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109		1		07/05/09 12:10	460-00-4	
Dibromofluoromethane (S)	106	%	85-115		1		07/05/09 12:10	1868-53-7	
1,2-Dichloroethane-d4 (S)	106	%	79-120		1		07/05/09 12:10	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		07/05/09 12:10	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: WSW-HILL PRE GAC **Lab ID: 9247805025** Collected: 07/01/09 12:38 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.76**	ug/L	0.019	0.019	1	07/06/09 12:18	07/08/09 18:49	106-93-4	
1-Chloro-2-bromopropane (S)	109	%	60-140		1	07/06/09 12:18	07/08/09 18:49	301-79-56	
8260 MSV Low Level	Analytical Method: EPA 8260								
Benzene	**125**	ug/L	1.0	0.25	1		07/05/09 12:29	71-43-2	
1,2-Dichloroethane	**11.8**	ug/L	1.0	0.12	1		07/05/09 12:29	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/05/09 12:29	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		07/05/09 12:29	1634-04-4	
Naphthalene	**3.7**	ug/L	1.0	0.24	1		07/05/09 12:29	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		07/05/09 12:29	108-88-3	
Xylene (Total)	**20.1**	ug/L	2.0	0.66	1		07/05/09 12:29	1330-20-7	
m&p-Xylene	**13.5**	ug/L	2.0	0.66	1		07/05/09 12:29	1330-20-7	
o-Xylene	**6.5**	ug/L	1.0	0.23	1		07/05/09 12:29	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109		1		07/05/09 12:29	460-00-4	
Dibromofluoromethane (S)	101	%	85-115		1		07/05/09 12:29	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	79-120		1		07/05/09 12:29	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		07/05/09 12:29	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

Sample: WSW-SMITH PRE GAC **Lab ID: 9247805026** Collected: 07/01/09 12:42 Received: 07/02/09 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.089**	ug/L	0.019	0.019	1	07/06/09 12:18	07/08/09 19:03	106-93-4	
1-Chloro-2-bromopropane (S)	107	%	60-140		1	07/06/09 12:18	07/08/09 19:03	301-79-56	
8260 MSV Low Level	Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	0.25	1		07/05/09 12:48	71-43-2	
1,2-Dichloroethane	**4.9**	ug/L	1.0	0.12	1		07/05/09 12:48	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/05/09 12:48	100-41-4	
Methyl-tert-butyl ether	**0.26J**	ug/L	1.0	0.21	1		07/05/09 12:48	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		07/05/09 12:48	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		07/05/09 12:48	108-88-3	
Xylene (Total)	**0.94J**	ug/L	2.0	0.66	1		07/05/09 12:48	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/05/09 12:48	1330-20-7	
o-Xylene	**0.41J**	ug/L	1.0	0.23	1		07/05/09 12:48	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109		1		07/05/09 12:48	460-00-4	
Dibromofluoromethane (S)	106	%	85-115		1		07/05/09 12:48	1868-53-7	
1,2-Dichloroethane-d4 (S)	103	%	79-120		1		07/05/09 12:48	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		07/05/09 12:48	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

QC Batch: OEXT/7299 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9247805016, 9247805017, 9247805018, 9247805019, 9247805020, 9247805021, 9247805022, 9247805023, 9247805024, 9247805025, 9247805026

METHOD BLANK: 303873 Matrix: Water
Associated Lab Samples: 9247805016, 9247805017, 9247805018, 9247805019, 9247805020, 9247805021, 9247805022, 9247805023, 9247805024, 9247805025, 9247805026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	07/08/09 15:24	
1-Chloro-2-bromopropane (S)	%	119	60-140	07/08/09 15:24	

LABORATORY CONTROL SAMPLE & LCSD: 303874 303875

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.28	0.27	0.30	98	106	60-140	9	20	
1-Chloro-2-bromopropane (S)	%				95	101	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 303876 303877

Parameter	Units	9247805017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	.27	.27	0.26	0.30	96	110	60-140	14	20	
1-Chloro-2-bromopropane (S)	%						92	113	60-140			

SAMPLE DUPLICATE: 303878

Parameter	Units	9247805020 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.36	0.32	11	20	
1-Chloro-2-bromopropane (S)	%		95	9		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

QC Batch: MSV/7559 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9247805021, 9247805022, 9247805023, 9247805024, 9247805025, 9247805026

METHOD BLANK: 303812 Matrix: Water
Associated Lab Samples: 9247805021, 9247805022, 9247805023, 9247805024, 9247805025, 9247805026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	07/05/09 10:35	
Benzene	ug/L	ND	1.0	07/05/09 10:35	
Ethylbenzene	ug/L	ND	1.0	07/05/09 10:35	
m&p-Xylene	ug/L	ND	2.0	07/05/09 10:35	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/05/09 10:35	
Naphthalene	ug/L	ND	1.0	07/05/09 10:35	
o-Xylene	ug/L	ND	1.0	07/05/09 10:35	
Toluene	ug/L	ND	1.0	07/05/09 10:35	
Xylene (Total)	ug/L	ND	2.0	07/05/09 10:35	
1,2-Dichloroethane-d4 (S)	%	102	79-120	07/05/09 10:35	
4-Bromofluorobenzene (S)	%	98	87-109	07/05/09 10:35	
Dibromofluoromethane (S)	%	104	85-115	07/05/09 10:35	
Toluene-d8 (S)	%	102	70-120	07/05/09 10:35	

LABORATORY CONTROL SAMPLE: 303813

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	54.2	108	72-126	
Benzene	ug/L	50	55.6	111	78-128	
Ethylbenzene	ug/L	50	54.6	109	80-127	
m&p-Xylene	ug/L	100	109	109	82-127	
Methyl-tert-butyl ether	ug/L	50	53.0	106	71-130	
Naphthalene	ug/L	50	48.5	97	52-136	
o-Xylene	ug/L	50	55.0	110	83-124	
Toluene	ug/L	50	52.8	106	76-126	
Xylene (Total)	ug/L	150	164	110	83-125	
1,2-Dichloroethane-d4 (S)	%			98	79-120	
4-Bromofluorobenzene (S)	%			102	87-109	
Dibromofluoromethane (S)	%			102	85-115	
Toluene-d8 (S)	%			101	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 303814 303815

Parameter	Units	9247762014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	50	50	62.7	63.2	125	126	74-136	.7	30	
Toluene	ug/L	ND	50	50	59.0	60.1	118	120	73-131	2	30	
1,2-Dichloroethane-d4 (S)	%						102	102	79-120			
4-Bromofluorobenzene (S)	%						97	95	87-109			
Dibromofluoromethane (S)	%						102	103	85-115			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 303814 303815

Parameter	Units	9247762014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						99	100	70-120			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

QC Batch: MSV/7565 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 9247805005, 9247805006, 9247805007, 9247805008, 9247805009, 9247805011, 9247805015, 9247805018, 9247805019

METHOD BLANK: 303836 Matrix: Water
Associated Lab Samples: 9247805005, 9247805006, 9247805007, 9247805008, 9247805009, 9247805011, 9247805015, 9247805018, 9247805019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	07/05/09 20:07	
Benzene	ug/L	ND	5.0	07/05/09 20:07	
Ethylbenzene	ug/L	ND	5.0	07/05/09 20:07	
m&p-Xylene	ug/L	ND	10.0	07/05/09 20:07	
Methyl-tert-butyl ether	ug/L	ND	5.0	07/05/09 20:07	
Naphthalene	ug/L	ND	5.0	07/05/09 20:07	
o-Xylene	ug/L	ND	5.0	07/05/09 20:07	
Toluene	ug/L	ND	5.0	07/05/09 20:07	
Xylene (Total)	ug/L	ND	10.0	07/05/09 20:07	
1,2-Dichloroethane-d4 (S)	%	101	79-120	07/05/09 20:07	
4-Bromofluorobenzene (S)	%	102	87-109	07/05/09 20:07	
Dibromofluoromethane (S)	%	103	85-115	07/05/09 20:07	
Toluene-d8 (S)	%	101	70-120	07/05/09 20:07	

LABORATORY CONTROL SAMPLE: 303837

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	54.4	109	72-126	
Benzene	ug/L	50	51.1	102	78-128	
Ethylbenzene	ug/L	50	47.2	94	80-127	
m&p-Xylene	ug/L	100	94.9	95	82-127	
Methyl-tert-butyl ether	ug/L	50	52.9	106	71-130	
Naphthalene	ug/L	50	48.3	97	52-136	
o-Xylene	ug/L	50	46.5	93	83-124	
Toluene	ug/L	50	50.2	100	76-126	
Xylene (Total)	ug/L	150	141	94	83-125	
1,2-Dichloroethane-d4 (S)	%			100	79-120	
4-Bromofluorobenzene (S)	%			102	87-109	
Dibromofluoromethane (S)	%			104	85-115	
Toluene-d8 (S)	%			101	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 303838 303839

Parameter	Units	9247652011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	50	50	62.0	55.3	124	111	74-136	11	30	
Toluene	ug/L	ND	50	50	58.4	52.2	116	104	73-131	11	30	
1,2-Dichloroethane-d4 (S)	%						99	96	79-120			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 303838 303839

Parameter	Units	9247652011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
4-Bromofluorobenzene (S)	%						104	102	87-109			
Dibromofluoromethane (S)	%						101	99	85-115			
Toluene-d8 (S)	%						100	99	70-120			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

QC Batch: OEXT/7291 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9247805001, 9247805002, 9247805003, 9247805004, 9247805005, 9247805006, 9247805007, 9247805008, 9247805009, 9247805010, 9247805011, 9247805012, 9247805013, 9247805014, 9247805015

METHOD BLANK: 303376 Matrix: Water
Associated Lab Samples: 9247805001, 9247805002, 9247805003, 9247805004, 9247805005, 9247805006, 9247805007, 9247805008, 9247805009, 9247805010, 9247805011, 9247805012, 9247805013, 9247805014, 9247805015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	07/07/09 10:08	
1-Chloro-2-bromopropane (S)	%	105	60-140	07/07/09 10:08	

LABORATORY CONTROL SAMPLE & LCSD: 303377 303378

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.28	0.32	0.30	112	106	60-140	5	20	
1-Chloro-2-bromopropane (S)	%				103	100	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 303379 303380

Parameter	Units	9247787016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	.28	.28	0.29	0.27	104	98	60-140	6	20	
1-Chloro-2-bromopropane (S)	%						116	106	60-140			

SAMPLE DUPLICATE: 303381

Parameter	Units	9247805002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	188	228	19	20	
1-Chloro-2-bromopropane (S)	%		0	0		S4

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

QC Batch: MSV/7552 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 9247805001, 9247805002, 9247805003, 9247805004, 9247805010, 9247805012, 9247805013, 9247805014, 9247805016, 9247805017, 9247805020

METHOD BLANK: 303786 Matrix: Water
Associated Lab Samples: 9247805001, 9247805002, 9247805003, 9247805004, 9247805010, 9247805012, 9247805013, 9247805014, 9247805016, 9247805017, 9247805020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	07/04/09 08:58	
Benzene	ug/L	ND	5.0	07/04/09 08:58	
Ethylbenzene	ug/L	ND	5.0	07/04/09 08:58	
m&p-Xylene	ug/L	ND	10.0	07/04/09 08:58	
Methyl-tert-butyl ether	ug/L	ND	5.0	07/04/09 08:58	
Naphthalene	ug/L	ND	5.0	07/04/09 08:58	
o-Xylene	ug/L	ND	5.0	07/04/09 08:58	
Toluene	ug/L	ND	5.0	07/04/09 08:58	
Xylene (Total)	ug/L	ND	10.0	07/04/09 08:58	
1,2-Dichloroethane-d4 (S)	%	96	79-120	07/04/09 08:58	
4-Bromofluorobenzene (S)	%	100	87-109	07/04/09 08:58	
Dibromofluoromethane (S)	%	100	85-115	07/04/09 08:58	
Toluene-d8 (S)	%	99	70-120	07/04/09 08:58	

LABORATORY CONTROL SAMPLE: 303787

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	42.2	84	72-126	
Benzene	ug/L	50	43.4	87	78-128	
Ethylbenzene	ug/L	50	43.4	87	80-127	
m&p-Xylene	ug/L	100	85.9	86	82-127	
Methyl-tert-butyl ether	ug/L	50	41.6	83	71-130	
Naphthalene	ug/L	50	37.4	75	52-136	
o-Xylene	ug/L	50	42.8	86	83-124	
Toluene	ug/L	50	42.9	86	76-126	
Xylene (Total)	ug/L	150	129	86	83-125	
1,2-Dichloroethane-d4 (S)	%			86	79-120	
4-Bromofluorobenzene (S)	%			105	87-109	
Dibromofluoromethane (S)	%			98	85-115	
Toluene-d8 (S)	%			99	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 303788 303789

Parameter	Units	9247648001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	50	50	49.3	50.4	99	101	74-136	2	30	
Toluene	ug/L	ND	50	50	47.7	48.2	87	89	73-131	1	30	
1,2-Dichloroethane-d4 (S)	%						96	96	79-120			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 303788 303789

Parameter	Units	9247648001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
4-Bromofluorobenzene (S)	%						98	99	87-109			
Dibromofluoromethane (S)	%						100	100	85-115			
Toluene-d8 (S)	%						98	99	70-120			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: SMITH'S GROC 09322
Pace Project No.: 9247805

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

ANALYTE QUALIFIERS

S2	Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of 3

1162490

Section A Required Client Information:

Company: SCDHEC - UST
Address: 2600 Bull St
Cola, SC 29201
Email To:
Phone: ~~803-896-6240~~ Fax: ~~803-898-3043~~
Requested Due Date/TAT:

Section B Required Project Information:

Report To: D Thoma
Copy To:
Purchase Order No.:
Project Name: Smith's Gate
Project Number: 09322/36193

Section C Invoice Information:

Attention: Finance (D. Thoma)
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: R Spencer
Pace Profile #: 849-1

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☒ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	BTEX, naph, MTBE	1,2-DCA (8260B)	EDB 8011	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92417805
1	MW-1	WT	G			9/1/09	1426		6				6						X	X	X		no oder 001
2	MW-2						1440		6				6						X	X	X		slight oder 002
3	MW-3						1522		6				6						X	X	X		no oder 003
4	MW-4																						not located
5	MW-5						1355		6				6						X	X	X		no oder 004
6	MW-6						1327																005
7	MW-7						1333																006
8	MW-8						1433																007
9	MW-9						1338																PT oder 008
10	MW-10						1104																no 009
11	MW-11						1116																no 010
12	MW-12	WT	G			7/1/09	1135		6				6						X	X	X		PT oder 011

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brannox			Moody - Pace	7-2-09	9:30				
	Moody	7-2-09	9:10	C Weems / Pace	7/2/09	9:10	2.1	yes	no	yes

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John Womack

SIGNATURE of SAMPLER: John Womack

DATE Signed (MM/DD/YY): 7-1-09

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 3

1174260

Section A Required Client Information:

Company: SCDHEC - UST
Address: 2600 Bull Street
Columbia, SC 29201
Email To:
Phone: 803-896-6[illegible] Fax: 803-896-6245
Requested Due Date/TAT:

Section B Required Project Information:

Report To: D. Thoma
Copy To:
Purchase Order No.:
Project Name: Smith Grocery
Project Number: 09322\ CA 36193

Section C Invoice Information:

Attention: Finance CO. Thoma
Company Name: SCDHEC - UST
Address:
Pace Quote Reference:
Pace Project Manager: R. Spencer
Pace Profile #: 844-3, 1

REGULATORY AGENCY

NPDES / GROUND WATER / DRINKING WATER
X UST / RCRA / OTHER

Site Location STATE: SC

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

Analysis Test: Btex, naph, MTBE, 8260B; 1,2 DCA; 8011 EDB

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	TIME	Composite End/Grab DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test				Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-13	WT	G			7/1			6				X					X	X	X			Not located: [illegible]
2	MW-14						10:10		6												12	13	no odor
3	MW-15						10:08		3												13	14	no odor, 1 3 Voa's 2 [illegible]
4	MW-16						11:51		6												14	15	no odor
5	MW-17						11:44														15	16	PP odor
6	MW-18						12:20														16	17	no odor
7	MW-19						12:08														17	18	no odor
8	MW-20																						obstructed at 1'
9	TW-1						14:59														18	19	no odor
10	TW-2						15:09														19		no odor
11	TW-3						11:02														20		no odor
12	WSW - Hill Post GAC	WT	G			7/1	12:18		6				X					X	X	X	21		from hose at bed

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Logan McLendon		7/1/09	Moody - Pace	7-2-09	8:30				
	Moody	7-2-09	9:10	[illegible] / Pace	7/2/09	9:10	2.1	yes	no	yes
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Logan McLendon
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7/1/09

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 3

1174262

Section A Required Client Information:

Company: SCDHEC-UST
Address: 2600 Bull St
Cola, SC 29201
Email To:
Phone: 803-896-4240 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: D Thoma
Copy To:
Purchase Order No.:
Project Name: Smith Groc
Project Number: 09322/36193

Section C Invoice Information:

Attention: Finance (D Thoma)
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: R Spencer
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Analysis Test: BTEX, Naph, MTBE	1,2-DCA (8260)	EDB 504	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WSW-Swift Post GAC	WT	G			7-1-09			6				6						XX		X		no order 0247805 22
2	WSW-Crock								6				6										no order 23
3	WSW-Smith								6				6										no order 24
4	WSW-Hill Pre GAC					7-1-09			6				6						XX		X		no order 25
~~5~~	~~WSW-Hill Post GAC~~																							
6	WSW-Swift Pre GAC	WT	G			7/1/09			6				6						XX		X		no order 26
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Brewer			Grmoody - Pace	7-2-09	9:30				
	Grmoody	7-2-09	9:10	Pace	7/2/09	9:10	2.1	yes	no	yes

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John Womack
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7-1-09

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

JUL 16 2009

JIMMY COOPER
PALMETTO ENVIRONMENTAL GROUP
PO BOX 427
ELGIN SC 29045

Re: Notice to Proceed-GAC Change
Smith Grocery, SC Hwy 49, Clover, SC
UST Permit #09322; CA#36618
IFB-31733-5/1/07-EMW; PO #680378
York County

Dear Mr. Cooper:

Under the terms and conditions of the referenced contract, a GAC filter replacement has been approved for the Hill and Wiggam Residences residence located at 3049 and 3043 Clover Circle. The contact people are Tony Hill (803) 684-5425 and Gary Wiggam (803) 628-5464. This facility has been assigned an individual Cost Agreement (CA) number as listed above. Please reference the **CA number and Purchase Order #680378** on the invoice submitted for payment. Palmetto Environmental Group should complete the work in accordance with the contract specifications.

If you have any questions or need further assistance, please contact me at (803) 896-6397 or by email at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

Enc: Approved Cost Agreement

cc: Technical File (w/o enc.)
Minda Johnson, UST Program

19 feet
UST
DOCKET

Approved Cost Agreement 36618

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB					
		B PERSONNEL	1.0000	85.00	85.00
24 GAC SYSTEM					
		C FILTER REPLACEMENT/REMOVAL	2.0000	390.00	780.00
			Total Amount		865.00

GAC Unit Installation and Maintenance

Date 4/15/09

UST Permit number #09322 CA# 36618

Street Address 3049 Clover Cir.

GAC Unit serial and model number and meter reading
5012 95.8.14 Gals

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

UST
JUL 17 2009
PROGRAM

MAINTENANCE AND SERVICE

☑ **FILTER CHANGE**

Filter Disposal method: land fill

Condition of GAC Unit _____in need of repair* ✓ good

Condition of GAC Unit housing _____in need of repair* ✓ good

*Repair needed: _____

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☐ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

UST
DOCKET
20ted

Comments _____

GAC Unit Installation and Maintenance

Date 7/15/09

UST Permit number #09322 CA# 36618

Street Address 3043 Clover Cir.

GAC Unit serial and model number and meter reading
3012 98,188 GALS

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☑ **FILTER CHANGE**

Filter Disposal method: Land Fill

Condition of GAC Unit _____in need of repair* ✓ good

Condition of GAC Unit housing _____in need of repair* ✓ good

*Repair needed: _____

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☐ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

Comments _____

_____

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

JUL 31 2009

JIMMY COOPER
PALMETTO ENVIRONMENTAL GROUP
PO BOX 427
ELGIN SC 29045

Re: Notice to Proceed-GAC Change
Smith's Grocery, SC 49, York, SC
UST Permit #09322; CA# 36689
IFB-31733-5/1/07-EMW; PO #680378
York County

Dear Mr. Cooper:

Under the terms and conditions of the referenced contract, a GAC filter replacement has been approved for the Hill residence located at 3049 Clover Circle, York, SC. The contact person for this facility is Mr. Tony Hill. He can be reached at (803) 720-7294. This facility has been assigned an individual Cost Agreement (CA) number as listed above. Please reference the **CA number and Purchase Order #680378** on the invoice submitted for payment. Ecological Resources Incorporated should complete the work in accordance with the contract specifications. Please send the report to the attention of Debra Thoma.

If you have any questions or need further assistance, please contact me at (803) 896-6669 or by email at shradeaa@dhec.sc.gov.

Sincerely,

Arthur Shrader, Hydrogeologist
Assessment Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

cc: Technical File
Minda Johnson, UST Program

21tech
UST
DOCKET

Approved Cost Agreement 36689

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB					
		B PERSONNEL	1.0000	85.00	85.00
24 GAC SYSTEM					
		C FILTER REPLACEMENT/REMOVAL	1.0000	390.00	390.00
			Total Amount		475.00

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

SEP 16 2009

JIMMY COOPER
ECOLOGICAL RESOURCES INC
PO BOX 427
ELGIN SC 29045

Re: Notice to Proceed-GAC Change
Smith Grocery, SC Hwy 49, Clover, SC
UST Permit #09322; CA#37107
IFB-31733-5/1/07-EMW; PO #680378
York County

Dear Mr. Cooper:

Under the terms and conditions of the referenced contract, a GAC filter replacement has been approved for the Hill and Wiggam Residences residence located at 3049 and 3043 Clover Circle. The contact people are Tony Hill (803) 684-5425 and Gary Wiggam (803) 628-5464. This facility has been assigned an individual Cost Agreement (CA) number as listed above. Please reference the **CA number and Purchase Order #680378** on the invoice submitted for payment. Palmetto Environmental Group should complete the work in accordance with the contract specifications.

If you have any questions or need further assistance, please contact me at (803) 896-6397 or by email at thomadl@dhec.sc.gov.

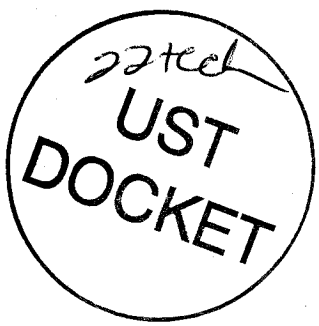
Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

Enc: Approved Cost Agreement

cc: Technical File (w/o enc.)
Minda Johnson, UST Program



Approved Cost Agreement 37107

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB						
		B	PERSONNEL	1.0000	85.00	85.00
24 GAC SYSTEM						
		C	FILTER REPLACEMENT/REMOVAL	2.0000	390.00	780.00
				Total Amount		865.00

GAC Unit Installation and Maintenance

Date 9/22/09

UST Permit number #09322 CA# 37107

Street Address 3043 Clover Circle Clover SC

GAC Unit serial and model number and meter reading

5012 13781 Gals

UST
Debra
SEP 24 2009
PROGRAM

NEW INSTALLATION

Date installation completed ______

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☑ **FILTER CHANGE**

23feb
UST
DOCKET

Filter Disposal method: land fill

Condition of GAC Unit ______in need of repair* ✓ good

Condition of GAC Unit housing ______in need of repair* ✓ good

*Repair needed: ______

☐ **SERVICE/REPAIR CALL**

Service or repair provided ______

☐ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

Comments ______

GAC Unit Installation and Maintenance

Date 9/22/09

UST Permit number #09322 CA# 37107

Street Address 3049 Clover Circle Clover S.C.

GAC Unit serial and model number and meter reading

5017 17113 Gals

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☑ **FILTER CHANGE**

Filter Disposal method: Land Fill

Condition of GAC Unit _____ in need of repair* ✓ good

Condition of GAC Unit housing _____ in need of repair* ✓ good

*Repair needed: _____

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☐ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

Comments _____

GAC Unit Installation and Maintenance

Date 9/24/2009

UST Permit number 09322 CA 37107

Street Address 3043 Clove Circle

GAC Unit serial and model number and meter reading

UST SEP 3 0 2009 PROGRAM

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☐ **FILTER CHANGE**

Filter Disposal method: _____

Condition of GAC Unit _____in need of repair* _____good

Condition of GAC Unit housing _____in need of repair* _____good

*Repair needed: _____

☑ **SERVICE/REPAIR CALL**

Service or repair provided Reset controller & timer.

☐ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

24hrd UST DOCKET

Comments Machine was stuck in backwash cycle.

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

JAN 13 2010

JIMMY COOPER
ECOLOGICAL RESOURCES INC
PO BOX 427
ELGIN SC 29045

25 tech
UST
DOCKET

Re: **Notice to Proceed-GAC Change**
Smith Grocery, SC Hwy 49, Clover, SC
UST Permit #09322; CA#38051
IFB-31733-5/1/07-EMW; PO #680378
York County

Dear Mr. Cooper:

Under the terms and conditions of the referenced contract, a GAC filter replacement has been approved for the Hill and Wiggam Residences residence located at 3049 and 3043 Clover Circle. The contact people are Tony Hill (803) 684-5425 and Gary Wiggam (803) 628-5464. This facility has been assigned an individual Cost Agreement (CA) number as listed above. Please reference the **CA number and Purchase Order #680378** on the invoice submitted for payment. Palmetto Environmental Group should complete the work in accordance with the contract specifications.

If you have any questions or need further assistance, please contact me at (803) 896-6397 or by email at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

Enc: Approved Cost Agreement

cc: Technical File (w/o enc.)
Minda Johnson, UST Program

Approved Cost Agreement 38051

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB					
		B PERSONNEL	1.0000	85.00	85.00
24 GAC SYSTEM					
		C FILTER REPLACEMENT/REMOVAL	2.0000	390.00	780.00
			Total Amount		865.00

GAC Unit Installation and Maintenance

UST
FEB 09 2010
PROGRAM

Date 1-13-2010

UST Permit number #09322 CA# 38051

Street Address 3049 Clover Circle York S.C.

GAC Unit serial and model number and meter reading
5012
489 26

UST
DOCKET
Hotech

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☑ **FILTER CHANGE**

Filter Disposal method: Land Fill

Condition of GAC Unit _____in need of repair* ✓ good

Condition of GAC Unit housing _____in need of repair* ✓ good

*Repair needed: _____

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☐ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

Comments _____

_____

GAC Unit Installation and Maintenance

Date 1-13-2010

UST Permit number #09322 CA# 38051

Street Address 3043 Clover circle York SC

GAC Unit serial and model number and meter reading

5012

17113

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☑ **FILTER CHANGE**

Filter Disposal method: land farm

Condition of GAC Unit _____in need of repair* ✓ good

Condition of GAC Unit housing _____in need of repair* ✓ good

*Repair needed: _____

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☐ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

Comments _____

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAR 18 2010

JIMMY COOPER
ECOLOGICAL RESOURCES INC
PO BOX 427
ELGIN SC 29045

UST DOCKET 27

Re: **Notice to Proceed-GAC Change**
Smith Grocery, SC Hwy 49, Clover, SC
UST Permit #09322; CA#38545
IFB-31733-5/1/07-EMW; PO #680378
York County

Dear Mr. Cooper:

Under the terms and conditions of the referenced contract, a GAC filter replacement has been approved for the Hill and Wiggam Residences residence located at 3049 and 3043 Clover Circle. The contact people are Tony Hill (803) 684-5425 and Gary Wiggam (803) 628-5464. This facility has been assigned an individual Cost Agreement (CA) number as listed above. Please reference the **CA number and Purchase Order #680378** on the invoice submitted for payment. Palmetto Environmental Group should complete the work in accordance with the contract specifications.

If you have any questions or need further assistance, please contact me at (803) 896-6397 or by email at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

Enc: Approved Cost Agreement

cc: Technical File (w/o enc.)
Minda Johnson, UST Program

Approved Cost Agreement 38545

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB					
		B PERSONNEL	1.0000	85.00	85.00
10 SAMPLE COLLECTION					
		A GROUND WATER	2.0000	15.00	30.00
11 ANALYSES					
	GW GROUNDWATER	A BTEX+NAPTH+MTBE	2.0000	35.00	70.00
24 GAC SYSTEM					
		C FILTER REPLACEMENT/REMOVAL	2.0000	390.00	780.00
			Total Amount		965.00

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

DIVISION OF UST MANAGEMENT
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia, South Carolina 29201

TO: Underground Storage Tank (UST) Contractors

FROM: Larry G. Sorrell
Financial Section
UST Management Division

DATE: March 15, 2010

SUBJECT: Transition to New Financial Systems

Effective **May 3, 2010,** the South Carolina Department of Health and Environmental Control will be converting to a new statewide system, the South Carolina Enterprise Information System (SCEIS). The conversion to SCEIS is expected to improve services by state agencies and provide the citizens of the state with better services at reduced costs.

As part of this transition, we will be required to shut down our financial and purchasing functions in our existing system on **April 16, 2010.** The transition period could last as long as six weeks. During this time period, no purchasing, receiving or vendor payments can be processed.

In order to prepare for this conversion, we are taking every step possible to ensure that minimal delays occur in our payment process. All payable invoices received by **April 1, 2010,** will be processed into the accounting system we are currently using and forwarded to Accounts Payable for payment. Invoices received between **April 2 and May** 3 will not be processed to Accounts Payable until the first two weeks in May, at the earliest. At that time SCEIS will be used to process invoices received during the shut down period. We respectfully ask for patience and consideration during this transition period so that no services are interrupted.

If you have any questions regarding these changes, please contact me at sorrellg@dhec.sc.gov or 803.896.6391.

C: Don Siron, Director of UST Program
Eric Cathcart, Manager of Regulatory Compliance Section
Chris Doll, Manager of Assessment Section
Lee Monts, Manager of Corrective Action Section
UST Financial Staff

GAC Unit Installation and Maintenance

PROGRAM
MAR 30 2010
UST

Date 3/11/2010 Hill

UST Permit number #09322 CA# 38545

Street Address Clover Car SC Hwy 49, Clover & Co. York SC.

GAC Unit serial and model number and meter reading

5012

62836

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☑ **FILTER CHANGE**

Filter Disposal method: land fill

Condition of GAC Unit _____in need of repair* ✓ good

Condition of GAC Unit housing _____in need of repair* ✓ good

*Repair needed: _____

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☐ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

Comments _____

UST
DOCKET
ET Tar

GAC Unit Installation and Maintenance

Date 3/11/2010 Wiggins

UST Permit number #09322 CA# 38545

Street Address Clover Circle SC Hwy 49, Clover Cir. York SC

GAC Unit serial and model number and meter reading

5012

28158

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☑ **FILTER CHANGE**

Filter Disposal method: Land Fill

Condition of GAC Unit _____ in need of repair* ✓ good

Condition of GAC Unit housing _____ in need of repair* ✓ good

*Repair needed: _____

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☑ **SAMPLE COLLECTION** (circle) (Pre-GAC) (Post GAC)

Comments RESET TIME ON CONTROLLER

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

UST
APR 0 9 2010
PROGRAM

March 25, 2010

Mr. Jimmy Cooper
Ecological Resources, Inc.
P.O. Box 427
2193 Hwy 1
Elgin, SC 29045

RE: Project: Smith Grocery #09322
Pace Project No.: 9265252

Dear Mr. Cooper:
Enclosed are the analytical results for sample(s) received by the laboratory on March 12, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Renee Spencer

Renee Spencer

renee.spencer@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

UST
DOCKET
#29

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Smith Grocery
Pace Project No.: 9265252

Charlotte Certification IDs
9800 Kincey Ave. - Ste 100 Huntersville, NC 28078
Connecticut Certification #: PH-0104
Virginia Certification #: 00213
Tennessee Certification #: 04010
South Carolina Drinking Water Cert. #: 990060003
South Carolina Certification #: 990060001
Pennsylvania Certification #: 68-00784
North Carolina Wastewater Certification #: 12
North Carolina Field Services Certification #: 5342
North Carolina Drinking Water Certification #: 37706
New Jersey Certification #: NC012
Louisiana/LELAP Certification #: 04034
Kentucky UST Certification #: 84
Florida/NELAP Certification #: E87627
West Virginia Certification #: 357

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Smith Grocery
Pace Project No.: 9265252

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9265252001	**PRE-GAC Hill**	Water	03/11/10 15:00	03/12/10 15:55
9265252002	**POST-GAC Hill**	Water	03/11/10 15:00	03/12/10 15:55
9265252003	**PRE-GAC Wiggams**	Water	03/11/10 15:15	03/12/10 15:55
9265252004	**POST-GAC Wiggams**	Water	03/11/10 15:15	03/12/10 15:55

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Smith Grocery
Pace Project No.: 9265252

Lab ID	Sample ID	Method	Analysts	Analytes Reported
9265252001	**PRE-GAC Hill**	EPA 8260	KJM	12
9265252002	**POST-GAC Hill**	EPA 8260	KJM	12
9265252003	**PRE-GAC Wiggams**	EPA 8260	KJM	12
9265252004	**POST-GAC Wiggams**	EPA 8260	KJM	12

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Smith Grocery
Pace Project No.: 9265252

Sample: PRE-GAC Hill **Lab ID: 9265252001** Collected: 03/11/10 15:00 Received: 03/12/10 15:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		03/17/10 10:56	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		03/17/10 10:56	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1		03/17/10 10:56	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		03/17/10 10:56	91-20-3	
Toluene	ND	ug/L	5.0	1		03/17/10 10:56	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		03/17/10 10:56	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	1		03/17/10 10:56	1330-20-7	
o-Xylene	ND	ug/L	5.0	1		03/17/10 10:56	95-47-6	
4-Bromofluorobenzene (S)	102	%	70-130	1		03/17/10 10:56	460-00-4	
Dibromofluoromethane (S)	102	%	70-130	1		03/17/10 10:56	1868-53-7	
1,2-Dichloroethane-d4 (S)	101	%	70-130	1		03/17/10 10:56	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		03/17/10 10:56	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Smith Grocery
Pace Project No.: 9265252

Sample: POST-GAC Hill **Lab ID: 9265252002** Collected: 03/11/10 15:00 Received: 03/12/10 15:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		03/17/10 10:19	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		03/17/10 10:19	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1		03/17/10 10:19	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		03/17/10 10:19	91-20-3	
Toluene	ND	ug/L	5.0	1		03/17/10 10:19	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		03/17/10 10:19	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	1		03/17/10 10:19	1330-20-7	
o-Xylene	ND	ug/L	5.0	1		03/17/10 10:19	95-47-6	
4-Bromofluorobenzene (S)	100	%	70-130	1		03/17/10 10:19	460-00-4	
Dibromofluoromethane (S)	100	%	70-130	1		03/17/10 10:19	1868-53-7	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		03/17/10 10:19	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		03/17/10 10:19	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Smith Grocery
Pace Project No.: 9265252

Sample: PRE-GAC Wiggams **Lab ID: 9265252003** Collected: 03/11/10 15:15 Received: 03/12/10 15:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Benzene	**9.2**	ug/L	5.0	1		03/17/10 10:37	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		03/17/10 10:37	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1		03/17/10 10:37	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		03/17/10 10:37	91-20-3	
Toluene	ND	ug/L	5.0	1		03/17/10 10:37	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		03/17/10 10:37	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	1		03/17/10 10:37	1330-20-7	
o-Xylene	ND	ug/L	5.0	1		03/17/10 10:37	95-47-6	
4-Bromofluorobenzene (S)	102	%	70-130	1		03/17/10 10:37	460-00-4	
Dibromofluoromethane (S)	101	%	70-130	1		03/17/10 10:37	1868-53-7	
1,2-Dichloroethane-d4 (S)	101	%	70-130	1		03/17/10 10:37	17060-07-0	
Toluene-d8 (S)	99	%	70-130	1		03/17/10 10:37	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Smith Grocery
Pace Project No.: 9265252

Sample: POST-GAC Wiggams **Lab ID: 9265252004** Collected: 03/11/10 15:15 Received: 03/12/10 15:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Benzene	**14.0**	ug/L	5.0	1		03/17/10 04:32	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		03/17/10 04:32	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1		03/17/10 04:32	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		03/17/10 04:32	91-20-3	
Toluene	ND	ug/L	5.0	1		03/17/10 04:32	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		03/17/10 04:32	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	1		03/17/10 04:32	1330-20-7	
o-Xylene	ND	ug/L	5.0	1		03/17/10 04:32	95-47-6	
4-Bromofluorobenzene (S)	100	%	70-130	1		03/17/10 04:32	460-00-4	
Dibromofluoromethane (S)	102	%	70-130	1		03/17/10 04:32	1868-53-7	
1,2-Dichloroethane-d4 (S)	108	%	70-130	1		03/17/10 04:32	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		03/17/10 04:32	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Smith Grocery
Pace Project No.: 9265252

QC Batch: MSV/10305 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV SC
Associated Lab Samples: 9265252002, 9265252004

METHOD BLANK: 415695 Matrix: Water
Associated Lab Samples: 9265252002, 9265252004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	5.0	03/17/10 00:36	
Ethylbenzene	ug/L	ND	5.0	03/17/10 00:36	
m&p-Xylene	ug/L	ND	10.0	03/17/10 00:36	
Methyl-tert-butyl ether	ug/L	ND	5.0	03/17/10 00:36	
Naphthalene	ug/L	ND	5.0	03/17/10 00:36	
o-Xylene	ug/L	ND	5.0	03/17/10 00:36	
Toluene	ug/L	ND	5.0	03/17/10 00:36	
Xylene (Total)	ug/L	ND	10.0	03/17/10 00:36	
1,2-Dichloroethane-d4 (S)	%	105	70-130	03/17/10 00:36	
4-Bromofluorobenzene (S)	%	101	70-130	03/17/10 00:36	
Dibromofluoromethane (S)	%	104	70-130	03/17/10 00:36	
Toluene-d8 (S)	%	97	70-130	03/17/10 00:36	

LABORATORY CONTROL SAMPLE: 415696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	44.9	90	70-130	
Ethylbenzene	ug/L	50	49.7	99	70-130	
m&p-Xylene	ug/L	100	102	102	70-130	
Methyl-tert-butyl ether	ug/L	50	49.6	99	70-130	
Naphthalene	ug/L	50	57.6	115	70-130	
o-Xylene	ug/L	50	52.1	104	70-130	
Toluene	ug/L	50	48.1	96	70-130	
Xylene (Total)	ug/L	150	154	103	70-130	
1,2-Dichloroethane-d4 (S)	%			103	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			101	70-130	
Toluene-d8 (S)	%			97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 415698 415699

Parameter	Units	9265242006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	50	50	54.8	53.9	109	107	70-130	2	30	
Ethylbenzene	ug/L	ND	50	50	56.7	57.8	112	114	70-130	2	30	
m&p-Xylene	ug/L	ND	100	100	117	119	115	117	70-130	2	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	53.7	54.3	107	108	70-130	1	30	
Naphthalene	ug/L	ND	50	50	55.0	60.1	108	119	70-130	9	30	
o-Xylene	ug/L	ND	50	50	59.5	59.7	117	117	70-130	0	30	
Toluene	ug/L	ND	50	50	58.0	56.5	113	110	70-130	3	30	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Smith Grocery
Pace Project No.: 9265252

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 415698 415699

Parameter	Units	9265242006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane-d4 (S)	%						98	102	70-130			
4-Bromofluorobenzene (S)	%						102	107	70-130			
Dibromofluoromethane (S)	%						100	101	70-130			
Toluene-d8 (S)	%						100	99	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Smith Grocery
Pace Project No.: 9265252

QC Batch: MSV/10306
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV SC
Associated Lab Samples: 9265252001, 9265252003

METHOD BLANK: 415701
Matrix: Water
Associated Lab Samples: 9265252001, 9265252003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	5.0	03/17/10 00:54	
Ethylbenzene	ug/L	ND	5.0	03/17/10 00:54	
m&p-Xylene	ug/L	ND	10.0	03/17/10 00:54	
Methyl-tert-butyl ether	ug/L	ND	5.0	03/17/10 00:54	
Naphthalene	ug/L	ND	5.0	03/17/10 00:54	
o-Xylene	ug/L	ND	5.0	03/17/10 00:54	
Toluene	ug/L	ND	5.0	03/17/10 00:54	
Xylene (Total)	ug/L	ND	10.0	03/17/10 00:54	
1,2-Dichloroethane-d4 (S)	%	104	70-130	03/17/10 00:54	
4-Bromofluorobenzene (S)	%	101	70-130	03/17/10 00:54	
Dibromofluoromethane (S)	%	102	70-130	03/17/10 00:54	
Toluene-d8 (S)	%	99	70-130	03/17/10 00:54	

LABORATORY CONTROL SAMPLE: 415702

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	48.2	96	70-130	
Ethylbenzene	ug/L	50	53.0	106	70-130	
m&p-Xylene	ug/L	100	108	108	70-130	
Methyl-tert-butyl ether	ug/L	50	51.1	102	70-130	
Naphthalene	ug/L	50	59.0	118	70-130	
o-Xylene	ug/L	50	55.0	110	70-130	
Toluene	ug/L	50	50.9	102	70-130	
Xylene (Total)	ug/L	150	163	108	70-130	
1,2-Dichloroethane-d4 (S)	%			105	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Dibromofluoromethane (S)	%			103	70-130	
Toluene-d8 (S)	%			100	70-130	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Smith Grocery
Pace Project No.: 9265252

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of

1138945

Section A Required Client Information:

Company: Ecological Resources
Address: P.O. Box 427 Elgin SC. 29045
Email To:
Phone: 803-438-1331 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Jimmy Cooper
Copy To:
Purchase Order No.:
Project Name: Smith Grocery
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Lance
Pace Profile #: 1435-1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☑ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes — MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: BTEX MN	1,2 DCA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	PRE-GAC Hill		G	3/11/2010	3:00pm																001
2	POST-GAC Hill		G																		002
3																					
4	PRE-GAC Williams		G		3:15pm																003
5	POST-GAC Williams		G																		004
6																					
7																					
8																					
9																					
10																					
11																					
12																					

9265252

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Edward LeGrand	3/11/2010	5:15	Jimmy Pace	3-11-10	1050				
	Jimmy Pace	3/12/10	1033	Jimmy Pace	3-12-10	1555	2.1	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Edward LeGRAND

SIGNATURE of SAMPLER: Edward LeGrand DATE Signed (MM/DD/YY): 3/11/2010

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical

Sample Condition Upon Receipt

Client Name: Coop Project # 9265952

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other_____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Optional
Proj. Due Date: N/A
Proj. Name: N/A

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other_____

Thermometer Used T060 Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature 2.1 Biological Tissue is Frozen: Yes No N/A

Temp should be above freezing to 6°C

Date and Initials of person examining contents: M 3/12

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing preservation have been checked.	☐Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): N/A		

Client Notification/ Resolution: Field Data Required? Y / N / N/A

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: RLS Date: 3/20/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

UST DOCKET 30 ted

BRYAN SHANE
MIDLANDS ENVIRONMENTAL CONSULTANTS
PO BOX 854
LEXINGTON SC 29071

APR 13 2010

Re: **Notice to Proceed-Groundwater Sampling**
Bid # IFB-33335-3/11/08-EMW; PO# 719459

Dear Mr. Shane:

Based on the award of the referenced bid package, enclosed are the information packets to conduct twenty (20) groundwater-sampling events. The packets contain all necessary information for work to begin. The facility has been assigned an individual Cost Agreement (CA) number as listed below. Please reference the CA number and Purchase Order # 719459 on the appropriate invoice submitted for payment against the facility.

UST Permit #	Facility	County	# wells	UST Project Manager	Sampling Due Date	Parameters-Groundwater	PACE CA#	MECI CA#
15971	Nesmith Well	Williamsburg	9	A. Smith	05/15/10	BTEXMN, DCA, & EDB	38247	38246
16263	Value Mart 1	Georgetown	14	D. Thoma	05/15/10	BTEXMN & DCA	38149	38150
13997	D&L Country Store	Georgetown	20	D. Thoma	05/15/10	BTEXMN & DCA	38147	38148
14541	Neely's Store	York	36	D. Thoma	05/15/10	BTEXMN, DCA, & EDB	38683	38684
09322	Smith's Grocery	York	29	D. Thoma	05/15/10	BTEXMN, DCA & EDB	38681	38682
15170	Silken Webb	Beaufort	10	J. Koon	05/15/10	BTEXMN, DCA, EDB, & Oxygenates	38550	38549
10917	Kathy's Grocery	Greenville	21	A. Smith	05/15/10	BTEXMN, DCA, & EDB	38592	38591
04735	Pavan Food Store	Greenville	5	A. Smith	05/15/10	BTEXMN, DCA, EDB, & total lead	29473	29474
09372	Handy Pantry 44	York	20	D. Thoma	05/15/10	BTEXMN, DCA, EDB, & Oxygenates	38663	38664
15385	Squire Village Store	York	22	A. Smith	05/15/10	BTEXMN, DCA, & EDB	38032	38033
15222	Sweatman Grocery	Dorchester	14	J. Padgett	05/15/10	BTEXMN, EDB, & Oxygenates	38562	38561
04877	Nicklepumper 235	Hampton	46	J. Padgett	05/15/10	BTEXMN, DCA, EDB, & total Lead	38600	38599
14793	Nik's Service Station	Hampton	32	J. Padgett	05/15/10	BTEXMN, DCA, EDB, & Oxygenates	38602	38601
03215	Florence Maint.	Florence	5	M. Rivers	05/15/10	BTEXMN	38677	38676
18231	Frm Hook's East	Horry	18	J. Martin	05/15/10	BTEXMN & DCA	38598	38596
09160	Rock Hill Maint.	York	15	D. Thoma	05/15/10	BTEXMN & DCA	38151	38152
09325	Hershman Gulf	York	13	D. Thoma	05/15/10	BTEXMN, DCA, & EDB	38159	38160

15866	Jennins Grocery	Greenville	17	S. Briney	05/15/10	BTEXMN	38765	38764
18876	Frm Reaves Station	Pickens	6	A. Smith	05/15/10	BTEXMN, DCA, EDB, & Oxygenates	38266	38265
19190	Bank of America	Spartanburg	11	A. Smith	05/15/10	BTEXMN, DCA, & EDB	38259	38258

MECI will perform services at the sites on behalf of the site's responsible party (RP); however, payment will be made from the SUPERB Account. The site's RP has no obligation for payment for this scope of work. Please coordinate access to the facility with the property owner. Contact information has been provided in the information packet. The Department grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included with the final report. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs. **Please note, the final report is due within 3 weeks from the date the site is sampled. If the site is not sampled by the specified due date or the report is not received in the specified time period, a late fee may be imposed.**

Please contact me with the sampling schedule before commencing work at these facilities. If you have any questions or need further assistance, please contact me at (803) 896-6397 or thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Information Packets
Approved Cost Agreements

cc: Renee Spencer, PACE Analytical, 9800 Kincey Ave. Ste. 100, Huntersville, NC, 28078 (w/ Approved CAs)
Technical Files (w/o. enc.)

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

RONNY LOWDER
EMERALD INC
PO BOX 3050
SUMTER SC 29151

JUL 12 2010

3 Hech
UST
DOCKET

Re: Notice to Proceed-GAC Changes
IFB-318409-5/6/10-EMW; PO #809301

Dear Mr. Lowder:

Under the terms and conditions of the referenced contract, a GAC filter replacement has been approved for the following sites. Each facility has been assigned an individual Cost Agreement (CA) number as listed below. Please reference the **CA number and Purchase Order #809301** on the invoice submitted for payment. Emerald Inc. should complete the work in accordance with the contract specifications. For any samples submitted to PACE for analysis, please be sure to include the PACE CA number and PO#729210 on the chain of custody form. Pre- and Post-GAC Samples should be collected from all water supply wells and sampled for BTEX, Naphthalene, MtBE, and DCA by EPA Method 8260 and EDB by EPA Method 8011.

UST ~~Permit~~ #	Facility	WSW Info	County	Contact Person	Contact Number	PACE CA#	Emerald CA#
09322	Smiths Grocery	Hill, 3049 Clover Circle, Clover Wiggam, 3043 Clover Circle, Clover	York	Tony Hill Gary Wiggam	803-684-5425 803-628-5464	39365	39366
14541	Neely's Country	Sanders, 2291 Neely Store Rd, Rock Hill Village Market, 2185 Neely Store Rd Caudle, 2211 Neely Store Rd	York	Carol Sanders Connie Freeman Violet Caudle	803-329-4288 803-366-9077 803-329-2852	39428	39429
09425	B Quik	Toney, 301 Christy Cove Ln, Catawba	York	Sandy Toney	803-325-1402	39430	39431
15688	Robert Rabon	Rabon, 30 S Pike E., Sumter Bridges, 90 S Pike E., Sumter	Sumter	Grover Rabon Brian Bennett	803-469-6235 803-464-8751	39432	39433
17439	SP Grocery	McIntosh, 305 Church St., Lynchburg	Lee	Christine McIntosh	803-437-2282	39427	39426

If you have any questions or need further assistance, please contact me at (803) 896-6397 or by email at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

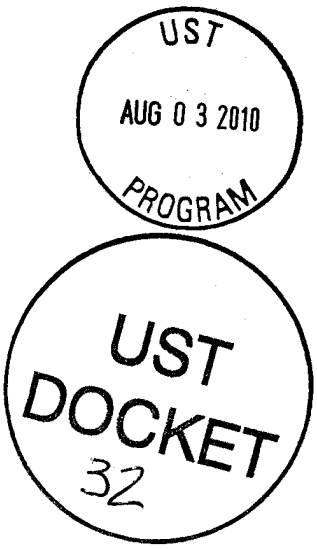
Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Site Information

cc: Technical File (w/out enc)
Minda Johnson, UST Management Division

Midlands Environmental Consultants, Inc.

August 2, 2010



Ms. Debra Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Report of Groundwater Sampling
Smith Grocery
York, South Carolina
SCDHEC Site ID Number 09322, CA # 38682
MECI Project Number 10-2816
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached Report of Sampling for the referenced site.

On July 19, 2010, seventeen monitoring wells (MW-2, MW-3, MW-5, MW-6, MW-7, MW-9 through MW-15, MW-17, MW-19, TW-1, TW-2 and TW-3) and six water supply wells (WSW-Smith (pre), WSW-Smith (post), WSW-Crock, WSW-Swift (pre) WSW-Swift (post) and WSW-Hill) were sampled. Three monitoring wells (TW-1, TW-2 and TW-3) were purged prior to sampling. Six monitoring wells (MW-1, MW-4, MW-8, MW-16, MW-18 and MW-20) were not located. Groundwater samples obtained were transported to Pace Analytical Services, Inc. of Huntersville, NC for analysis.

Purge water produced by the purging process was treated on-site utilizing a granular activated carbon unit. A total of 46.0 gallons of purge water was disposed of in this manner. A disposal manifest for the referenced purge water is attached at the end of this report.

If you have any question or comments please feel free to contact us at 803-808-2043.

Sincerely,
Midlands Environmental Consultants, Inc.

Brian J. Owen
Field Technician

Brenton P. Kelly
Project Scientist

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

Site Activity Summary

UST Permit #: 09322
Facility Name: Smith Grocery
County: York
Field Personnel: Alex Wolfson, Gavin Globensky

Midlands Environmental Consultants, Inc.
235-B Dooley Road, Lexington, SC 29073
(803) 808-2043 fax: 808-2048

Sample ID	Sampled?	Date	Time	Screened Interval	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	# Gals. Purged	Comments
MW-1	N	***	***	25-35	***	***	***	***	Not Located: A pile of brush and logs in the area, Injection well IW-5 located near-by
MW-2	Y	7/19/10	10:35	23-38	***	33.32	***	***	Odor
MW-3	Y	7/19/10	11:45	25-35	***	30.48	***	***	No Odor
MW-4	N	***	***	17-27	***	***	***	***	Not Located: In a Tilled Filed
MW-5	Y	7/19/10	11:25	20-30	***	28.52	***	***	No Odor
MW-6	Y	7/19/10	11:27	27-37	***	33.31	***	***	No Odor
MW-7	Y	7/19/10	11:32	26-36	***	32.3	***	***	Odor
MW-8	N	***	***	23-38	***	***	***	***	Not Located: Not located with Metal Detector
MW-9	Y	7/19/10	11:30	21-36	***	31.9	***	***	Odor
MW-10	Y	7/19/10	12:15	29-44	***	38.95	***	***	Odor
MW-11	Y	7/19/10	12:30	29-44	***	39.21	***	***	No Odor
MW-12	Y	7/19/10	13:10	29-44	***	39.23	***	***	No Odor
MW-13	Y	7/19/10	13:30	32-47	***	41.29	***	***	No Odor
MW-14	Y	7/19/10	13:55	35-50	***	42.66	***	***	No Odor
MW-15	Y	7/19/10	14:00	35-50	***	43.85	***	***	No Odor
								0.0	**TOTAL GALLONS PURGED**

Site Activity Summary

UST Permit #: 09322
Facility Name: Smith Grocery
County: York
Field Personnel: Alex Wolfson, Gavin Globensky

Midlands Environmental Consultants, Inc.
235-B Dooley Road, Lexington, SC 29073
(803) 808-2043 fax: 808-2048

Sample ID	Sampled?	Date	Time	Screened Interval	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	# Gals. Purged	Comments
MW-16	N	***	***	22-37	***	***	***	***	Not Located: In woods covered by pinestraw, not located with metal detector or measuring off known wells
MW-17	Y	7/19/10	13:00	25-40	***	39.74	***	***	No Odor: Located where MW-16 is shown on map, tagged to 40 feet, sampled as MW-17
MW-18	N	***	***	31-46	***	***	***	***	Not Located: In woods covered by pinestraw, not located with metal detector or measuring off known wells
MW-19	Y	7/19/10	14:15	35-50	***	44.24	***	***	No Odor
MW-20	N	***	***	20-35	***	***	***	***	Not Located: Not located with Metal Detector
TW-1	Y	7/19/10	11:20	56-61	***	33.78	***	9.0	Odor
TW-2	Y	7/19/10	11:05	86-88	***	33.61	***	26.0	Odor
TW-3	Y	7/19/10	12:25	66-71	***	38.29	***	11.0	Odor
WSW-Smith (Pre)	Y	7/19/10	11:40	***	***	***	***	***	No Odor
WSW-Smith (Post)	Y	7/19/10	11:40	***	***	***	***	***	No Odor
WSW-Crock	Y	7/19/10	13:35	***	***	***	***	***	No Odor
WSW-Swift (Pre)	Y	7/19/10	13:50	***	***	***	***	***	No Odor
WSW-Swith (Psot)	Y	7/19/10	13:50	***	***	***	***	***	No Odor
WSW-Hill	Y	7/19/10	13:55	***	***	***	***	***	No Odor
								46.0	**TOTAL GALLONS PURGED**

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 7/19/2010

Field Personnel: Alex Wolfson and Gavin Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-1

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Free Product (DFP)			feet
Depth to Ground Water (DGW)	33.78		feet
Total Well Depth (TWD)	61		feet
Length of the water column (LWC=TWD-DGW)		27.22	feet
1 casing volume (CV=LWC X C)= _____ X	0.163	4.44	gallons
3 casing volume (3 X CV)=	3	13.31	gallons

Total Volume of Water Purged Before Sampling 9 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:10	11:15	11:20					
pH (s.u.)	8.13	7.36	7.16					
Specific Conductivity (µmhos/cm)	179.9	162.4	200.8					
Water Temperature (°C)	21.0	20.7	20.5					
Dissolved Oxygen	0.57	0.63	0.62					
PID readings, if required								

Remarks: Sample Time: 11:20 Dry at 9 Gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 7/19/2010

Field Personnel: Alex Wolfson and Gavin Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-2

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Free Product (DFP)			feet
Depth to Ground Water (DGW)	33.61		feet
Total Well Depth (TWD)	88		feet
Length of the water column (LWC=TWD-DGW)		54.39	feet
1 casing volume (CV=LWC X C)= ____ X	0.163	8.87	gallons
3 casing volume (3 X CV)=	3	26.60	gallons

Total Volume of Water Purged Before Sampling 26 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	10:40	10:48	10:57	11:05				
pH (s.u.)	9.85	10.07	9.73	9.28				
Specific Conductivity (µmhos/cm)	127.4	143.2	150.3	174.1				
Water Temperature (°C)	21.4	20.6	19.1	18.9				
Dissolved Oxygen	0.95	0.92	0.67	0.85				
PID readings, if required								

Remarks: Sample Time: 11:05

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 7/19/2010

Field Personnel: Alex Wolfson and Gavin Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-3

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Free Product (DFP)			feet
Depth to Ground Water (DGW)	38.29		feet
Total Well Depth (TWD)	71		feet
Length of the water column (LWC=TWD-DGW)		32.71	feet
1 casing volume (CV=LWC X C)= ____ X	0.163	5.33	gallons
3 casing volume (3 X CV)=	3	16.00	gallons

Total Volume of Water Purged Before Sampling 11 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	12:15	12:20	12:25					
pH (s.u.)	7.58	7.46	7.06					
Specific Conductivity (µmhos/cm)	66.8	62.9	63.7					
Water Temperature (°C)	21.6	20.1	19.4					
Dissolved Oxygen	1.88	0.95	0.93					
PID readings, if required								

Remarks: Sample Time: 12:25 Dry at 11 Gallons

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of

1379366

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company:	Report To:	Attention:
Address:	Copy To:	Company Name:
		Address:
Email To:	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name:	Pace Project Manager:
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COLLECTED: COMPOSITE START TIME	COLLECTED: COMPOSITE END/GRAB DATE	COLLECTED: COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

2

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: | DATE Signed (MM/DD/YY):

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 3

1379367

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company:	Report To:	Attention:
Address:	Copy To:	Company Name:
		Address:
Email To:	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name:	Pace Project Manager:
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: SC

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

2

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 5

1379368

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company:	Report To:	Attention:
Address:	Copy To:	Company Name:
		Address:
Email To:	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name:	Pace Project Manager:
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1																					
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

2

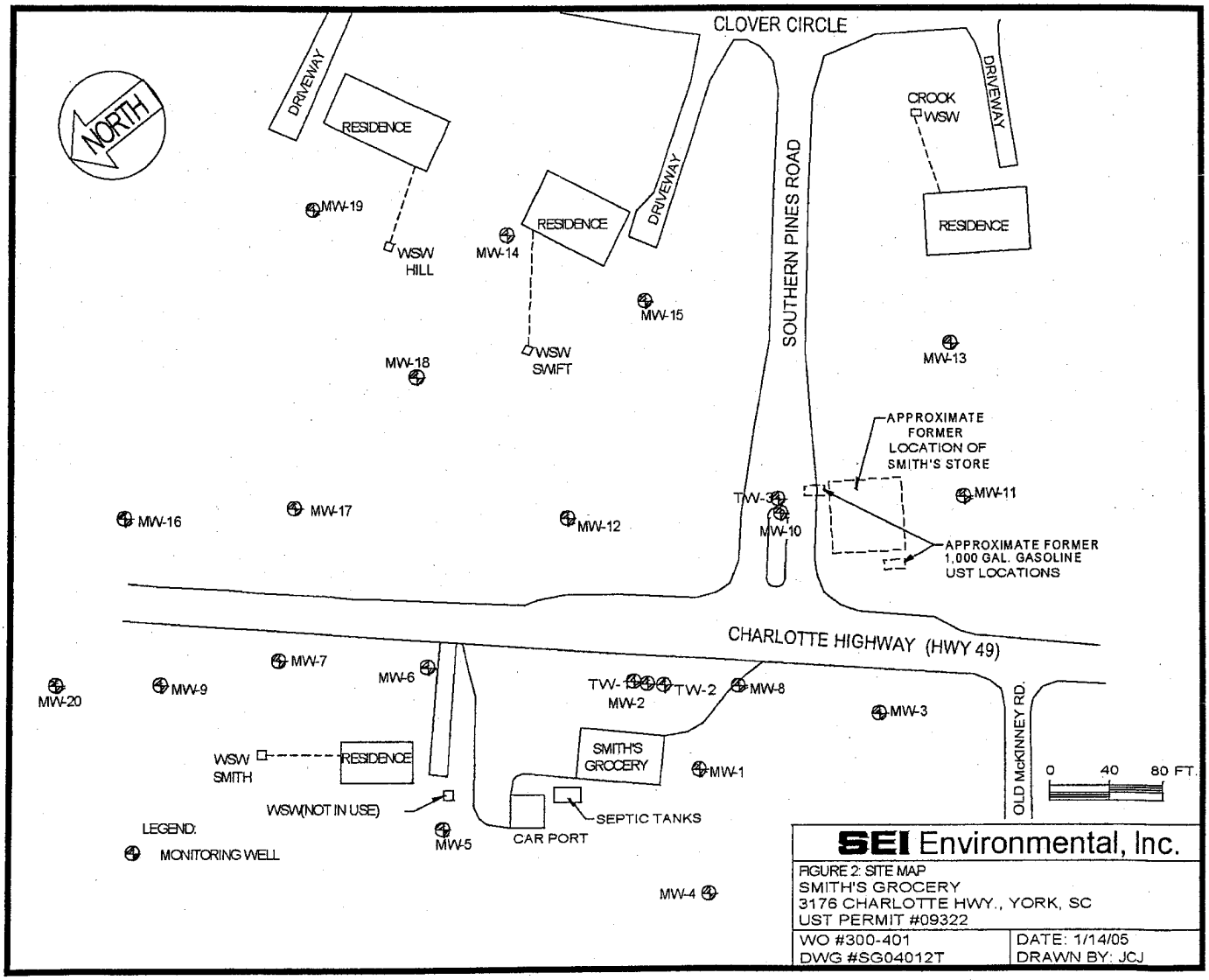
SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.


CLOVER CIRCLE
NORTH
DRIVEWAY
RESIDENCE
MW-19
WSW HILL
MW-14
RESIDENCE
DRIVEWAY
SOUTHERN PINES ROAD
CROOK WSW
DRIVEWAY
RESIDENCE
MW-15
MW-18
WSW SWIFT
MW-13
APPROXIMATE FORMER LOCATION OF SMITH'S STORE
MW-16
MW-17
MW-12
TW-3
MW-10
MW-11
APPROXIMATE FORMER 1,000 GAL. GASOLINE UST LOCATIONS
CHARLOTTE HIGHWAY (HWY 49)
MW-7
MW-6
MW-20
MW-9
TW-1
MW-2
TW-2
MW-8
MW-3
WSW SMITH
RESIDENCE
SMITH'S GROCERY
MW-1
OLD McKINNEY RD.
0 40 80 FT.
WSW(NOT IN USE)
SEPTIC TANKS
LEGEND:
MONITORING WELL
MW-5
CAR PORT
MW-4
SEI Environmental, Inc.
FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322
WO #300-401
DWG #SG04012T
DATE: 1/14/05
DRAWN BY: JCJ

Midlands
Environmental
Consultants, Inc.

August 2, 2010

Re: Treatment of Purge Water
Smith Grocery
York, South Carolina
SCDHEC Site ID Number 09322
MECI Project Number 10-2816

To Whom It May Concern;

Midlands Environmental Consultants, Inc. is providing the following letter as certification that treatment of the referenced purge water complied with the conditions of "Proposed Conditions for Use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater", as described in the following:

Applicability:

Groundwater treated was obtained as a result development of wells and sampling.

Conditions:

1. The purge/bail water from all wells is mixed before usage of the Activated Carbon Unit.
2. No free-product was detected in any of the purge water drums.
3. Analytical results of from well sampling show average concentrations of petroleum hydrocarbon constituents less than 5000 parts per billion (ppb) Benzene and less than 20,000 ppb total BTEX.
4. The existing carbon pack will be replaced/reactivated every 5,000 gallons.
5. Record of usage is maintained by Contractor.
6. Any and all recommendations and conditions issued by the Manufacturer have been adhered to.
7. Any and all recommendations and conditions (even on a site by site basis) issued by the SCDHEC must be adhered to.

All purge waters were treated on-site using an up-flow treatment drum loaded with 30 pounds of activated carbon. Carbon will be loaded to a maximum of 3 pounds of total organic compounds or 5,000 gallons of development/purge water, whichever occurs first.

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

A total of 46.0 gallons were treated on July 19, 2010 at the referenced site.

Midlands Environmental also tracks cumulative organic compounds adsorbed on the activated carbon to ensure the capacity of carbon mass is not over-charged. This data is available upon request.

Should you have any questions or comments, please contact the undersigned.

Sincerely,
Midlands Environmental Consultants, Inc.

Brendon P. Kelly
Project Scientist

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

Received 7-29-10

July 27, 2010

Ms. Debra Thoma
SCDHEC
UST Program
2600 Bull Street
Columbia, SC 29201

RE: Project: SMITH GROCERY ~~09332~~ 09322
Pace Project No.: 9273788

Dear Ms. Thoma:
Enclosed are the analytical results for sample(s) received by the laboratory on July 20, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Renee Spencer

renee.spencer@pacelabs.com
Project Manager

Enclosures

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Charlotte Certification IDs
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
Pennsylvania Certification #: 68-00784
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Virginia Certification #: 00213
Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DHH Drinking Water # LA 100031

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9273788001	MW-2	Water	07/19/10 10:35	07/20/10 13:13
9273788002	MW-3	Water	07/19/10 11:45	07/20/10 13:13
9273788003	MW-5	Water	07/19/10 11:25	07/20/10 13:13
9273788004	MW-6	Water	07/19/10 11:27	07/20/10 13:13
9273788005	MW-7	Water	07/19/10 11:32	07/20/10 13:13
9273788006	MW-9	Water	07/19/10 11:30	07/20/10 13:13
9273788007	MW-10	Water	07/19/10 12:15	07/20/10 13:13
9273788008	MW-11	Water	07/19/10 12:30	07/20/10 13:13
9273788009	MW-12	Water	07/19/10 13:10	07/20/10 13:13
9273788010	MW-13	Water	07/19/10 13:20	07/20/10 13:13
9273788011	MW-14	Water	07/19/10 13:55	07/20/10 13:13
9273788012	MW-15	Water	07/19/10 14:00	07/20/10 13:13
9273788013	MW-17	Water	07/19/10 13:00	07/20/10 13:13
9273788014	MW-19	Water	07/19/10 14:15	07/20/10 13:13
9273788015	TW-1	Water	07/19/10 11:20	07/20/10 13:13
9273788016	TW-2	Water	07/19/10 11:05	07/20/10 13:13
9273788017	TW-3	Water	07/19/10 12:25	07/20/10 13:13
9273788018	WSW-CROCK	Water	07/19/10 13:35	07/20/10 13:13
9273788019	WSW-SMITH	Water	07/19/10 11:40	07/20/10 13:13
9273788020	WSW-SWIFT (PRE)	Water	07/19/10 13:50	07/20/10 13:13
9273788021	WSW-SWIFT (POST)	Water	07/19/10 13:50	07/20/10 13:13
9273788022	WSW-HILL (PRE)	Water	07/19/10 13:55	07/20/10 13:13
9273788023	WSW-HILL (POST)	Water	07/19/10 13:55	07/20/10 13:13

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Lab ID	Sample ID	Method	Analysts	Analytes Reported
9273788001	MW-2	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788002	MW-3	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788003	MW-5	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788004	MW-6	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788005	MW-7	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788006	MW-9	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788007	MW-10	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788008	MW-11	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788009	MW-12	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788010	MW-13	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788011	MW-14	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788012	MW-15	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788013	MW-17	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788014	MW-19	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788015	TW-1	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788016	TW-2	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788017	TW-3	EPA 8011	RES	2
		EPA 8260	KJM	13
9273788018	WSW-CROCK	EPA 8011	RES	2
		EPA 8260	MCK	13
9273788019	WSW-SMITH	EPA 8011	RES	2

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 8260	MCK	13
9273788020	WSW-SWIFT (PRE)	EPA 8011	RES	2
		EPA 8260	MCK	13
9273788021	WSW-SWIFT (POST)	EPA 8011	RES	2
		EPA 8260	MCK	13
9273788022	WSW-HILL (PRE)	EPA 8011	RES	2
		EPA 8260	MCK	13
9273788023	WSW-HILL (POST)	EPA 8011	RES	2
		EPA 8260	MCK	13

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-2 **Lab ID: 9273788001** Collected: 07/19/10 10:35 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**132**	ug/L	4.0	4.0	200	07/21/10 10:45	07/22/10 22:13	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		200	07/21/10 10:45	07/22/10 22:13	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**10100**	ug/L	2500	600	500		07/21/10 20:02	71-43-2	
1,2-Dichloroethane	ND	ug/L	2500	650	500		07/21/10 20:02	107-06-2	
Ethylbenzene	**1950J**	ug/L	2500	550	500		07/21/10 20:02	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	2500	1000	500		07/21/10 20:02	1634-04-4	
Naphthalene	ND	ug/L	2500	1450	500		07/21/10 20:02	91-20-3	
Toluene	**20500**	ug/L	2500	900	500		07/21/10 20:02	108-88-3	
Xylene (Total)	**12800**	ug/L	5000	1350	500		07/21/10 20:02	1330-20-7	
m&p-Xylene	**7990**	ug/L	5000	1350	500		07/21/10 20:02	179601-23-1	
o-Xylene	**4800**	ug/L	2500	850	500		07/21/10 20:02	95-47-6	
4-Bromofluorobenzene (S)	107	%	70-130		500		07/21/10 20:02	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		500		07/21/10 20:02	1868-53-7	
1,2-Dichloroethane-d4 (S)	98	%	70-130		500		07/21/10 20:02	17060-07-0	
Toluene-d8 (S)	101	%	70-130		500		07/21/10 20:02	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-3 **Lab ID: 9273788002** Collected: 07/19/10 11:45 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	07/21/10 10:45	07/21/10 23:54	106-93-4	
1-Chloro-2-bromopropane (S)	105	%	60-140		1	07/21/10 10:45	07/21/10 23:54	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/21/10 17:53	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/21/10 17:53	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/21/10 17:53	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/21/10 17:53	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/21/10 17:53	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/21/10 17:53	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/21/10 17:53	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/21/10 17:53	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		07/21/10 17:53	95-47-6	
4-Bromofluorobenzene (S)	105	%	70-130		1		07/21/10 17:53	460-00-4	
Dibromofluoromethane (S)	99	%	70-130		1		07/21/10 17:53	1868-53-7	
1,2-Dichloroethane-d4 (S)	98	%	70-130		1		07/21/10 17:53	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		07/21/10 17:53	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-5 **Lab ID: 9273788003** Collected: 07/19/10 11:25 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	07/21/10 10:45	07/22/10 00:15	106-93-4	
1-Chloro-2-bromopropane (S)	105	%	60-140		1	07/21/10 10:45	07/22/10 00:15	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/21/10 18:12	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/21/10 18:12	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/21/10 18:12	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/21/10 18:12	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/21/10 18:12	91-20-3	
Toluene	**92.2**	ug/L	5.0	1.8	1		07/21/10 18:12	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/21/10 18:12	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/21/10 18:12	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		07/21/10 18:12	95-47-6	
4-Bromofluorobenzene (S)	107	%	70-130		1		07/21/10 18:12	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		1		07/21/10 18:12	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	70-130		1		07/21/10 18:12	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		07/21/10 18:12	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-6 **Lab ID: 9273788004** Collected: 07/19/10 11:27 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.034**	ug/L	0.020	0.020	1	07/21/10 10:45	07/22/10 22:34	106-93-4	
1-Chloro-2-bromopropane (S)	107	%	60-140		1	07/21/10 10:45	07/22/10 22:34	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**4.8J**	ug/L	5.0	1.2	1		07/22/10 13:31	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/22/10 13:31	107-06-2	
Ethylbenzene	**4.1J**	ug/L	5.0	1.1	1		07/22/10 13:31	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/22/10 13:31	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/22/10 13:31	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/22/10 13:31	108-88-3	
Xylene (Total)	**24.2**	ug/L	10.0	2.7	1		07/22/10 13:31	1330-20-7	
m&p-Xylene	**18.5**	ug/L	10.0	2.7	1		07/22/10 13:31	179601-23-1	
o-Xylene	**5.8**	ug/L	5.0	1.7	1		07/22/10 13:31	95-47-6	
4-Bromofluorobenzene (S)	105	%	70-130		1		07/22/10 13:31	460-00-4	
Dibromofluoromethane (S)	99	%	70-130		1		07/22/10 13:31	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		07/22/10 13:31	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		07/22/10 13:31	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-7 **Lab ID: 9273788005** Collected: 07/19/10 11:32 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.22**	ug/L	0.020	0.020	1	07/21/10 10:45	07/22/10 22:55	106-93-4	
1-Chloro-2-bromopropane (S)	100	%	60-140		1	07/21/10 10:45	07/22/10 22:55	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**195**	ug/L	25.0	6.0	5		07/22/10 15:09	71-43-2	
1,2-Dichloroethane	ND	ug/L	25.0	6.5	5		07/22/10 15:09	107-06-2	
Ethylbenzene	**391**	ug/L	25.0	5.5	5		07/22/10 15:09	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	25.0	10.0	5		07/22/10 15:09	1634-04-4	
Naphthalene	**146**	ug/L	25.0	14.5	5		07/22/10 15:09	91-20-3	
Toluene	**20.4J**	ug/L	25.0	9.0	5		07/22/10 15:09	108-88-3	
Xylene (Total)	**1280**	ug/L	50.0	13.5	5		07/22/10 15:09	1330-20-7	
m&p-Xylene	**690**	ug/L	50.0	13.5	5		07/22/10 15:09	179601-23-1	
o-Xylene	**591**	ug/L	25.0	8.5	5		07/22/10 15:09	95-47-6	
4-Bromofluorobenzene (S)	103	%	70-130		5		07/22/10 15:09	460-00-4	
Dibromofluoromethane (S)	99	%	70-130		5		07/22/10 15:09	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	70-130		5		07/22/10 15:09	17060-07-0	
Toluene-d8 (S)	98	%	70-130		5		07/22/10 15:09	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-9 **Lab ID: 9273788006** Collected: 07/19/10 11:30 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.67**	ug/L	0.020	0.020	1	07/21/10 10:45	07/22/10 23:16	106-93-4	
1-Chloro-2-bromopropane (S)	158	%	60-140		1	07/21/10 10:45	07/22/10 23:16	301-79-56	S5
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	250	60.0	50		07/21/10 16:16	71-43-2	
1,2-Dichloroethane	ND	ug/L	250	65.0	50		07/21/10 16:16	107-06-2	
Ethylbenzene	**1540**	ug/L	250	55.0	50		07/21/10 16:16	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	250	100	50		07/21/10 16:16	1634-04-4	
Naphthalene	**1070**	ug/L	250	145	50		07/21/10 16:16	91-20-3	
Toluene	**725**	ug/L	250	90.0	50		07/21/10 16:16	108-88-3	
Xylene (Total)	**16000**	ug/L	500	135	50		07/21/10 16:16	1330-20-7	
m&p-Xylene	**9780**	ug/L	500	135	50		07/21/10 16:16	179601-23-1	
o-Xylene	**6260**	ug/L	250	85.0	50		07/21/10 16:16	95-47-6	
4-Bromofluorobenzene (S)	105	%	70-130		50		07/21/10 16:16	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		50		07/21/10 16:16	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	70-130		50		07/21/10 16:16	17060-07-0	
Toluene-d8 (S)	99	%	70-130		50		07/21/10 16:16	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-10 **Lab ID: 9273788007** Collected: 07/19/10 12:15 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**48.9**	ug/L	2.0	2.0	100	07/21/10 10:45	07/22/10 23:37	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		100	07/21/10 10:45	07/22/10 23:37	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**3630**	ug/L	500	120	100		07/21/10 20:20	71-43-2	
1,2-Dichloroethane	ND	ug/L	500	130	100		07/21/10 20:20	107-06-2	
Ethylbenzene	**2760**	ug/L	500	110	100		07/21/10 20:20	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	500	200	100		07/21/10 20:20	1634-04-4	
Naphthalene	**346J**	ug/L	500	290	100		07/21/10 20:20	91-20-3	
Toluene	**15000**	ug/L	500	180	100		07/21/10 20:20	108-88-3	
Xylene (Total)	**11600**	ug/L	1000	270	100		07/21/10 20:20	1330-20-7	
m&p-Xylene	**6860**	ug/L	1000	270	100		07/21/10 20:20	179601-23-1	
o-Xylene	**4770**	ug/L	500	170	100		07/21/10 20:20	95-47-6	
4-Bromofluorobenzene (S)	103	%	70-130		100		07/21/10 20:20	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		100		07/21/10 20:20	1868-53-7	
1,2-Dichloroethane-d4 (S)	98	%	70-130		100		07/21/10 20:20	17060-07-0	
Toluene-d8 (S)	100	%	70-130		100		07/21/10 20:20	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-11 **Lab ID: 9273788008** Collected: 07/19/10 12:30 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	07/21/10 10:45	07/22/10 02:18	106-93-4	
1-Chloro-2-bromopropane (S)	101	%	60-140		1	07/21/10 10:45	07/22/10 02:18	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/21/10 18:30	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/21/10 18:30	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/21/10 18:30	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/21/10 18:30	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/21/10 18:30	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/21/10 18:30	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/21/10 18:30	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/21/10 18:30	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		07/21/10 18:30	95-47-6	
4-Bromofluorobenzene (S)	103	%	70-130		1		07/21/10 18:30	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		07/21/10 18:30	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	70-130		1		07/21/10 18:30	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		07/21/10 18:30	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-12 **Lab ID: 9273788009** Collected: 07/19/10 13:10 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.12**	ug/L	0.020	0.020	1	07/21/10 10:45	07/22/10 23:57	106-93-4	
1-Chloro-2-bromopropane (S)	74	%	60-140		1	07/21/10 10:45	07/22/10 23:57	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**147**	ug/L	5.0	1.2	1		07/22/10 14:08	71-43-2	
1,2-Dichloroethane	**5.7**	ug/L	5.0	1.3	1		07/22/10 14:08	107-06-2	
Ethylbenzene	**13.2**	ug/L	5.0	1.1	1		07/22/10 14:08	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/22/10 14:08	1634-04-4	
Naphthalene	**25.6**	ug/L	5.0	2.9	1		07/22/10 14:08	91-20-3	
Toluene	**2.4J**	ug/L	5.0	1.8	1		07/22/10 14:08	108-88-3	
Xylene (Total)	**263**	ug/L	10.0	2.7	1		07/22/10 14:08	1330-20-7	
m&p-Xylene	**187**	ug/L	10.0	2.7	1		07/22/10 14:08	179601-23-1	
o-Xylene	**75.4**	ug/L	5.0	1.7	1		07/22/10 14:08	95-47-6	
4-Bromofluorobenzene (S)	105	%	70-130		1		07/22/10 14:08	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		07/22/10 14:08	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	70-130		1		07/22/10 14:08	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		07/22/10 14:08	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-13 **Lab ID: 9273788010** Collected: 07/19/10 13:20 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	07/21/10 10:46	07/22/10 02:58	106-93-4	
1-Chloro-2-bromopropane (S)	92	%	60-140		1	07/21/10 10:46	07/22/10 02:58	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/21/10 19:43	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/21/10 19:43	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/21/10 19:43	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/21/10 19:43	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/21/10 19:43	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/21/10 19:43	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/21/10 19:43	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/21/10 19:43	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		07/21/10 19:43	95-47-6	
4-Bromofluorobenzene (S)	103	%	70-130		1		07/21/10 19:43	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		1		07/21/10 19:43	1868-53-7	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		07/21/10 19:43	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		07/21/10 19:43	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-14 **Lab ID: 9273788011** Collected: 07/19/10 13:55 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	07/21/10 10:46	07/22/10 03:19	106-93-4	
1-Chloro-2-bromopropane (S)	73	%	60-140		1	07/21/10 10:46	07/22/10 03:19	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/21/10 18:48	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/21/10 18:48	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/21/10 18:48	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/21/10 18:48	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/21/10 18:48	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/21/10 18:48	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/21/10 18:48	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/21/10 18:48	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		07/21/10 18:48	95-47-6	
4-Bromofluorobenzene (S)	102	%	70-130		1		07/21/10 18:48	460-00-4	
Dibromofluoromethane (S)	102	%	70-130		1		07/21/10 18:48	1868-53-7	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		07/21/10 18:48	17060-07-0	
Toluene-d8 (S)	98	%	70-130		1		07/21/10 18:48	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-15 **Lab ID: 9273788012** Collected: 07/19/10 14:00 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	07/21/10 10:46	07/22/10 03:39	106-93-4	
1-Chloro-2-bromopropane (S)	88	%	60-140		1	07/21/10 10:46	07/22/10 03:39	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/21/10 19:06	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/21/10 19:06	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/21/10 19:06	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/21/10 19:06	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/21/10 19:06	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/21/10 19:06	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/21/10 19:06	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/21/10 19:06	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		07/21/10 19:06	95-47-6	
4-Bromofluorobenzene (S)	105	%	70-130		1		07/21/10 19:06	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		07/21/10 19:06	1868-53-7	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		07/21/10 19:06	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		07/21/10 19:06	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-17 **Lab ID: 9273788013** Collected: 07/19/10 13:00 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.050**	ug/L	0.020	0.020	1	07/21/10 10:46	07/23/10 00:18	106-93-4	
1-Chloro-2-bromopropane (S)	103	%	60-140		1	07/21/10 10:46	07/23/10 00:18	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/22/10 14:26	71-43-2	
1,2-Dichloroethane	**1.4J**	ug/L	5.0	1.3	1		07/22/10 14:26	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/22/10 14:26	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/22/10 14:26	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/22/10 14:26	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/22/10 14:26	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/22/10 14:26	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/22/10 14:26	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		07/22/10 14:26	95-47-6	
4-Bromofluorobenzene (S)	102	%	70-130		1		07/22/10 14:26	460-00-4	
Dibromofluoromethane (S)	102	%	70-130		1		07/22/10 14:26	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	70-130		1		07/22/10 14:26	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		07/22/10 14:26	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: MW-19 **Lab ID: 9273788014** Collected: 07/19/10 14:15 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	07/21/10 10:46	07/22/10 04:20	106-93-4	
1-Chloro-2-bromopropane (S)	99	%	60-140		1	07/21/10 10:46	07/22/10 04:20	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.2	1		07/21/10 19:25	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		07/21/10 19:25	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/21/10 19:25	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/21/10 19:25	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/21/10 19:25	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/21/10 19:25	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		07/21/10 19:25	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/21/10 19:25	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		07/21/10 19:25	95-47-6	
4-Bromofluorobenzene (S)	102	%	70-130		1		07/21/10 19:25	460-00-4	
Dibromofluoromethane (S)	99	%	70-130		1		07/21/10 19:25	1868-53-7	
1,2-Dichloroethane-d4 (S)	93	%	70-130		1		07/21/10 19:25	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		07/21/10 19:25	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: TW-1 **Lab ID: 9273788015** Collected: 07/19/10 11:20 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**19.9**	ug/L	0.49	0.49	25	07/21/10 10:46	07/23/10 00:39	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		25	07/21/10 10:46	07/23/10 00:39	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**9660**	ug/L	250	60.0	50		07/21/10 16:37	71-43-2	
1,2-Dichloroethane	**77.1J**	ug/L	250	65.0	50		07/21/10 16:37	107-06-2	
Ethylbenzene	**2300**	ug/L	250	55.0	50		07/21/10 16:37	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	250	100	50		07/21/10 16:37	1634-04-4	
Naphthalene	**610**	ug/L	250	145	50		07/21/10 16:37	91-20-3	
Toluene	**640**	ug/L	250	90.0	50		07/21/10 16:37	108-88-3	
Xylene (Total)	**11900**	ug/L	500	135	50		07/21/10 16:37	1330-20-7	
m&p-Xylene	**9160**	ug/L	500	135	50		07/21/10 16:37	179601-23-1	
o-Xylene	**2710**	ug/L	250	85.0	50		07/21/10 16:37	95-47-6	
4-Bromofluorobenzene (S)	109	%	70-130		50		07/21/10 16:37	460-00-4	
Dibromofluoromethane (S)	97	%	70-130		50		07/21/10 16:37	1868-53-7	
1,2-Dichloroethane-d4 (S)	92	%	70-130		50		07/21/10 16:37	17060-07-0	
Toluene-d8 (S)	99	%	70-130		50		07/21/10 16:37	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: TW-2 **Lab ID: 9273788016** Collected: 07/19/10 11:05 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**139**	ug/L	4.0	4.0	200	07/21/10 10:46	07/23/10 01:00	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		200	07/21/10 10:46	07/23/10 01:00	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**10600**	ug/L	500	120	100		07/21/10 20:56	71-43-2	
1,2-Dichloroethane	**550**	ug/L	500	130	100		07/21/10 20:56	107-06-2	
Ethylbenzene	**1980**	ug/L	500	110	100		07/21/10 20:56	100-41-4	
Methyl-tert-butyl ether	**537**	ug/L	500	200	100		07/21/10 20:56	1634-04-4	
Naphthalene	ND	ug/L	500	290	100		07/21/10 20:56	91-20-3	
Toluene	**18900**	ug/L	2500	900	500		07/22/10 17:10	108-88-3	
Xylene (Total)	**12500**	ug/L	1000	270	100		07/21/10 20:56	1330-20-7	
m&p-Xylene	**7740**	ug/L	1000	270	100		07/21/10 20:56	179601-23-1	
o-Xylene	**4770**	ug/L	500	170	100		07/21/10 20:56	95-47-6	
4-Bromofluorobenzene (S)	102	%	70-130		100		07/21/10 20:56	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		100		07/21/10 20:56	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	70-130		100		07/21/10 20:56	17060-07-0	
Toluene-d8 (S)	101	%	70-130		100		07/21/10 20:56	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: TW-3 **Lab ID: 9273788017** Collected: 07/19/10 12:25 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.52**	ug/L	0.020	0.020	1	07/21/10 10:46	07/23/10 01:20	106-93-4	
1-Chloro-2-bromopropane (S)	112	%	60-140		1	07/21/10 10:46	07/23/10 01:20	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**26.2**	ug/L	5.0	1.2	1		07/22/10 03:38	71-43-2	
1,2-Dichloroethane	**2.1J**	ug/L	5.0	1.3	1		07/22/10 03:38	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.1	1		07/22/10 03:38	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		07/22/10 03:38	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		07/22/10 03:38	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		07/22/10 03:38	108-88-3	
Xylene (Total)	**3.5J**	ug/L	10.0	2.7	1		07/22/10 03:38	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		07/22/10 03:38	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		07/22/10 03:38	95-47-6	
4-Bromofluorobenzene (S)	105	%	70-130		1		07/22/10 03:38	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		07/22/10 03:38	1868-53-7	
1,2-Dichloroethane-d4 (S)	98	%	70-130		1		07/22/10 03:38	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		07/22/10 03:38	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: WSW-CROCK **Lab ID: 9273788018** Collected: 07/19/10 13:35 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.039**	ug/L	0.020	0.020	1	07/21/10 10:46	07/23/10 01:41	106-93-4	
1-Chloro-2-bromopropane (S)	100	%	60-140		1	07/21/10 10:46	07/23/10 01:41	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	0.25	1		07/22/10 14:58	71-43-2	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/22/10 14:58	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/22/10 14:58	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		07/22/10 14:58	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		07/22/10 14:58	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		07/22/10 14:58	108-88-3	
Xylene (Total)	ND	ug/L	2.0	0.66	1		07/22/10 14:58	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/22/10 14:58	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		07/22/10 14:58	95-47-6	
4-Bromofluorobenzene (S)	101	%	70-130		1		07/22/10 14:58	460-00-4	
Dibromofluoromethane (S)	109	%	70-130		1		07/22/10 14:58	1868-53-7	
1,2-Dichloroethane-d4 (S)	112	%	70-130		1		07/22/10 14:58	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		07/22/10 14:58	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: WSW-SMITH **Lab ID: 9273788019** Collected: 07/19/10 11:40 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	07/21/10 10:46	07/22/10 06:01	106-93-4	
1-Chloro-2-bromopropane (S)	113	%	60-140		1	07/21/10 10:46	07/22/10 06:01	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	0.25	1		07/22/10 15:24	71-43-2	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/22/10 15:24	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/22/10 15:24	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		07/22/10 15:24	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		07/22/10 15:24	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		07/22/10 15:24	108-88-3	
Xylene (Total)	ND	ug/L	2.0	0.66	1		07/22/10 15:24	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/22/10 15:24	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		07/22/10 15:24	95-47-6	
4-Bromofluorobenzene (S)	99	%	70-130		1		07/22/10 15:24	460-00-4	
Dibromofluoromethane (S)	108	%	70-130		1		07/22/10 15:24	1868-53-7	
1,2-Dichloroethane-d4 (S)	110	%	70-130		1		07/22/10 15:24	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		07/22/10 15:24	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: WSW-SWIFT (PRE) **Lab ID: 9273788020** Collected: 07/19/10 13:50 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.57**	ug/L	0.019	0.019	1	07/22/10 11:14	07/23/10 16:05	106-93-4	
1-Chloro-2-bromopropane (S)	103	%	60-140		1	07/22/10 11:14	07/23/10 16:05	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	0.25	1		07/22/10 15:49	71-43-2	
1,2-Dichloroethane	**9.7**	ug/L	1.0	0.12	1		07/22/10 15:49	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/22/10 15:49	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		07/22/10 15:49	1634-04-4	
Naphthalene	**0.93J**	ug/L	1.0	0.24	1		07/22/10 15:49	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		07/22/10 15:49	108-88-3	
Xylene (Total)	**7.7**	ug/L	2.0	0.66	1		07/22/10 15:49	1330-20-7	
m&p-Xylene	**4.9**	ug/L	2.0	0.66	1		07/22/10 15:49	179601-23-1	
o-Xylene	**2.8**	ug/L	1.0	0.23	1		07/22/10 15:49	95-47-6	
4-Bromofluorobenzene (S)	100	%	70-130		1		07/22/10 15:49	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		07/22/10 15:49	1868-53-7	
1,2-Dichloroethane-d4 (S)	109	%	70-130		1		07/22/10 15:49	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		07/22/10 15:49	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: WSW-SWIFT (POST) **Lab ID: 9273788021** Collected: 07/19/10 13:50 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.056**	ug/L	0.019	0.019	1	07/22/10 11:15	07/23/10 17:09	106-93-4	
1-Chloro-2-bromopropane (S)	106	%	60-140		1	07/22/10 11:15	07/23/10 17:09	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	**0.98J**	ug/L	1.0	0.25	1		07/22/10 16:15	71-43-2	
1,2-Dichloroethane	**3.5**	ug/L	1.0	0.12	1		07/22/10 16:15	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/22/10 16:15	100-41-4	
Methyl-tert-butyl ether	**0.28J**	ug/L	1.0	0.21	1		07/22/10 16:15	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		07/22/10 16:15	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		07/22/10 16:15	108-88-3	
Xylene (Total)	**1.2J**	ug/L	2.0	0.66	1		07/22/10 16:15	1330-20-7	
m&p-Xylene	**0.86J**	ug/L	2.0	0.66	1		07/22/10 16:15	179601-23-1	
o-Xylene	**0.38J**	ug/L	1.0	0.23	1		07/22/10 16:15	95-47-6	
4-Bromofluorobenzene (S)	101	%	70-130		1		07/22/10 16:15	460-00-4	
Dibromofluoromethane (S)	108	%	70-130		1		07/22/10 16:15	1868-53-7	
1,2-Dichloroethane-d4 (S)	111	%	70-130		1		07/22/10 16:15	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		07/22/10 16:15	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: WSW-HILL (PRE) **Lab ID: 9273788022** Collected: 07/19/10 13:55 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.26**	ug/L	0.019	0.019	1	07/22/10 11:15	07/23/10 17:30	106-93-4	
1-Chloro-2-bromopropane (S)	96	%	60-140		1	07/22/10 11:15	07/23/10 17:30	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	0.25	1		07/22/10 16:41	71-43-2	
1,2-Dichloroethane	**3.4**	ug/L	1.0	0.12	1		07/22/10 16:41	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/22/10 16:41	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		07/22/10 16:41	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		07/22/10 16:41	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		07/22/10 16:41	108-88-3	
Xylene (Total)	ND	ug/L	2.0	0.66	1		07/22/10 16:41	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/22/10 16:41	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		07/22/10 16:41	95-47-6	
4-Bromofluorobenzene (S)	99	%	70-130		1		07/22/10 16:41	460-00-4	
Dibromofluoromethane (S)	107	%	70-130		1		07/22/10 16:41	1868-53-7	
1,2-Dichloroethane-d4 (S)	112	%	70-130		1		07/22/10 16:41	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		07/22/10 16:41	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

Sample: WSW-HILL (POST) **Lab ID: 9273788023** Collected: 07/19/10 13:55 Received: 07/20/10 13:13 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.044**	ug/L	0.019	0.019	1	07/22/10 11:15	07/23/10 17:52	106-93-4	
1-Chloro-2-bromopropane (S)	108	%	60-140		1	07/22/10 11:15	07/23/10 17:52	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	**1.8**	ug/L	1.0	0.25	1		07/22/10 17:06	71-43-2	
1,2-Dichloroethane	**1.7**	ug/L	1.0	0.12	1		07/22/10 17:06	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/22/10 17:06	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		07/22/10 17:06	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		07/22/10 17:06	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		07/22/10 17:06	108-88-3	
Xylene (Total)	ND	ug/L	2.0	0.66	1		07/22/10 17:06	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/22/10 17:06	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		07/22/10 17:06	95-47-6	
4-Bromofluorobenzene (S)	100	%	70-130		1		07/22/10 17:06	460-00-4	
Dibromofluoromethane (S)	109	%	70-130		1		07/22/10 17:06	1868-53-7	
1,2-Dichloroethane-d4 (S)	109	%	70-130		1		07/22/10 17:06	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		07/22/10 17:06	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

QC Batch: OEXT/10589 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9273788001, 9273788002, 9273788003, 9273788004, 9273788005, 9273788006, 9273788007, 9273788008, 9273788009, 9273788010, 9273788011, 9273788012, 9273788013, 9273788014, 9273788015, 9273788016, 9273788017, 9273788018, 9273788019

METHOD BLANK: 471588 Matrix: Water
Associated Lab Samples: 9273788001, 9273788002, 9273788003, 9273788004, 9273788005, 9273788006, 9273788007, 9273788008, 9273788009, 9273788010, 9273788011, 9273788012, 9273788013, 9273788014, 9273788015, 9273788016, 9273788017, 9273788018, 9273788019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	07/21/10 21:30	
1-Chloro-2-bromopropane (S)	%	110	60-140	07/21/10 21:30	

LABORATORY CONTROL SAMPLE & LCSD: 471589 471590

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.28	0.29	0.29	102	102	60-140	0	20	
1-Chloro-2-bromopropane (S)	%				106	106	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 471619 471620

Parameter	Units	9273788001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	132	.29	.29	140	138	2627	2159	60-140	1	20	P6
1-Chloro-2-bromopropane (S)	%						188	150	60-140			S5

SAMPLE DUPLICATE: 471621

Parameter	Units	9273788003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	105	111	1		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

QC Batch: OEXT/10602 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9273788020, 9273788021, 9273788022, 9273788023

METHOD BLANK: 472253 Matrix: Water
Associated Lab Samples: 9273788020, 9273788021, 9273788022, 9273788023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	07/23/10 11:36	
1-Chloro-2-bromopropane (S)	%	101	60-140	07/23/10 11:36	

LABORATORY CONTROL SAMPLE & LCSD: 472254 472255

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.29	0.29	0.29	102	104	60-140	0	20	
1-Chloro-2-bromopropane (S)	%				103	101	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 472256 472257

Parameter	Units	9273788020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	0.57	.28	.28	0.88	0.89	109	113	60-140	1	20	
1-Chloro-2-bromopropane (S)	%						109	110	60-140			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

QC Batch: MSV/11654 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level SC
Associated Lab Samples: 9273788018, 9273788019, 9273788020, 9273788021, 9273788022, 9273788023

METHOD BLANK: 472296 Matrix: Water
Associated Lab Samples: 9273788018, 9273788019, 9273788020, 9273788021, 9273788022, 9273788023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	07/22/10 11:59	
Benzene	ug/L	ND	1.0	07/22/10 11:59	
Ethylbenzene	ug/L	ND	1.0	07/22/10 11:59	
m&p-Xylene	ug/L	ND	2.0	07/22/10 11:59	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/22/10 11:59	
Naphthalene	ug/L	ND	1.0	07/22/10 11:59	
o-Xylene	ug/L	ND	1.0	07/22/10 11:59	
Toluene	ug/L	ND	1.0	07/22/10 11:59	
Xylene (Total)	ug/L	ND	2.0	07/22/10 11:59	
1,2-Dichloroethane-d4 (S)	%	107	70-130	07/22/10 11:59	
4-Bromofluorobenzene (S)	%	99	70-130	07/22/10 11:59	
Dibromofluoromethane (S)	%	104	70-130	07/22/10 11:59	
Toluene-d8 (S)	%	100	70-130	07/22/10 11:59	

LABORATORY CONTROL SAMPLE: 472297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	49.2	98	70-130	
Benzene	ug/L	50	44.7	89	70-130	
Ethylbenzene	ug/L	50	45.6	91	70-130	
m&p-Xylene	ug/L	100	96.3	96	70-130	
Methyl-tert-butyl ether	ug/L	50	50.8	102	70-130	
Naphthalene	ug/L	50	50.3	101	70-130	
o-Xylene	ug/L	50	48.1	96	70-130	
Toluene	ug/L	50	46.5	93	70-130	
Xylene (Total)	ug/L	150	144	96	70-130	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Dibromofluoromethane (S)	%			97	70-130	
Toluene-d8 (S)	%			102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 472298 472299

Parameter	Units	9273788023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	1.7	50	50	53.5	54.0	103	105	70-130	1	30	
Benzene	ug/L	1.8	50	50	53.2	53.3	103	103	70-130	0	30	
Ethylbenzene	ug/L	ND	50	50	51.5	51.1	103	102	70-130	1	30	
m&p-Xylene	ug/L	ND	100	100	106	106	106	106	70-130	0	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	54.4	55.3	109	111	70-130	2	30	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 472298 472299

Parameter	Units	9273788023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Naphthalene	ug/L	ND	50	50	56.1	56.8	112	114	70-130	1	30	
o-Xylene	ug/L	ND	50	50	56.4	53.1	113	106	70-130	6	30	
Toluene	ug/L	ND	50	50	53.9	53.4	107	106	70-130	1	30	
1,2-Dichloroethane-d4 (S)	%						95	96	70-130			
4-Bromofluorobenzene (S)	%						100	102	70-130			
Dibromofluoromethane (S)	%						96	101	70-130			
Toluene-d8 (S)	%						105	104	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

QC Batch: MSV/11639 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV SC
Associated Lab Samples: 9273788001, 9273788002, 9273788003, 9273788004, 9273788005, 9273788006, 9273788007, 9273788008, 9273788009, 9273788010, 9273788011, 9273788012, 9273788013, 9273788014, 9273788015, 9273788016

METHOD BLANK: 471571 Matrix: Water
Associated Lab Samples: 9273788001, 9273788002, 9273788003, 9273788004, 9273788005, 9273788006, 9273788007, 9273788008, 9273788009, 9273788010, 9273788011, 9273788012, 9273788013, 9273788014, 9273788015, 9273788016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	07/21/10 11:57	
Benzene	ug/L	ND	5.0	07/21/10 11:57	
Ethylbenzene	ug/L	ND	5.0	07/21/10 11:57	
m&p-Xylene	ug/L	ND	10.0	07/21/10 11:57	
Methyl-tert-butyl ether	ug/L	ND	5.0	07/21/10 11:57	
Naphthalene	ug/L	ND	5.0	07/21/10 11:57	
o-Xylene	ug/L	ND	5.0	07/21/10 11:57	
Toluene	ug/L	ND	5.0	07/21/10 11:57	
Xylene (Total)	ug/L	ND	10.0	07/21/10 11:57	
1,2-Dichloroethane-d4 (S)	%	102	70-130	07/21/10 11:57	
4-Bromofluorobenzene (S)	%	103	70-130	07/21/10 11:57	
Dibromofluoromethane (S)	%	96	70-130	07/21/10 11:57	
Toluene-d8 (S)	%	101	70-130	07/21/10 11:57	

METHOD BLANK: 472858 Matrix: Water
Associated Lab Samples: 9273788001, 9273788002, 9273788003, 9273788004, 9273788005, 9273788006, 9273788007, 9273788008, 9273788009, 9273788010, 9273788011, 9273788012, 9273788013, 9273788014, 9273788015, 9273788016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	07/22/10 11:59	
Benzene	ug/L	ND	5.0	07/22/10 11:59	
Ethylbenzene	ug/L	ND	5.0	07/22/10 11:59	
m&p-Xylene	ug/L	ND	10.0	07/22/10 11:59	
Methyl-tert-butyl ether	ug/L	ND	5.0	07/22/10 11:59	
Naphthalene	ug/L	ND	5.0	07/22/10 11:59	
o-Xylene	ug/L	ND	5.0	07/22/10 11:59	
Toluene	ug/L	ND	5.0	07/22/10 11:59	
Xylene (Total)	ug/L	ND	10.0	07/22/10 11:59	
1,2-Dichloroethane-d4 (S)	%	99	70-130	07/22/10 11:59	
4-Bromofluorobenzene (S)	%	102	70-130	07/22/10 11:59	
Dibromofluoromethane (S)	%	97	70-130	07/22/10 11:59	
Toluene-d8 (S)	%	101	70-130	07/22/10 11:59	

LABORATORY CONTROL SAMPLE: 471572

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	52.1	104	70-130	
Benzene	ug/L	50	47.0	94	70-130	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

LABORATORY CONTROL SAMPLE: 471572

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethylbenzene	ug/L	50	47.6	95	70-130	
m&p-Xylene	ug/L	100	99.0	99	70-130	
Methyl-tert-butyl ether	ug/L	50	48.9	98	70-130	
Naphthalene	ug/L	50	48.1	96	70-130	
o-Xylene	ug/L	50	49.4	99	70-130	
Toluene	ug/L	50	47.9	96	70-130	
Xylene (Total)	ug/L	150	148	99	70-130	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			104	70-130	
Dibromofluoromethane (S)	%			101	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 471573 471574

Parameter	Units	9273788002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	59.7	56.2	119	112	70-130	6	30	
Benzene	ug/L	ND	50	50	52.9	49.1	106	98	70-130	8	30	
Ethylbenzene	ug/L	ND	50	50	52.6	48.2	105	96	70-130	9	30	
m&p-Xylene	ug/L	ND	100	100	108	99.5	108	99	70-130	8	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	55.5	54.4	111	109	70-130	2	30	
Naphthalene	ug/L	ND	50	50	50.9	52.4	102	105	70-130	3	30	
o-Xylene	ug/L	ND	50	50	53.7	50.0	107	99	70-130	7	30	
Toluene	ug/L	ND	50	50	53.8	49.4	107	98	70-130	9	30	
1,2-Dichloroethane-d4 (S)	%						105	97	70-130			
4-Bromofluorobenzene (S)	%						104	106	70-130			
Dibromofluoromethane (S)	%						101	101	70-130			
Toluene-d8 (S)	%						99	98	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

QC Batch: MSV/11645
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV SC
Associated Lab Samples: 9273788017

METHOD BLANK: 471729 Matrix: Water
Associated Lab Samples: 9273788017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	07/21/10 23:23	
Benzene	ug/L	ND	5.0	07/21/10 23:23	
Ethylbenzene	ug/L	ND	5.0	07/21/10 23:23	
m&p-Xylene	ug/L	ND	10.0	07/21/10 23:23	
Methyl-tert-butyl ether	ug/L	ND	5.0	07/21/10 23:23	
Naphthalene	ug/L	ND	5.0	07/21/10 23:23	
o-Xylene	ug/L	ND	5.0	07/21/10 23:23	
Toluene	ug/L	ND	5.0	07/21/10 23:23	
Xylene (Total)	ug/L	ND	10.0	07/21/10 23:23	
1,2-Dichloroethane-d4 (S)	%	99	70-130	07/21/10 23:23	
4-Bromofluorobenzene (S)	%	101	70-130	07/21/10 23:23	
Dibromofluoromethane (S)	%	101	70-130	07/21/10 23:23	
Toluene-d8 (S)	%	100	70-130	07/21/10 23:23	

METHOD BLANK: 472859 Matrix: Water
Associated Lab Samples: 9273788017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	07/22/10 12:18	
Benzene	ug/L	ND	5.0	07/22/10 12:18	
Ethylbenzene	ug/L	ND	5.0	07/22/10 12:18	
m&p-Xylene	ug/L	ND	10.0	07/22/10 12:18	
Methyl-tert-butyl ether	ug/L	ND	5.0	07/22/10 12:18	
Naphthalene	ug/L	ND	5.0	07/22/10 12:18	
o-Xylene	ug/L	ND	5.0	07/22/10 12:18	
Toluene	ug/L	ND	5.0	07/22/10 12:18	
Xylene (Total)	ug/L	ND	10.0	07/22/10 12:18	
1,2-Dichloroethane-d4 (S)	%	97	70-130	07/22/10 12:18	
4-Bromofluorobenzene (S)	%	102	70-130	07/22/10 12:18	
Dibromofluoromethane (S)	%	101	70-130	07/22/10 12:18	
Toluene-d8 (S)	%	101	70-130	07/22/10 12:18	

LABORATORY CONTROL SAMPLE: 471730

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	54.3	109	70-130	
Benzene	ug/L	50	47.0	94	70-130	
Ethylbenzene	ug/L	50	47.7	95	70-130	
m&p-Xylene	ug/L	100	98.5	98	70-130	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

LABORATORY CONTROL SAMPLE: 471730

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methyl-tert-butyl ether	ug/L	50	52.0	104	70-130	
Naphthalene	ug/L	50	52.3	105	70-130	
o-Xylene	ug/L	50	50.0	100	70-130	
Toluene	ug/L	50	47.1	94	70-130	
Xylene (Total)	ug/L	150	148	99	70-130	
1,2-Dichloroethane-d4 (S)	%			104	70-130	
4-Bromofluorobenzene (S)	%			107	70-130	
Dibromofluoromethane (S)	%			99	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 471731 471732

Parameter	Units	9273790002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	56.5	56.7	113	113	70-130	0	30	
Benzene	ug/L	ND	50	50	53.8	52.7	108	105	70-130	2	30	
Ethylbenzene	ug/L	ND	50	50	51.6	52.0	103	104	70-130	1	30	
m&p-Xylene	ug/L	ND	100	100	108	107	107	107	70-130	1	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	54.8	54.6	108	108	70-130	0	30	
Naphthalene	ug/L	ND	50	50	51.1	52.4	102	105	70-130	2	30	
o-Xylene	ug/L	ND	50	50	53.6	53.3	107	106	70-130	1	30	
Toluene	ug/L	ND	50	50	54.4	53.3	108	106	70-130	2	30	
1,2-Dichloroethane-d4 (S)	%						101	94	70-130			
4-Bromofluorobenzene (S)	%						105	106	70-130			
Dibromofluoromethane (S)	%						100	99	70-130			
Toluene-d8 (S)	%						100	100	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: SMITH GROCERY 09332
Pace Project No.: 9273788

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

ANALYTE QUALIFIERS

P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
S5	Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 3

1379366

Section A Required Client Information:

Company: SCDHEC - UST
Address: 2600 Bull Street
Columbia, SC 29201
Email To:
Phone: 803-893-6240 Fax: 803-896-6293
Requested Due Date/TAT:

Section B Required Project Information:

Report To: D. Thoma
Copy To:
Purchase Order No.:
Project Name: Smith Grocery
Project Number: 09322/CA# 38687

Section C Invoice Information:

Attention: Finance (D. Thoma)
Company Name: SCDHEC - UST
Address:
Pace Quote Reference:
Pace Project Manager: R. Spencer
Pace Profile #: 849-1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☑ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N): BTEX, MTBE, Naphthalene (8260B)	1,2 DCA (8260B)	EDB (8011)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-1	WT	G			7-19	-		6				6					Y	X	X	X		9273788
2	MW-2	WT	G				1035											Y	X	X	X		No Sample Odor 001
3	MW-3	WT	G				1145											Y	X	X	X		No Odor 2
4	MW-4	WT	G				-											Y	X	X	X		No Sample
5	MW-5	WT	G				1125											Y	X	X	X		No Odor 3
6	MW-6	WT	G				1127											Y	X	X	X		No Odor 4
7	MW-7	WT	G				1122											Y	X	X	X		Odor 5
8	MW-8	WT	G				-											Y	X	X	X		No Sample
9	MW-9	WT	G				1130											Y	X	X	X		Odor 6
10	MW-10	WT	G				1215											Y	X	X	X		Odor 7
11	MW-11	WT	G				1230											Y	X	X	X		No Odor 8
12	MW-12	WT	G				1310											Y	X	X	X		No Odor 9

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Req-4 "J" Values	Alex Wolfson	7-19		Pace	7-20-10	1322				
	Pace	7-20-10	13:13	Justin Mottl/Pace	7-20-10	13:13	3.3	Y	n	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Alex Wolfson
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7-19

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 3

1379367

Section A Required Client Information:

Company: SCDHEC - UST
Address: 2600 Bull Street
Columbia, SC 29201
Email To:
Phone: (803)896-6240 Fax: (803)896-6243
Requested Due Date/TAT:

Section B Required Project Information:

Report To: P. Thoma
Copy To:
Purchase Order No.:
Project Name: Smith Grocery
Project Number: 09322/CA# 38682

Section C Invoice Information:

Attention: Finance (D. Thoma)
Company Name: SCDHEC-UST
Address:
Pace Quote Reference:
Pace Project Manager: L. Spence
Pace Profile #: 824-1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☑ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	BTEX, Naph, MTBE (8260B)	1,2 DCA (8260B)	EDB (8011)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-13	WT	G			7-9-10	1330		6				6					Y	X	X	X		92737881 No odor 010
2	MW-14						1355												X	X	X		No odor 011
3	MW-15						1400												X	X	X		No odor 012
4	MW-16																		X	X	X		No Sample
5	MW-17																		X	X	X		No odor 013
6	MW-18																		X	X	X		No Sample
7	MW-19						1415												X	X	X		No odor 014
8	MW-20																		X	X	X		No Sample
9	TW-1						1120												X	X	X		odor 015
10	TW-2						1105												X	X	X		odor 016
11	TW-3						1225												X	X	X		odor 017
12	WSW-Crock						1335												X	X	X		No odor 018

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Request "J" Value	Alex Wolfson	7-19		Pace	7-20-10	1222	
Report	Pace	7-20-10	13:13	Justin Mattingly/Pace	7-20-10	13:13	3.3 Y n Y

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Alex Wolfson
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7-19

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

SITE ACTIVITY SUMMARY

UST PERMIT # 09322
FACILITY NAME Smith's Grocery
COUNTY York
NAME OF SAMPLER Dalton Reames

Address of GAC	Serial #	Water Usage	Date	Time	Site Activity	Comments
3049 Clover Circle	52219	194 Gals	7/30/10	1130	Changed Carbon	Hill - WSW
			7/30/10	1020	Pre-GAC Sample	Clear; no
			7/30/10	1025	Post-GAC Sample	Clear; no
3043 Clover Circle	49187	235 Gals	7/30/10	1320	Changed Carbon	Wiggam - WSW
			7/30/10	1200	Pre-GAC Sample	Clear; no
			7/30/10	1210	Post-GAC Sample	Clear; no

UST DOCKET 3376

GAC Unit Installation and Maintenance

Date 7/30/10

UST Permit number 09322 Wiggam-WSW

Street Address 3043 Clover Circle

GAC Unit serial and model number 49187 / 7081471

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☒ **FILTER CHANGE**

Filter Disposal method: Landfill

Condition of GAC Unit _____in need of repair* X good

Condition of GAC Unit housing _____in need of repair* _____good

*Repair needed: _____

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☒ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

Comments _____

GAC Unit Installation and Maintenance

Date 7/30/10 DR

UST Permit number 09322

Street Address 3049 Clover Circle Hill-WSW

GAC Unit serial and model number 52219/7081471

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☒ **FILTER CHANGE**

Filter Disposal method: Landfill

Condition of GAC Unit _____ in need of repair* X good

Condition of GAC Unit housing _____ in need of repair* _____ good

*Repair needed: _____

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☒ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

Comments _____

GAC Maintenance Report
Permit # 09322

Address	Serial #	Model#	Date serviced	Condition of unit	Samples collected
Hill - WSW 3049 Clover Circle	0219	708147	7/30/10	Needs Repairs Good	Pre-GAC Post-GAC
		~~708147~~		Needs Repairs Good	~~Pre-GAC~~ Post-GAC
Wigfall WSW 3043 Clover Circle	49187	708147	7/30/10	Needs ~~Repairs~~ ~~Good~~	Pre-GAC ~~Post-GAC~~
				Needs Repairs Good	~~Pre-GAC~~ Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC

Notes:

Repairs/service: _____

Filter disposal method: Landfill

Comments: _____

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of

1377854

Section A
Required Client Information:

Company: SCDHEC
Address: 2600 Bull St.
Columbia, SC 29201
Email To:
Phone: 803-896-6241 Fax:
Requested Due Date/TAT:

Section B
Required Project Information:

Report To: D. Thoma
Copy To:
Purchase Order No.:
Project Name: Smiths Grocery
Project Number: 01322/CA: 39365

Section C
Invoice Information:

Attention: Finance
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Renee Spencer
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☑ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Section D
Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes
MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COLLECTED: COMPOSITE START TIME	COLLECTED: COMPOSITE END/GRAB DATE	COLLECTED: COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: BTEX MIN	DCA	EDB	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Hill - Pre	GW		2/4/08	1200				6				6					✓	✓	✓		
2	Hill - Post	GW		2/5/08	1045				6				6					✓	✓	✓		
3	Wiggam - Pre	GW		2/4/08	1200				6				6					✓	✓	✓		
4	Wiggam - Post	GW		2/5/08	1210				6				6					✓	✓	✓		
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Low Detection Limits		2/6/08	1600				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dylan Kennedy
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 2/6/08

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

4

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

August 06, 2010

Ms. Debra Thoma
SCDHEC
UST Program
2600 Bull Street
Columbia, SC 29201

RE: Project: Smiths Grocery 09322
Pace Project No.: 9274596

Dear Ms. Thoma:
Enclosed are the analytical results for sample(s) received by the laboratory on July 31, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

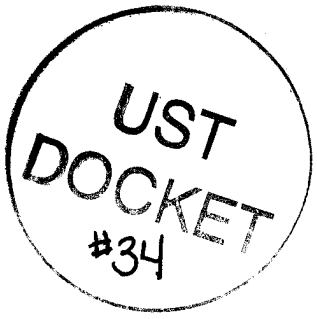
If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Renee Spencer

renee.spencer@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Smiths Grocery 09322
Pace Project No.: 9274596

Charlotte Certification IDs
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
Pennsylvania Certification #: 68-00784
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Virginia Certification #: 00213
Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DHH Drinking Water # LA 100031

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Smiths Grocery 09322
Pace Project No.: 9274596

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9274596001	**Hill-Pre**	Water	07/30/10 10:20	07/31/10 09:30
9274596002	**Hill-Post**	Water	07/30/10 10:25	07/31/10 09:30
9274596003	**Wiggam-Pre**	Water	07/30/10 12:00	07/31/10 09:30
9274596004	**Wiggam-Post**	Water	07/30/10 12:10	07/31/10 09:30

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Smiths Grocery 09322
Pace Project No.: 9274596

Lab ID	Sample ID	Method	Analysts	Analytes Reported
9274596001	**Hill-Pre**	EPA 8011	CAH	2
		EPA 8260	MCK	13
9274596002	**Hill-Post**	EPA 8011	CAH	2
		EPA 8260	MCK	13
9274596003	**Wiggam-Pre**	EPA 8011	CAH	2
		EPA 8260	MCK	13
9274596004	**Wiggam-Post**	EPA 8011	CAH	2
		EPA 8260	MCK	13

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Smiths Grocery 09322
Pace Project No.: 9274596

Sample: Hill-Pre **Lab ID: 9274596001** Collected: 07/30/10 10:20 Received: 07/31/10 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.45**	ug/L	0.019	0.019	1	08/03/10 14:49	08/04/10 01:51	106-93-4	
1-Chloro-2-bromopropane (S)	106	%	60-140		1	08/03/10 14:49	08/04/10 01:51	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	**29.3**	ug/L	1.0	0.25	1		08/05/10 03:27	71-43-2	
1,2-Dichloroethane	**5.6**	ug/L	1.0	0.12	1		08/05/10 03:27	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		08/05/10 03:27	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		08/05/10 03:27	1634-04-4	
Naphthalene	**0.45J**	ug/L	1.0	0.24	1		08/05/10 03:27	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		08/05/10 03:27	108-88-3	
Xylene (Total)	**5.2**	ug/L	2.0	0.66	1		08/05/10 03:27	1330-20-7	
m&p-Xylene	**3.6**	ug/L	2.0	0.66	1		08/05/10 03:27	179601-23-1	
o-Xylene	**1.7**	ug/L	1.0	0.23	1		08/05/10 03:27	95-47-6	
4-Bromofluorobenzene (S)	105	%	70-130		1		08/05/10 03:27	460-00-4	
Dibromofluoromethane (S)	109	%	70-130		1		08/05/10 03:27	1868-53-7	
1,2-Dichloroethane-d4 (S)	113	%	70-130		1		08/05/10 03:27	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		08/05/10 03:27	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Smiths Grocery 09322
Pace Project No.: 9274596

Sample: Hill-Post **Lab ID: 9274596002** Collected: 07/30/10 10:25 Received: 07/31/10 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.067**	ug/L	0.019	0.019	1	08/03/10 14:49	08/04/10 02:11	106-93-4	C3
1-Chloro-2-bromopropane (S)	103	%	60-140		1	08/03/10 14:49	08/04/10 02:11	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	**3.2**	ug/L	1.0	0.25	1		08/05/10 03:53	71-43-2	
1,2-Dichloroethane	**1.5**	ug/L	1.0	0.12	1		08/05/10 03:53	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		08/05/10 03:53	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		08/05/10 03:53	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		08/05/10 03:53	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		08/05/10 03:53	108-88-3	
Xylene (Total)	**0.69J**	ug/L	2.0	0.66	1		08/05/10 03:53	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		08/05/10 03:53	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.23	1		08/05/10 03:53	95-47-6	
4-Bromofluorobenzene (S)	104	%	70-130		1		08/05/10 03:53	460-00-4	
Dibromofluoromethane (S)	111	%	70-130		1		08/05/10 03:53	1868-53-7	
1,2-Dichloroethane-d4 (S)	111	%	70-130		1		08/05/10 03:53	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		08/05/10 03:53	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Smiths Grocery 09322
Pace Project No.: 9274596

Sample: Wiggam-Pre **Lab ID: 9274596003** Collected: 07/30/10 12:00 Received: 07/31/10 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**1.4**	ug/L	0.039	0.039	2	08/03/10 14:49	08/04/10 14:24	106-93-4	
1-Chloro-2-bromopropane (S)	104	%	60-140		2	08/03/10 14:49	08/04/10 14:24	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	**371**	ug/L	10.0	2.5	10		08/06/10 06:25	71-43-2	
1,2-Dichloroethane	**27.5**	ug/L	1.0	0.12	1		08/05/10 04:18	107-06-2	
Ethylbenzene	**0.49J**	ug/L	1.0	0.30	1		08/05/10 04:18	100-41-4	
Methyl-tert-butyl ether	**0.50J**	ug/L	1.0	0.21	1		08/05/10 04:18	1634-04-4	
Naphthalene	**21.9**	ug/L	1.0	0.24	1		08/05/10 04:18	91-20-3	
Toluene	**0.28J**	ug/L	1.0	0.26	1		08/05/10 04:18	108-88-3	
Xylene (Total)	**115**	ug/L	2.0	0.66	1		08/05/10 04:18	1330-20-7	
m&p-Xylene	**60.1**	ug/L	2.0	0.66	1		08/05/10 04:18	179601-23-1	
o-Xylene	**55.0**	ug/L	1.0	0.23	1		08/05/10 04:18	95-47-6	
4-Bromofluorobenzene (S)	107	%	70-130		1		08/05/10 04:18	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		08/05/10 04:18	1868-53-7	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		08/05/10 04:18	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		08/05/10 04:18	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Smiths Grocery 09322
Pace Project No.: 9274596

Sample: Wiggam-Post **Lab ID: 9274596004** Collected: 07/30/10 12:10 Received: 07/31/10 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.22**	ug/L	0.019	0.019	1	08/03/10 14:49	08/04/10 02:52	106-93-4	
1-Chloro-2-bromopropane (S)	110	%	60-140		1	08/03/10 14:49	08/04/10 02:52	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	**43.0**	ug/L	1.0	0.25	1		08/05/10 04:44	71-43-2	
1,2-Dichloroethane	**4.9**	ug/L	1.0	0.12	1		08/05/10 04:44	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		08/05/10 04:44	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		08/05/10 04:44	1634-04-4	
Naphthalene	**2.0**	ug/L	1.0	0.24	1		08/05/10 04:44	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		08/05/10 04:44	108-88-3	
Xylene (Total)	**10.9**	ug/L	2.0	0.66	1		08/05/10 04:44	1330-20-7	
m&p-Xylene	**5.8**	ug/L	2.0	0.66	1		08/05/10 04:44	179601-23-1	
o-Xylene	**5.1**	ug/L	1.0	0.23	1		08/05/10 04:44	95-47-6	
4-Bromofluorobenzene (S)	105	%	70-130		1		08/05/10 04:44	460-00-4	
Dibromofluoromethane (S)	108	%	70-130		1		08/05/10 04:44	1868-53-7	
1,2-Dichloroethane-d4 (S)	108	%	70-130		1		08/05/10 04:44	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		08/05/10 04:44	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Smiths Grocery 09322
Pace Project No.: 9274596

QC Batch: OEXT/10719 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9274596001, 9274596002, 9274596003, 9274596004

METHOD BLANK: 477296 Matrix: Water
Associated Lab Samples: 9274596001, 9274596002, 9274596003, 9274596004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	08/03/10 19:22	
1-Chloro-2-bromopropane (S)	%	105	60-140	08/03/10 19:22	

LABORATORY CONTROL SAMPLE & LCSD: 477297 477298

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.28	0.27	0.29	98	102	60-140	7	20	
1-Chloro-2-bromopropane (S)	%				100	105	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 477299 477300

Parameter	Units	9274593006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	.28	.28	0.29	0.30	104	106	60-140	2	20	
1-Chloro-2-bromopropane (S)	%						98	99	60-140			

SAMPLE DUPLICATE: 477301

Parameter	Units	9274593009 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	112	117	5		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Smiths Grocery 09322
Pace Project No.: 9274596

QC Batch: MSV/11785 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level SC
Associated Lab Samples: 9274596001, 9274596002, 9274596003, 9274596004

METHOD BLANK: 478084 Matrix: Water
Associated Lab Samples: 9274596001, 9274596002, 9274596003, 9274596004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	08/04/10 22:47	
Benzene	ug/L	ND	1.0	08/04/10 22:47	
Ethylbenzene	ug/L	ND	1.0	08/04/10 22:47	
m&p-Xylene	ug/L	ND	2.0	08/04/10 22:47	
Methyl-tert-butyl ether	ug/L	ND	1.0	08/04/10 22:47	
Naphthalene	ug/L	ND	1.0	08/04/10 22:47	
o-Xylene	ug/L	ND	1.0	08/04/10 22:47	
Toluene	ug/L	ND	1.0	08/04/10 22:47	
Xylene (Total)	ug/L	ND	2.0	08/04/10 22:47	
1,2-Dichloroethane-d4 (S)	%	110	70-130	08/04/10 22:47	
4-Bromofluorobenzene (S)	%	101	70-130	08/04/10 22:47	
Dibromofluoromethane (S)	%	110	70-130	08/04/10 22:47	
Toluene-d8 (S)	%	99	70-130	08/04/10 22:47	

LABORATORY CONTROL SAMPLE: 478085

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	52.9	106	70-130	
Benzene	ug/L	50	47.1	94	70-130	
Ethylbenzene	ug/L	50	46.9	94	70-130	
m&p-Xylene	ug/L	100	97.7	98	70-130	
Methyl-tert-butyl ether	ug/L	50	53.1	106	70-130	
Naphthalene	ug/L	50	51.8	104	70-130	
o-Xylene	ug/L	50	48.8	98	70-130	
Toluene	ug/L	50	50.7	101	70-130	
Xylene (Total)	ug/L	150	146	98	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			106	70-130	
Dibromofluoromethane (S)	%			102	70-130	
Toluene-d8 (S)	%			103	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 478086 478087

Parameter	Units	9274664004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	57.4	53.6	115	107	70-130	7	30	
Benzene	ug/L	ND	50	50	51.1	49.0	102	98	70-130	4	30	
Ethylbenzene	ug/L	ND	50	50	53.1	53.4	106	107	70-130	1	30	
m&p-Xylene	ug/L	ND	100	100	112	113	112	112	70-130	0	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	52.1	52.7	104	105	70-130	1	30	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Smiths Grocery 09322
Pace Project No.: 9274596

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 478086 478087

Parameter	Units	9274664004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Naphthalene	ug/L	ND	50	50	53.8	57.2	108	114	70-130	6	30	
o-Xylene	ug/L	ND	50	50	56.5	56.4	113	112	70-130	0	30	
Toluene	ug/L	ND	50	50	57.5	52.4	115	105	70-130	9	30	
1,2-Dichloroethane-d4 (S)	%						101	101	70-130			
4-Bromofluorobenzene (S)	%						106	107	70-130			
Dibromofluoromethane (S)	%						103	104	70-130			
Toluene-d8 (S)	%						105	101	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Smiths Grocery 09322
Pace Project No.: 9274596

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

ANALYTE QUALIFIERS

C3	Relative percent difference between results from each column was greater than 40%. The higher of the two results was reported.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: | of | 1377854

Section A Required Client Information:

Company: SCDHEC
Address: 2600 Bull St.
Columbia, SC 29201
Email To:
Phone: 803-896-0241 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: D. Thoma
Copy To:
Purchase Order No.:
Project Name: Smith's Grocery
Project Number: 09322/CA:39365

Section C Invoice Information:

Attention: Finance
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Renee Spencer
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☑ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: BTEX MIN	DCA	EDB	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Hill - Pre	GW	G	7/30/10	1000				6				6					✓	✓	✓		9274596 001
2	Hill - Post	GW	G	7/30/10	1025				6				6					✓	✓	✓		002
3	Wiggam - Pre	GW	G	7/30/10	1200				6				6					✓	✓	✓		003
4	Wiggam - Post	GW	G	7/30/10	1210				6				6					✓	✓	✓		004
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
1 ppb Detection Limits		7/30/10	1600		08/31/10	0930	2.8	4	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Dalton Ramos
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7/30/10

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

SEP 30 2010

BRYAN SHANE
MIDLANDS ENVIRONMENTAL CONSULTANTS INC
P O BOX 854
LEXINGTON SC 29071

UST DOCKET 35-ech

Re: Bid # IFB-34007-6/3/08-EMW; PO# 4500011317
Notice to Proceed

Dear Mr. Shane:

Based on the award of the referenced bid package, enclosed are the information packets to conduct assessments at several facilities. The packets contain the necessary approval for work to begin. The facilities have been assigned Cost Agreement (CA) numbers as listed below. Please reference the CA numbers and Purchase Order # 4500011317 on the appropriate invoices submitted for payment against the facilities. As specified in the referenced bid, **the completed invoice forms and associated reports (include contract certification number) are expected on or before the designated due date (see below).**

UST Permit#	Facility	County	Release #	Work Scope	Due Date*	CA #	Approved Amt
09322	Smiths Grocery	York	1	Monitoring Well Installation	60 Days	39705	$10,750.00
02233	Danny Melton Amoco	Chesterfield	1	Monitoring Well Installation	60 Days	39453	$325.00
05694	Copelands Service Station	Lauens	1	Monitoring Well Installation	60 Days	39770	$7,860.00
00332	Interstate Truck Stop	Allendale	2	Monitoring Well Installation	60 Days	39471	$2,000.00
11702	Colonel Creek Landing	Fairfield	1	Monitoring Well Installation	60 Days	39701	$2,841.00

*From receipt of letter

Midland's Environmental Consultants, Inc. will perform services at the sites on behalf of the site's UST owners; however, payments will be made from the SUPERB Account. The site's UST owners have no obligation for payment for this scope of work. **Please note, if there are any changes in the established cost agreement amounts (e.g., additional water supply wells sampled, additional well footage, etc.) contact the site's project manager for technical and/or financial approval. Failure to do so prior to submittal of invoice may result in delay of payment.**

The Bureau grants pre-approval for transportation of drums of virgin petroleum contaminated soil and drums of groundwater from the referenced site to a permitted treatment facility. The contaminated soil and/or groundwater must be properly stored in labeled 55-gallon drums or equivalent containers.

The contaminated soil and/or groundwater must be accepted by the approved treatment facility. There can be no spillage or leakage in transport. A copy of the disposal manifest from the receiving facility that clearly designates the quantity received must be included as an appendix to the final report. Please note, transportation of waste oil contaminated soil must receive pre-approval from the Division of Waste Assessment & Emergency Response.

Please provide this office with a schedule of drilling dates and coordinate all work with me before commencing work at the facility. If you have any questions or need further assistance, please contact me at (803) 896-6633.

Sincerely,

Cathleen Ridgley

Cathleen Ridgley, Hydrogeologist
Assessment Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc.: Monitoring Well Approvals (MWA)
Approved Cost Agreements (ACA)
Information Packets

cc: Cathleen Ridgley, UST Program (w/out enc)
Technical Files (w/ copy of MWA, ACA, & Site Map)

Approved Cost Agreement 39705

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
03 COMPREHENSIVE SURVEY						
			COMPREHENSIVE SURVEY	1.0000	700.00	700.00
04 MOB/DEMOB						
		A	EQUIPMENT	1.0000	100.00	100.00
		B	PERSONNEL	4.0000	100.00	400.00
09 WELL INSTALLATION						
		B	WATER TABLE (DRILLED)	230.0000	20.00	4,600.00
10 SAMPLE COLLECTION						
		A	GROUND WATER	9.0000	25.00	225.00
		C	WATER SUPPLY	6.0000	25.00	150.00
		D	GROUNDWATER NO-PURGE	14.0000	25.00	350.00
11 ANALYSES						
	GW GROUNDWATER	A	BTEX+NAPTH+MTBE	29.0000	30.00	870.00
		BB	1,2-DCA	29.0000	25.00	725.00
		F	EDB	29.0000	28.00	812.00
		P	8 OXYGENATES	29.0000	42.00	1,218.00
17 DISPOSAL						
		A1	WASTEWATER - PURGING/SAMPLING	5.0000	50.00	250.00
		C	SOIL (TREATMENT/DISPOSAL)	5.0000	50.00	250.00
23 EFR						
		D	SITE RECONNAISSANCE	1.0000	100.00	100.00
				Total Amount		10,750.00

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

Monitoring Well Approval

Approval is hereby granted to: **Midlands Environmental Consultants, Inc.**

On behalf of: **Lois Smith**

Facility: **Smiths Grocery**
SC Hwy 49, York, SC

UST Permit #: **09322**

County: **York**

This approval is for the installation of six (6) groundwater monitoring wells. The monitoring wells are to be installed in the approved locations. Monitoring wells are to be installed following the South Carolina Well Standards, R.61-71, and the applicable guidance documents.

Please note that R.61-71 requires the following:

1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.

2. All monitoring wells shall be labeled as required by R.61-71.H.2.c.

3. A Water Well Record Form or other form provided or approved by the Department shall be completed and submitted to the Department within 30 days after well completion or abandonment unless another schedule has been approved by the Department. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f

4. All analytical data and water levels obtained from each monitoring well shall be submitted to the Department within 30 days of receipt of laboratory results unless another schedule has been approved by the Department as required by R.61-71.H.1.d.

thomadl@dhec.sc.gov) shall be provided a minimum of twenty-four (24) hours prior to well construction as required by R.61-71.H.1.a.

6. All temporary monitoring wells shall be abandoned within 5 days of borehole completion using appropriate methods as required by R.61-71.H.4.c. All other wells shall be properly developed per R.61-71.H.2.d.

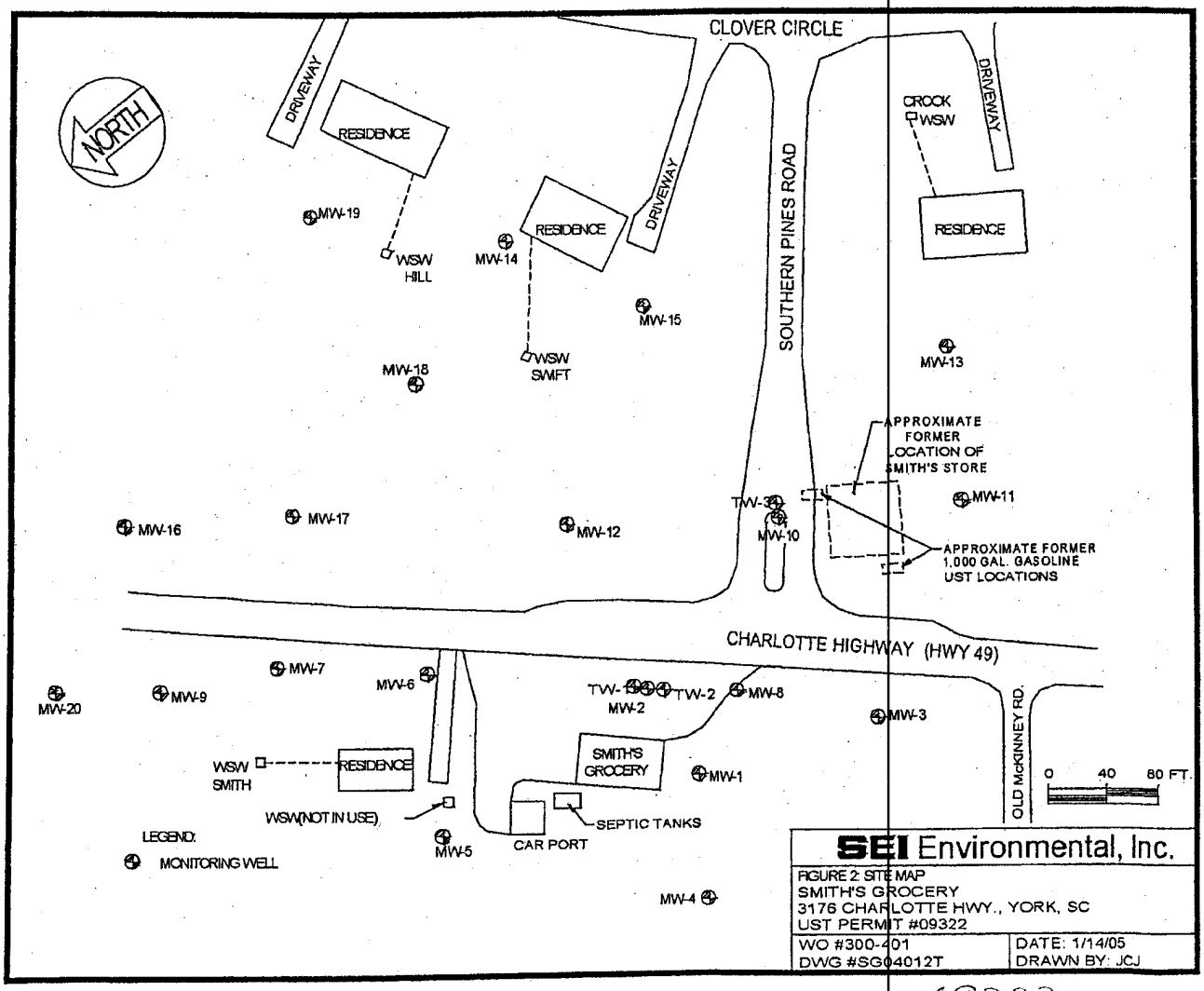
7. Departmental approval is required prior to abandonment of all monitoring wells as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards and Regulations, dated April 26, 2002. A copy of this approval should be on the site during well installation.

Date of Issuance: 8/12/2010 **Approval:** UMW-23844

Debra L Thoma

Debra L Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management


CLOVER CIRCLE
NORTH
DRIVEWAY
RESIDENCE
MW-19
WSW
HILL
MW-14
RESIDENCE
DRIVEWAY
SOUTHERN PINES ROAD
CROCK
WSW
DRIVEWAY
RESIDENCE
MW-15
WSW
SWIFT
MW-18
MW-13
APPROXIMATE
FORMER
LOCATION OF
SMITH'S STORE
MW-11
TW-3
MW-10
MW-16
MW-17
MW-12
APPROXIMATE FORMER
1,000 GAL. GASOLINE
UST LOCATIONS
CHARLOTTE HIGHWAY (HWY 49)
MW-7
MW-6
MW-20
MW-9
TW-1
MW-2
TW-2
MW-8
MW-3
WSW
SMITH
RESIDENCE
SMITH'S
GROCERY
MW-1
OLD McKINNEY RD.
0 40 80 FT.
WSW(NOT IN USE)
SEPTIC TANKS
LEGEND:
MONITORING WELL
MW-5
CAR PORT
MW-4
SEI Environmental, Inc.
FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322
WO #300-401
DWG #SG04012T
DATE: 1/14/05
DRAWN BY: JCJ

09322

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

SEP 30 2010

RONNY LOWDER
EMERALD INC
PO BOX 3050
SUMTER SC 29151

Re: Notice to Proceed-GAC Changes
IFB-318409-5/6/10-EMW; PO #4500011951

Dear Mr. Lowder:

Under the terms and conditions of the referenced contract, a GAC filter replacement has been approved for the following sites. Each facility has been assigned an individual Cost Agreement (CA) number as listed below. Please reference the **CA number and Purchase Order #4500011951** on the invoice submitted for payment. Emerald Inc. should complete the work in accordance with the contract specifications. For any samples submitted to PACE for analysis, please be sure to include the PACE CA number and PO#729210 on the chain of custody form. Pre- and Post-GAC Samples should be collected from all water supply wells and sampled for BTEX, Naphthalene, MtBE, and DCA by EPA Method 8260 and EDB by EPA Method 8011.

UST Permit #	Facility	WSW Info	County	Contact Person	Contact Number	PACE CA#	Emerald CA#
09322	Smiths Grocery	Hill, 3049 Clover Circle, Clover Wiggam, 3043 Clover Circle, Clover	York	Tony Hill Gary Wiggam	803-684-5425 803-628-5464	40138	40137
17439	SP Grocery	McIntosh, 305 Church St., Lynchburg	Lee	Christine McIntosh	803-437-2282	40136	40135

If you have any questions or need further assistance, please contact me at (803) 896-6397 or by email at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

cc: Technical File (w/out enc)
Renee Spencer, PACE Analytical, 9800 Kincey Ave, Ste 100, Huntersville, NC, 28078
Minda Johnson, UST Management Division

Approved Cost Agreement 40138

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
11 ANALYSES						
	GW GROUNDWATER	A	BTEX+NAPTH+MTBE	4.0000	23.00	92.00

Total Amount 92.00

Approved Cost Agreement 40137

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB						
		B	PERSONNEL	1.0000	75.00	75.00
10 SAMPLE COLLECTION						
		A	GROUND WATER	4.0000	10.00	40.00
24 GAC SYSTEM						
		C	FILTER REPLACEMENT/REMOVAL	2.0000	325.00	650.00
				Total Amount		765.00

UNDERGROUND STORAGE TANK (UST) OWNER/OPERATOR LEAD INFORMATION SHEET

1. CONTRACTOR OF CHOICE

As the UST Owner/Operator of UST Permit # 09322, I would like to use the contractor or person(s)* listed below and request that they represent me for: (check one)

( ) Initial Groundwater Assessment
( ) Other (please specify)_____
(X) all future assessment and corrective action scopes. **

Name of Contractor/Person(s): Midlands Environmental Consultants, Inc.

Address: 235-B Dooley Road, Lexington, SC 29073

Telephone Number: (803) 808-2043

Note: Site rehabilitation activities must be performed by a SCDHEC Certified Site Rehabilitation Contractor in accordance with R.61-98.

* indicate if the person listed is your own employee

** if you would like the contractor to perform all future assessment and corrective action activities at this and/or other facilities that have confirmed releases, please provide a list of all sites on your letterhead and provide the information requested in items 2 and 3 below within the context of the letter.

2. FINANCIAL OR FAMILIAL RELATIONSHIP

Does a financial or familial relationship, as defined below, exist between you and the contractor/person that you listed above? _____ Yes _X_ No (please initial) LBS

Financial Relationship: A connection or association through a material interest of sources of income which exceed five percent of annual gross income from a business entity.

Familial Relationship: A connection or association by family or relatives, in which a family member or relative has a material interest. Family or relatives include: father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, grandchild, great grandchild, step grandparent, step great grandparent, step grandchild, step great grandchild, or fiancee.

3. PAYMENT

You can pay the contractor and, upon the submittal of the canceled check (or a notarized statement from the contractor), be compensated from the SUPERB Account, or have payment issued directly from us to the contractor.

I request that payment be made to me after I have paid the contractor. _____ Yes LBS No (please initial)
I request that payment be made directly to the contractor. _X_ Yes LBS _____ No (please initial)

Note: All costs must receive prior financial approval from the Department regardless of payment option.

Underground Storage Tank Owner/Operator Signature Lou B Smith
Date 10/8/10

Debra

SITE ACTIVITY SUMMARY

UST PERMIT # 09322
FACILITY NAME Smith's Grocery
COUNTY York
NAME OF SAMPLER Dalton Reames

Address of GAC	Serial #	Water Usage	Date	Time	Site Activity	Comments
3049 Clover Circle, Clover, SC (Hill)	52219	254 Gals	11/08/10	1130	Changed Carbon	
			↓	1030	Sampled Hill Pre-GAC	Clear; Sl. Odor
			↓	1035	Sampled Hill Post-GAC (B,T,M, DCA, EDB)	Clear; N/O
3043 Clover Circle, Clover, SC (Wiggam)	49187	304	11/08/10	1315	Changed Carbon	- Power to Unit was off @ arrival - "Wiggled" Wire to restore Power
			↓	1200	Sampled Wiggam Pre-GAC	Clear; N/O
			↓	1205	Sampled Wiggam Post-GAC (B,T,M, DCA, EDB)	Clear; N/O

3S Tech
UST DOCKET

GAC Unit Installation and Maintenance

Date 11/08/10

UST Permit number 09322

Street Address 3049 Clover Circle, Clover, SC (Hill)

GAC Unit serial and model number 52219/7081471

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☑ **FILTER CHANGE**

Filter Disposal method: _____

Condition of GAC Unit _____in need of repair* _____good

Condition of GAC Unit housing _____in need of repair* _____good

*Repair needed: _____

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☑ **SAMPLE COLLECTION** (circle) (Pre-GAC) (Post GAC)

Comments _____

GAC Unit Installation and Maintenance

Date 11/08/10

UST Permit number 09322

Street Address 3043 Clover Circle, Clover, SC (Wiggam)

GAC Unit serial and model number 49187 / 7081471

NEW INSTALLATION

Date installation completed _____

Attachments required: ___schematic of system as installed,
___copy of analytical data for pre and post GAC samples
___calculations for filter change
___calculations for breakthrough

MAINTENANCE AND SERVICE

☒ **FILTER CHANGE**

Filter Disposal method: _____

Condition of GAC Unit _____in need of repair* _____good

Condition of GAC Unit housing _____in need of repair* _____good

*Repair needed: _____

☐ **SERVICE/REPAIR CALL**

Service or repair provided _____

☒ **SAMPLE COLLECTION** (circle) Pre-GAC Post GAC

Comments Power to unit was off upon arrival. "Wiggled" main wire to restore power.

GAC Maintenance Report
Permit # 09322

Address	Serial #	Model#	Date serviced	Condition of unit	Samples collected
3245 Clover Cir. Clover, SC	52219	7081471	11/08/10	Needs Repairs (Good)	(Pre-GAC) (Post-GAC)
				Needs Repairs Good	Pre-GAC Post-GAC
* 3243 Clover Cir Clover, SC	49187	7081471	11/08/10	Needs Repairs (Good)	(Pre-GAC) (Post-GAC)
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC
				Needs Repairs Good	Pre-GAC Post-GAC

Notes:

Repairs/service: _____

Filter disposal method: _____

Comments: * No Power to Unit upon arrival; "Wiggled" main wire to restore Power.

CHAIN-OF-CUSTODY / Analytical Request Document

Pace Analytical® www.pacelabs.com

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1407912

Section A **Required** Client Information:

Company:	S DHEC
Address:	600 Bull St.
	Columbia SC 29201
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	Standard

Section B **Required** Project Information:

Report To:	D. Thomas
Copy To:	
Purchase Order No.:	229210
Project Name:	Smith's Grocery
Project Number:	03922/CA: 40138

Section C Invoice Information:

Attention:	Finance
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	R. Spencer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER ______

Site Location STATE: SC

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	TIME	COMPOSITE END/GRAB DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: BTEX/Naph/MTBE (8260B)	1,2 DCA (8260B)	EDB (8011)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Hill Pre-GAC	WT	G	11/3/10	1030				6				6					X	X	X		
2	Hill Post-GAC	WT	G	11/3/10	1035				6				6					X	X	X		
3	Wiggins Pre-GAC	WT	G	11/3/10	1100				6				6					X	X	X		
4	Wiggins Post-GAC	WT	G	11/3/10	1105				6				6					X	X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
1ppb Detection Limits	[signature]	11/3/10	1205	Beav-Ex			

4

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dalton Raines

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 11/03/10

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

November 16, 2010

Ms. Debra Thoma
SCDHEC
UST Program
2600 Bull Street
Columbia, SC 29201

RE: Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

Dear Ms. Thoma:
Enclosed are the analytical results for sample(s) received by the laboratory on November 09, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

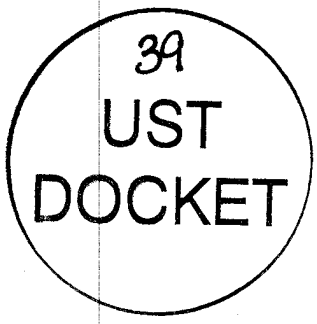
Sincerely,

Erin R. Watts for

Renee Spencer

renee.spencer@pacelabs.com
Project Manager

Enclosures



This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

Charlotte Certification IDs
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
Pennsylvania Certification #: 68-00784
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Virginia Certification #: 00213
Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DHH Drinking Water # LA 100031
West Virginia Certification #: 357

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9281706001	**HILL PRE-GAC**	Water	11/08/10 10:30	11/09/10 13:05
9281706002	**HILL POST-GAC**	Water	11/08/10 10:35	11/09/10 13:05
9281706003	**WIGGAM PRE-GAC**	Water	11/08/10 12:00	11/09/10 13:05
9281706004	**WIGGAM POST-GAC**	Water	11/08/10 12:05	11/09/10 13:05

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9281706001	**HILL PRE-GAC**	EPA 8011	RES	2	PASI-C
		EPA 8260	MCK	13	PASI-C
9281706002	**HILL POST-GAC**	EPA 8011	RES	2	PASI-C
		EPA 8260	MCK	13	PASI-C
9281706003	**WIGGAM PRE-GAC**	EPA 8011	RES	2	PASI-C
		EPA 8260	MCK	13	PASI-C
9281706004	**WIGGAM POST-GAC**	EPA 8011	RES	2	PASI-C
		EPA 8260	MCK	13	PASI-C

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

HITS ONLY

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
9281706001	**HILL PRE-GAC**					
EPA 8011	1,2-Dibromoethane (EDB)	0.59	ug/L	0.020	11/10/10 23:01	
EPA 8260	Benzene	69.6	ug/L	1.0	11/14/10 17:13	
EPA 8260	1,2-Dichloroethane	8.7	ug/L	1.0	11/14/10 17:13	
EPA 8260	Naphthalene	1.2	ug/L	1.0	11/14/10 17:13	
EPA 8260	Xylene (Total)	12.3	ug/L	2.0	11/14/10 17:13	
EPA 8260	m&p-Xylene	8.1	ug/L	2.0	11/14/10 17:13	
EPA 8260	o-Xylene	4.2	ug/L	1.0	11/14/10 17:13	
9281706002	**HILL POST-GAC**					
EPA 8011	1,2-Dibromoethane (EDB)	0.10	ug/L	0.019	11/11/10 06:04	
EPA 8260	Benzene	7.3	ug/L	1.0	11/14/10 17:38	
EPA 8260	1,2-Dichloroethane	1.7	ug/L	1.0	11/14/10 17:38	
EPA 8260	Xylene (Total)	1.4J	ug/L	2.0	11/14/10 17:38	
EPA 8260	m&p-Xylene	1.0J	ug/L	2.0	11/14/10 17:38	
EPA 8260	o-Xylene	0.41J	ug/L	1.0	11/14/10 17:38	
9281706003	**WIGGAM PRE-GAC**					
EPA 8011	1,2-Dibromoethane (EDB)	0.98	ug/L	0.020	11/11/10 07:04	
EPA 8260	Benzene	11.2	ug/L	1.0	11/15/10 16:10	
EPA 8260	1,2-Dichloroethane	15.0	ug/L	1.0	11/15/10 16:10	
EPA 8260	Methyl-tert-butyl ether	0.41J	ug/L	1.0	11/15/10 16:10	
EPA 8260	Naphthalene	5.7	ug/L	1.0	11/15/10 16:10	
EPA 8260	Xylene (Total)	33.1	ug/L	2.0	11/15/10 16:10	
EPA 8260	m&p-Xylene	19.7	ug/L	2.0	11/15/10 16:10	
EPA 8260	o-Xylene	13.5	ug/L	1.0	11/15/10 16:10	
9281706004	**WIGGAM POST-GAC**					
EPA 8011	1,2-Dibromoethane (EDB)	0.70	ug/L	0.019	11/11/10 07:45	
EPA 8260	Benzene	3.5	ug/L	1.0	11/14/10 18:04	
EPA 8260	1,2-Dichloroethane	8.2	ug/L	1.0	11/14/10 18:04	
EPA 8260	Naphthalene	2.2	ug/L	1.0	11/14/10 18:04	
EPA 8260	Xylene (Total)	16.3	ug/L	2.0	11/14/10 18:04	
EPA 8260	m&p-Xylene	10	ug/L	2.0	11/14/10 18:04	
EPA 8260	o-Xylene	6.4	ug/L	1.0	11/14/10 18:04	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

Sample: HILL PRE-GAC **Lab ID: 9281706001** Collected: 11/08/10 10:30 Received: 11/09/10 13:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.59**	ug/L	0.020	0.020	1	11/10/10 14:06	11/10/10 23:01	106-93-4	
1-Chloro-2-bromopropane (S)	113	%	60-140		1	11/10/10 14:06	11/10/10 23:01	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	**69.6**	ug/L	1.0	0.25	1		11/14/10 17:13	71-43-2	
1,2-Dichloroethane	**8.7**	ug/L	1.0	0.12	1		11/14/10 17:13	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		11/14/10 17:13	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		11/14/10 17:13	1634-04-4	
Naphthalene	**1.2**	ug/L	1.0	0.24	1		11/14/10 17:13	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		11/14/10 17:13	108-88-3	
Xylene (Total)	**12.3**	ug/L	2.0	0.66	1		11/14/10 17:13	1330-20-7	
m&p-Xylene	**8.1**	ug/L	2.0	0.66	1		11/14/10 17:13	179601-23-1	
o-Xylene	**4.2**	ug/L	1.0	0.23	1		11/14/10 17:13	95-47-6	
4-Bromofluorobenzene (S)	100	%	70-130		1		11/14/10 17:13	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		11/14/10 17:13	1868-53-7	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		11/14/10 17:13	17060-07-0	
Toluene-d8 (S)	113	%	70-130		1		11/14/10 17:13	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

Sample: HILL POST-GAC **Lab ID: 9281706002** Collected: 11/08/10 10:35 Received: 11/09/10 13:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.10**	ug/L	0.019	0.019	1	11/10/10 14:13	11/11/10 06:04	106-93-4	
1-Chloro-2-bromopropane (S)	115	%	60-140		1	11/10/10 14:13	11/11/10 06:04	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	**7.3**	ug/L	1.0	0.25	1		11/14/10 17:38	71-43-2	
1,2-Dichloroethane	**1.7**	ug/L	1.0	0.12	1		11/14/10 17:38	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		11/14/10 17:38	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		11/14/10 17:38	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.24	1		11/14/10 17:38	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		11/14/10 17:38	108-88-3	
Xylene (Total)	**1.4J**	ug/L	2.0	0.66	1		11/14/10 17:38	1330-20-7	
m&p-Xylene	**1.0J**	ug/L	2.0	0.66	1		11/14/10 17:38	179601-23-1	
o-Xylene	**0.41J**	ug/L	1.0	0.23	1		11/14/10 17:38	95-47-6	
4-Bromofluorobenzene (S)	92	%	70-130		1		11/14/10 17:38	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		11/14/10 17:38	1868-53-7	
1,2-Dichloroethane-d4 (S)	98	%	70-130		1		11/14/10 17:38	17060-07-0	
Toluene-d8 (S)	114	%	70-130		1		11/14/10 17:38	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

Sample: WIGGAM PRE-GAC **Lab ID: 9281706003** Collected: 11/08/10 12:00 Received: 11/09/10 13:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.98**	ug/L	0.020	0.020	1	11/10/10 14:13	11/11/10 07:04	106-93-4	
1-Chloro-2-bromopropane (S)	120	%	60-140		1	11/10/10 14:13	11/11/10 07:04	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	**11.2**	ug/L	1.0	0.25	1		11/15/10 16:10	71-43-2	
1,2-Dichloroethane	**15.0**	ug/L	1.0	0.12	1		11/15/10 16:10	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		11/15/10 16:10	100-41-4	
Methyl-tert-butyl ether	**0.41J**	ug/L	1.0	0.21	1		11/15/10 16:10	1634-04-4	
Naphthalene	**5.7**	ug/L	1.0	0.24	1		11/15/10 16:10	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		11/15/10 16:10	108-88-3	
Xylene (Total)	**33.1**	ug/L	2.0	0.66	1		11/15/10 16:10	1330-20-7	
m&p-Xylene	**19.7**	ug/L	2.0	0.66	1		11/15/10 16:10	179601-23-1	
o-Xylene	**13.5**	ug/L	1.0	0.23	1		11/15/10 16:10	95-47-6	
4-Bromofluorobenzene (S)	95	%	70-130		1		11/15/10 16:10	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		11/15/10 16:10	1868-53-7	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		11/15/10 16:10	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		11/15/10 16:10	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

Sample: WIGGAM POST-GAC **Lab ID: 9281706004** Collected: 11/08/10 12:05 Received: 11/09/10 13:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.70**	ug/L	0.019	0.019	1	11/10/10 14:13	11/11/10 07:45	106-93-4	
1-Chloro-2-bromopropane (S)	112	%	60-140		1	11/10/10 14:13	11/11/10 07:45	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260								
Benzene	**3.5**	ug/L	1.0	0.25	1		11/14/10 18:04	71-43-2	
1,2-Dichloroethane	**8.2**	ug/L	1.0	0.12	1		11/14/10 18:04	107-06-2	
Ethylbenzene	ND	ug/L	1.0	0.30	1		11/14/10 18:04	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.21	1		11/14/10 18:04	1634-04-4	
Naphthalene	**2.2**	ug/L	1.0	0.24	1		11/14/10 18:04	91-20-3	
Toluene	ND	ug/L	1.0	0.26	1		11/14/10 18:04	108-88-3	
Xylene (Total)	**16.3**	ug/L	2.0	0.66	1		11/14/10 18:04	1330-20-7	
m&p-Xylene	**10**	ug/L	2.0	0.66	1		11/14/10 18:04	179601-23-1	
o-Xylene	**6.4**	ug/L	1.0	0.23	1		11/14/10 18:04	95-47-6	
4-Bromofluorobenzene (S)	98	%	70-130		1		11/14/10 18:04	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		11/14/10 18:04	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		11/14/10 18:04	17060-07-0	
Toluene-d8 (S)	115	%	70-130		1		11/14/10 18:04	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

QC Batch: OEXT/11816
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9281706001

METHOD BLANK: 525485 Matrix: Water
Associated Lab Samples: 9281706001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	11/10/10 14:57	
1-Chloro-2-bromopropane (S)	%	104	60-140	11/10/10 14:57	

LABORATORY CONTROL SAMPLE & LCSD: 525486 525487

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.29	0.29	0.29	102	102	60-140	0	20	
1-Chloro-2-bromopropane (S)	%				104	103	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 525488 525489

Parameter	Units	4039240004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	<0.020	.28	.28	0.28	0.28	100	100	60-140	0	20	
1-Chloro-2-bromopropane (S)	%						100	100	60-140			

SAMPLE DUPLICATE: 525490

Parameter	Units	9281706001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.59	0.68	15	20	
1-Chloro-2-bromopropane (S)	%	113	119	3		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

QC Batch: OEXT/11817 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9281706002, 9281706003, 9281706004

METHOD BLANK: 525491 Matrix: Water
Associated Lab Samples: 9281706002, 9281706003, 9281706004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	11/11/10 00:02	
1-Chloro-2-bromopropane (S)	%	102	60-140	11/11/10 00:02	

LABORATORY CONTROL SAMPLE & LCSD: 525492 525493

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.29	0.29	0.30	102	104	60-140	1	20	
1-Chloro-2-bromopropane (S)	%				103	104	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 525494 525495

Parameter	Units	9281706002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	0.10	.28	.28	0.39	0.39	102	104	60-140	1	20	
1-Chloro-2-bromopropane (S)	%						110	111	60-140			

SAMPLE DUPLICATE: 525496

Parameter	Units	9281706003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.98	0.92	6	20	
1-Chloro-2-bromopropane (S)	%	120	114	7		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

QC Batch: MSV/12999 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level SC
Associated Lab Samples: 9281706001, 9281706002, 9281706004

METHOD BLANK: 526729 Matrix: Water
Associated Lab Samples: 9281706001, 9281706002, 9281706004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	11/14/10 10:24	
Benzene	ug/L	ND	1.0	11/14/10 10:24	
Ethylbenzene	ug/L	ND	1.0	11/14/10 10:24	
m&p-Xylene	ug/L	ND	2.0	11/14/10 10:24	
Methyl-tert-butyl ether	ug/L	ND	1.0	11/14/10 10:24	
Naphthalene	ug/L	0.26J	1.0	11/14/10 10:24	
o-Xylene	ug/L	ND	1.0	11/14/10 10:24	
Toluene	ug/L	ND	1.0	11/14/10 10:24	
Xylene (Total)	ug/L	ND	2.0	11/14/10 10:24	
1,2-Dichloroethane-d4 (S)	%	101	70-130	11/14/10 10:24	
4-Bromofluorobenzene (S)	%	100	70-130	11/14/10 10:24	
Dibromofluoromethane (S)	%	102	70-130	11/14/10 10:24	
Toluene-d8 (S)	%	98	70-130	11/14/10 10:24	

LABORATORY CONTROL SAMPLE: 526730

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	50.3	101	70-130	
Benzene	ug/L	50	48.4	97	70-130	
Ethylbenzene	ug/L	50	49.7	99	70-130	
m&p-Xylene	ug/L	100	101	101	70-130	
Methyl-tert-butyl ether	ug/L	50	48.3	97	70-130	
Naphthalene	ug/L	50	47.7	95	70-130	
o-Xylene	ug/L	50	52.4	105	70-130	
Toluene	ug/L	50	47.1	94	70-130	
Xylene (Total)	ug/L	150	153	102	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			106	70-130	
Dibromofluoromethane (S)	%			101	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 526731 526732

Parameter	Units	9281535008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	51.3	50.2	103	100	70-130	2	30	
Benzene	ug/L	ND	50	50	53.7	51.5	107	103	70-130	4	30	
Ethylbenzene	ug/L	ND	50	50	53.7	51.9	107	104	70-130	3	30	
m&p-Xylene	ug/L	ND	100	100	107	105	107	105	70-130	2	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	50.3	50.5	101	101	70-130	0	30	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 526731 526732

Parameter	Units	9281535008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Naphthalene	ug/L	ND	50	50	51.0	52.2	102	104	70-130	2	30	
o-Xylene	ug/L	ND	50	50	55.7	53.5	111	107	70-130	4	30	
Toluene	ug/L	ND	50	50	52.1	49.4	104	99	70-130	5	30	
1,2-Dichloroethane-d4 (S)	%						96	97	70-130			
4-Bromofluorobenzene (S)	%						101	103	70-130			
Dibromofluoromethane (S)	%						99	99	70-130			
Toluene-d8 (S)	%						99	98	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

QC Batch: MSV/13039
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Low Level SC
Associated Lab Samples: 9281706003

METHOD BLANK: 527796
Matrix: Water
Associated Lab Samples: 9281706003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	11/15/10 10:43	
Benzene	ug/L	ND	1.0	11/15/10 10:43	
Ethylbenzene	ug/L	ND	1.0	11/15/10 10:43	
m&p-Xylene	ug/L	ND	2.0	11/15/10 10:43	
Methyl-tert-butyl ether	ug/L	ND	1.0	11/15/10 10:43	
Naphthalene	ug/L	0.35J	1.0	11/15/10 10:43	
o-Xylene	ug/L	ND	1.0	11/15/10 10:43	
Toluene	ug/L	ND	1.0	11/15/10 10:43	
Xylene (Total)	ug/L	ND	2.0	11/15/10 10:43	
1,2-Dichloroethane-d4 (S)	%	97	70-130	11/15/10 10:43	
4-Bromofluorobenzene (S)	%	100	70-130	11/15/10 10:43	
Dibromofluoromethane (S)	%	100	70-130	11/15/10 10:43	
Toluene-d8 (S)	%	98	70-130	11/15/10 10:43	

LABORATORY CONTROL SAMPLE: 527797

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	50.8	102	70-130	
Benzene	ug/L	50	49.1	98	70-130	
Ethylbenzene	ug/L	50	47.4	95	70-130	
m&p-Xylene	ug/L	100	93.9	94	70-130	
Methyl-tert-butyl ether	ug/L	50	49.4	99	70-130	
Naphthalene	ug/L	50	46.8	94	70-130	
o-Xylene	ug/L	50	48.8	98	70-130	
Toluene	ug/L	50	43.7	87	70-130	
Xylene (Total)	ug/L	150	143	95	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Dibromofluoromethane (S)	%			108	70-130	
Toluene-d8 (S)	%			95	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 527798 527799

Parameter	Units	9282060066 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	54.2	53.1	108	106	70-130	2	30	
Benzene	ug/L	0.67J	50	50	49.3	48.3	97	95	70-130	2	30	
Ethylbenzene	ug/L	ND	50	50	52.3	51.8	104	103	70-130	1	30	
m&p-Xylene	ug/L	0.80J	100	100	106	103	105	102	70-130	3	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	51.6	52.9	103	106	70-130	3	30	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 527798 527799

Parameter	Units	9282060066 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Naphthalene	ug/L	0.29J	50	50	48.3	52.8	96	105	70-130	9	30	
o-Xylene	ug/L	0.24J	50	50	55.7	52.9	111	105	70-130	5	30	
Toluene	ug/L	1.1	50	50	48.8	47.5	95	93	70-130	3	30	
1,2-Dichloroethane-d4 (S)	%						106	108	70-130			
4-Bromofluorobenzene (S)	%						104	102	70-130			
Dibromofluoromethane (S)	%						106	109	70-130			
Toluene-d8 (S)	%						98	99	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-C Pace Analytical Services - Charlotte

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SMITH'S GROCERY 09322
Pace Project No.: 9281706

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
9281706001	**HILL PRE-GAC**	EPA 8011	OEXT/11816	EPA 8011	GCSV/8716
9281706002	**HILL POST-GAC**	EPA 8011	OEXT/11817	EPA 8011	GCSV/8717
9281706003	**WIGGAM PRE-GAC**	EPA 8011	OEXT/11817	EPA 8011	GCSV/8717
9281706004	**WIGGAM POST-GAC**	EPA 8011	OEXT/11817	EPA 8011	GCSV/8717
9281706001	**HILL PRE-GAC**	EPA 8260	MSV/12999		
9281706002	**HILL POST-GAC**	EPA 8260	MSV/12999		
9281706003	**WIGGAM PRE-GAC**	EPA 8260	MSV/13039		
9281706004	**WIGGAM POST-GAC**	EPA 8260	MSV/12999		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of 1

1407912

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: SCDHEC	Report To: D. Thomas	Attention: Finance
Address: 600 Bull St.	Copy To:	Company Name:
Columbia SC 29201		Address:
Email To:	Purchase Order No.: 729210	Pace Quote Reference:
Phone: 803-896-4010 Fax:	Project Name: Smith's Grocery	Pace Project Manager: R. Spencer
Requested Due Date/TAT: Standard	Project Number: 0732/CA: 40138	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	BTEX, MTBE (8260B)	1,2 DCA (8260B)	EDB (8011)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WT	G	11/8/10	1030				6				6						X		X	X		001
2	WT	G	11/8/10	1035				6				6						X		X	X		002
3	WT	G	11/8/10	1200				6				6						X		X	X		003
4	WT	G	11/8/10	1205				6				6						X		X	X		004
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
1 ppb Detection Limits	[signature]	11/8/10	1700	[signature]	11/9/10	10:30				
	[signature]	11/9/10	1505	[signature]	11/9/10	1505	2.9	Y	N	Y

3

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dalton Reames

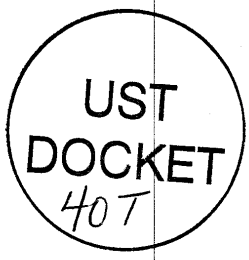
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 11/08/10

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Midlands Environmental Consultants, Inc.

November 19, 2010

Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201



Subject: Report of Monitoring Well Installation, Groundwater Sampling and Chemical Analyses
Smith's Grocery
S.C. Highway 49
York, South Carolina
SCDHEC Site ID# 09322, CA # 39705
MECI Project Number 10-3035
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached Report of Well Installation, Groundwater Sampling, and Chemical Analyses of Groundwater Samples for the referenced site. This report describes assessment activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

PROJECT INFORMATION

The subject site (Smith's Grocery) is located near the intersection of S.C. Highway 49 and Southern Pines Road, York, York County, South Carolina (see Figure 1). The site consists of an approximately 2.00 acre parcel of land (see Figure 2), and currently occupied by a convenience store. The site formerly maintained one 6,000 gallon gasoline UST and one 8,000 gallon gasoline UST. The South Carolina Department of Health and Environmental Control (SCDHEC) reported release of petroleum product from two single walled underground storage tanks (UST) at the subject site in June of 1993, which was confirmed in September of 1996.

The above project information is based on SCDHEC files.

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

FIELD EXPLORATION

Field exploration conducted at the site include:

- construction of three groundwater monitoring wells;
- groundwater sampling; chemical analyses: and,
- a comprehensive survey of the subject site.

The monitoring well locations were selected based on SCDHEC project manager instructions, existing site conditions, and drilling accessibility.

Following monitoring well installation, a comprehensive survey (See Figure 2) was conducted by Construction Support Services of Columbia, SC (Jay S. Joshi PLS# 14811) dated November 9, 2010 to locate the vertical and horizontal positions of the monitoring wells and relevant structures

MONITORING WELL INSTALLATION

During a site reconnaissance performed October 8, 2010, monitoring wells MW-8, MW-16, MW-17, MW-18, and MW-20 were located by MECI personnel. These wells were determined to be functioning properly and were not replaced. Due to the quality of the maps provided by SCDHEC (Map produced by SEI Environmental, Inc, dated 1/4/05) and the amount of injection wells (See Figure 3) in the vicinity of MW-7 and MW-9, MECI feels that there might have been some confusion of the location of MW-9 and MW-20 during the July 19, 2010 sampling event. MECI came to the conclusion that MW-9, not MW-20 was in need of being replaced.

On October 22, 2010, three single cased, watertable bracketing monitoring wells were installed at the subject site to replace several wells that were unable to be located during prior sampling events. These wells were installed by Geologic Exploration, of Statesville, North Carolina (S.C. Driller Certification: Brian Thomas #B 01465). Monitoring wells MW-1R, MW-4R, and MW-9R were installed as single cased, watertable bracketing monitoring wells using a truck-mounted drilling rig employing 8.0-inch outer diameter hollow-stem augers to construct the borehole. The following table presents new well installation details:

Well Number	Screened Interval (ft)	Total Depth (ft)
MW-1R	29.0-39.0	39.0
MW-4R	24.0-34.0	34.0
MW-9R	28.0-38.0	38.0

The soils encountered during drilling activities consisted of micaceous clayey silts of the Piedmont Physiographic Province. Representative portions of soil samples were screened with an Photo Ionization Detector (PID) and classified by MECI personnel. Test boring records showing soil descriptions and screening result are attached.

Based on PID readings and lack on access to spread soils onsite, soil cuttings were transported to Waste Management/Richland Landfill, Elgin, SC by MECI. A total of 0.93 tons was disposed of in this manner. A disposal manifest for these soils is attached at the end of this report.

Following completion of the monitoring wells, the wells were developed by bailing until they were determined to be functioning properly and turbidity was reduced. Test Boring Records showing soil descriptions and monitoring well installation details are attached. The drummed purge water was treated by MECI personnel using a granular activated carbon drum. A total of one (1) drum of purge/development water was disposed of in this manner. A disposal manifest for the drummed purge water is attached at the end of this report.

MONITORING WELL SAMPLING AND CHEMICAL ANALYSES

On October 26 and 27, 2010, MECI personnel collected groundwater samples from twenty-two (22) monitoring wells at the subject site. Monitoring well MW-15 was gauged and determined to have insufficient water for sampling. Monitoring well MW-13 was unable to be sampled during the subject sampling event, due to the well being located inside a fenced in yard with dogs. MECI attempted on October 26 and October 27, 2010 to sample MW-13, but the property was not home either day to allow access to the well. Based on a request by SCDHEC personnel, not all of the wells were purged prior to sampling. Purging was completed by bailing at least three well volumes of water from the well or until pH, conductivity, dissolved oxygen stabilized to within 10%, whichever occurred first. Where applicable, field measurements of pH, conductivity, dissolved oxygen, dissolved carbon dioxide, and water temperature were obtained before well sampling process. Table 1 presents the results of the field measurements obtained. The wells were sampled in accordance with SCDHEC guidelines.

Groundwater samples obtained were sent to Pace Analytical Services, Inc. of Huntersville, NC (SCDHEC Laboratory Certification #99006) for analysis.

The following sampling matrix contains well development and requested analyses for each well:

Monitoring Well	Purge	No Purge	Gauge Only	BTEX, Naphthalene, MTBE (EPA Method 8260-B)	EDB (EPA Method 8011)	1,2 DCA (EPA Method 8260-B)	8 Oxygenates (EPA Method 8260-B)	Total Lead (EPA Method 6010)	Sulfate (EPA Method 375.2)	Nitrate (EPA Method 335.2)	Methane (RSK Method)	PAH's (EPA Method 8270)	Ferrous Iron (Field Test)
				Analyte Sampled									
MW-1R	X			X	X	X	X						
MW-2		X		X	X	X	X						
MW-3		X		X	X	X	X						
MW-4R	X			X	X	X	X						
MW-5		X		X	X	X	X						
MW-6		X		X	X	X	X						
MW-7		X		X	X	X	X						
MW-8		X		X	X	X	X						
MW-9R	X			X	X	X	X						
MW-10		X		X	X	X	X						
MW-11		X		X	X	X	X						

Monitoring Well	Purge	No Purge	Gauge Only	BTEX, Naphthalene, MTBE (EPA Method 8260-B)	EDB (EPA Method 8011)	1,2 DCA (EPA Method 8260-B)	8 Oxygenates (EPA Method 8260-B)	Total Lead (EPA Method 6010)	Sulfate (EPA Method 375.2)	Nitrate (EPA Method 335.2)	Methane (RSK Method)	PAH's (EPA Method 8270)	Ferrous Iron (Field Test)
				Analyte Sampled									
MW-12		X		X	X	X	X						
MW-14		X		X	X	X	X						
MW-15			X										
MW-16		X		X	X	X	X						
MW-17		X		X	X	X	X						
MW-18		X		X	X	X	X						
MW-19		X		X	X	X	X						
MW-20		X		X	X	X	X						
IW-9		X		X	X	X	X						
TW-1	X			X	X	X	X						
TW-2	X			X	X	X	X						
MW-3	X			X	X	X	X						

Notes: BTEX = benzene, toluene, ethylbenzene, & total xylenes MTBE=methyl tertiary butyl ether 1,2 DCA = 1,2 dicloroethane PAH = polycyclic aromatic hydrocarbons

The results of the laboratory analyses are summarized in Table 2, and presented in the attached Analytical data.

WATER SUPPLY WELL SAMPLING AND CHEMICAL ANALYSES

On October 26, 2010, MECI personnel sampled four water supply wells. WSW-Hill and WSW-Swift both contain granular activated carbon units (GAC) (WSW-Smith does not have a GAC unit). Pre-Gac and Post-Gac samples were obtained from WSW-Hill and WSW-Swift. The following matrix contains well status, owner(s), and tax map identification numbers:

Water Supply Well Number	Well Owner	York County Tax Map Number:	Notes:	Well Status
WSW-Crock	Everette D. Crook Jr.	4890401001	3035 Clover Circle	Currently in Use
WSW-Hill	Tony H. Hill	4890401023	3049 Clover Circle	Currently in Use
WSW-Smith	Lois B. Smith	4560000005	3176 Charlotte Highway	Currently in Use
WSW-Swift	Gary A. Wiggam	4890401024	3043 Clover Circle	Currently in Use

The samples collected from WSW-Crock, WSW-Hill, WSW-Smith, and WSW-Swift were sent to Pace Analytical of Huntersville, North Carolina (SCDHEC Laboratory Certification #99006) for analysis. The samples collected were analyzed for BTEX, Naphthalene, MTBE, 1,2 DCA, 8 Oxygenates (EPA Method 8260B), and EDB (EPA Method 8011). The results of the laboratory analyses are summarized in Table 4, and presented in Appendix B.

GROUNDWATER ANALYTICAL RESULTS

As discussed above, groundwater samples obtained from the monitoring wells were analyzed for dissolved phase petroleum constituents. The analytical results indicate petroleum impact to the local groundwater with the highest dissolved concentrations detected in the area of monitoring well MW-8. The analytical results indicate dissolved total BTEX concentrations ranging from levels below detection limits (BDL) to 78,320 micrograms per liter in MW-8. The analytical results indicate dissolved MTBE concentrations ranging from levels below detection limits (BDL) to 217J micrograms per liter in monitoring well TW-2. The analytical results indicate dissolved Naphthalene concentrations ranging from levels below detection limits (BDL) to 1,190J micrograms per liter in monitoring well MW-1R. The analytical results indicate dissolved EDB concentrations ranging from levels below detection limits (BDL) to 48.9 micrograms per liter in monitoring well MW-10. The results of the analyses for each monitoring well and specific parameters are listed on Table 2 and Table 3. The detection limit for each parameter is provided in the attached laboratory reports.

WATER SUPPLY WELL ANALYTICAL RESULTS

Six samples were collected from water water supply wells located near the subject site. Analytical results indicate EBD concentrations at 0.039 micrograms per liter in the sample collected from WSW-Crock. Analytical results indicate Benzene concentrations at 14.0 micrograms per liter, 1,2, DCA concentrations at 1.6J micrograms per liter, and EDB concentration at 0.33 micrograms per liter in the Pre-GAC sample obtained from WSW-Hill. Analytical results indicate Benzene concentrations at 2.4J micrograms per liter, 1,2, DCA concentrations at 1.3J micrograms per liter, and EDB concentration at 0.034 micrograms per liter in the Post-GAC sample obtained from WSW-Hill. Analytical results indicate Benzene concentrations at 288 micrograms per liter, Total Xylenes concentrations at 67.6 micrograms per liter, Naphthalene concentrations at 11.8 micrograms per liter, 1,2, DCA concentrations at 23.5 micrograms per liter, and EDB concentration at 1.3 micrograms per liter in the Pre-GAC sample obtained from WSW-Swift. Analytical results indicate Benzene concentrations at 157 micrograms per liter, Ethylbenzene concentrations at 1.6J micrograms per liter, Total Xylenes concentrations at 46.7 micrograms per liter, MTBE concentrations at 3.0J micrograms per liter, Naphthalene concentrations at 13.6 micrograms per liter, 1,2, DCA concentrations at 12.5 micrograms per liter, and EDB concentration at 0.60 micrograms per liter in the Post-GAC sample obtained from WSW-Swift. Samples collected from WSW-Smith did not indicate petroleum impact. The results of the analyses are presented on Table 2 and Table 3. The detection limit for each parameter is provided in the attached laboratory reports.

ASSESSMENT SUMMARY

Groundwater elevation data for the October 26, 2010, gauging events was plotted, and points of equal elevation were interpolated between the monitoring wells. A groundwater contour map of the surficial aquifer was thus prepared and is presented on Figure 4.

The analytical results indicate dissolved total BTEX concentrations ranging from levels below detection limits (BDL) to 78,320 micrograms per liter in MW-8. The analytical results indicate dissolved MTBE concentrations ranging from levels below detection limits (BDL) to 217J micrograms per liter in monitoring well TW-2. The analytical results indicate dissolved Naphthalene concentrations ranging from levels below detection limits (BDL) to 1,190J micrograms per liter in monitoring well MW-1R. The analytical results indicate dissolved EDB concentrations ranging from levels below detection limits (BDL) to 48.9 micrograms per liter in monitoring well MW-10. The results of the analyses for each monitoring well and specific parameters are listed on Table 2 and

Table 3. The detection limit for each parameter is provided in the attached laboratory reports. Figure 5 depicts graphically the concentrations of Total BTEX (indicator for plume migration) dissolved in the groundwater at the site. Figure 6 depicts graphically the concentrations of Naphthalene dissolved in the groundwater at the site. Figure 7 depicts graphically the concentrations of EDB dissolved in the groundwater at the site.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assessment are consistent with those normally employed in hydrogeological assessment and waste management projects of this type. Our evaluation of site conditions has been based on our understanding of the site, project information provided to us, and data obtained in our exploration. The general subsurface conditions utilized in our evaluation have been based on interpretation of subsurface data between borings. Contents of this report are intended for the sole use by the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.

Jeff L. Coleman
Senior Scientist

Bryan T. Shane, P.G.
Principal Geologist

Attachments

TABLES

TABLE 1
PAGE 1 OF 2
FIELD PARAMETERS
OCTOBER 26 & 27, 2010 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 10-3035
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	Dissolved CO_2 (mg/l)	Dissolved Oxygen (mg/l)	Temperature (^{O} Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Water (ft)	Well-head Elevation (ft)	Groundwater Elevation (ft)
MW-1R	10/26/2010	175	4.17	19.0	6.19	5.77	79.8	65.9	29-39	32.33	96.56	64.23
MW-2	10/26/2010	120	0.69	21.5	6.31	NT	117.1	NT	23-38	35.45	99.67	64.22
MW-3	10/26/2010	125	2.93	18.8	6.88	NT	31.9	NT	25-35	32.59	97.10	64.51
MW-4R	10/26/2010	45	6.81	17.8	5.89	5.56	45.2	33.9	24-34	28.38	92.55	64.17
MW-5	10/26/2010	INS	INS	INS	INS	INS	INS	INS	20-30	29.84	94.36	64.52
MW-6	10/26/2010	INS	INS	INS	INS	INS	INS	INS	27-37	35.57	98.93	63.36
MW-7	10/26/2010	INS	INS	INS	INS	INS	INS	INS	21-36	34.19	96.71	62.52
MW-8	10/26/2010	200+	0.54	19.7	6.24	NT	119.9	NT	23-38	35.94	100.14	64.20
MW-9R	10/26/2010	65	5.91	18.5	6.64	5.63	33.2	25.5	28-38	32.50	94.95	62.45
MW-10	10/27/2010	INS	INS	INS	INS	INS	INS	INS	29-44	41.12	104.83	63.71
MW-11	10/26/2010	INS	INS	INS	INS	INS	INS	INS	29-44	31.95	105.51	73.56
MW-12	10/26/2010	INS	INS	INS	INS	INS	INS	INS	29-44	43.45	104.56	61.11

Notes:

1. mg/l = milligrams per liter.
2. Groundwater depths were measured from the top of the PVC riser pipe.
3. Stabalized groundwater levels measured 10/26/10.
4. NT = Not Tested.
5. INS = Insufficient Water for Field Measurements
6. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on 10/26/10.
7. DRY = Monitoring well Dry at time of Sampling
8. NS = MW-13 Not Sampled due to well being located in fence with dogs

TABLE 1
PAGE 2 OF 2
FIELD PARAMETERS
OCTOBER 26 & 27, 2010 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 10-3035
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	Dissolved CO_2 (mg/l)	Dissolved Oxygen (mg/l)	Temperature (^{o} Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Water (ft)	Well-head Elevation (ft)	Groundwater Elevation (ft)
MW-13	10/26/2010	NS	NS	NS	NS	NS	NS	NS	32-47	NS	105.35	NS
MW-14	10/26/2010	INS	INS	INS	INS	INS	INS	INS	35-50 (TD=46.50)	44.51	103.95	59.44
MW-15	10/26/2010	DRY	DRY	DRY	DRY	DRY	DRY	DRY	35-50 (TD=47.60)	DRY	105.28	DRY
MW-16	10/26/2010	95	1.28	17.4	6.09	NT	27.6	NT	22-37	33.81	95.06	61.25
MW-17	10/26/2010	INS	INS	INS	INS	INS	INS	INS	25-40	38.27	99.52	61.25
MW-18	10/26/2010	INS	INS	INS	INS	INS	INS	INS	31-46	43.79	103.17	59.38
MW-19	10/26/2010	INS	INS	INS	INS	INS	INS	INS	35-50	46.65	103.32	56.67
MW-20	10/26/2010	90	4.13	19.0	5.35	NT	30.1	NT	20-35	30.84	93.39	62.55
IW-9	10/26/2010	190	0.84	20.5	6.28	NT	124.5	NT	Unknown	34.55	98.87	64.32
TW-1	10/26/2010	120	0.94	20.3	6.51	6.18	191.3	190.6	56-61	35.30	99.79	64.49
TW-2	10/26/2010	<5	1.00	20.0	9.38	6.64	213.5	296.8	86-88	35.72	99.79	64.07
TW-3	10/26/2010	165	0.72	20.5	5.72	5.41	51.3	63.1	66-71	40.38	104.17	63.79

Notes:

1. mg/l = milligrams per liter.
2. Groundwater depths were measured from the top of the PVC riser pipe.
3. Stabalized groundwater levels measured 10/26/10.
4. NT = Not Tested.
5. INS = Insufficient Water for Field Measurements
6. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on 10/26/10.
7. DRY = Monitoring well Dry at time of Sampling
8. NS = MW-13 Not Sampled due to well being located in fence with dogs

TABLE 2
PAGE 1 OF 2
GROUNDWATER ANALYTICAL RESULTS
OCTOBER 26 AND 27, 2010 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 10-3035
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-1R	10/26/10	**7,360**	**30,200**	**5,060**	**28,800**	**71,420**	**4.3J**	**1,190J**	**26.3**	**18.3**
MW-2	10/26/10	**2,860**	**3,630**	**390**	**3,710**	**10,590**	**79.5J**	**110**	**112**	**15.1**
MW-3	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-4R	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-5	10/26/10	<5.0	**101**	**1.9J**	**11.5**	**114.4J**	<5.0	**3.5J**	<5.0	<0.020
MW-6	10/26/10	**18.2**	**2.2J**	**14.8**	**74.4**	**109.6J**	<5.0	**5.6**	<5.0	**0.13**
MW-7	10/26/10	<250	**875**	**2,120**	**21,500**	**24,495**	<250	**1,150**	<250	**1.1**
MW-8	10/26/10	**10,100**	**37,700**	**4,420**	**26,100**	**78,320**	<500	**866**	<500	**29.2**
MW-9R	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-10	10/27/10	**6,280**	**17,700**	**5,220**	**26,000**	**55,200**	<250	**813**	**112J**	**48.9**
MW-11	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-12	10/26/10	**1,870**	**24.0**	**479**	**838**	**3,211.0**	<5.0	**112**	**38.8**	**0.95**
MW-13	10/26/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-14	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-15	10/26/10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

TABLE 2
PAGE 2 OF 2
GROUNDWATER ANALYTICAL RESULTS
OCTOBER 26 AND 27, 2010 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 10-3035
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-16	10/26/10	**4.1J**	<5.0	<5.0	<10.0	**4.1J**	<5.0	**3.2J**	<5.0	<0.019
MW-17	10/26/10	**250**	<5.0	<5.0	**45.5**	**295.5**	**2.1J**	**8.7**	<5.0	**0.046**
MW-18	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-19	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-20	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
IW-9	10/26/10	**505**	**562**	**1,250**	**5,110**	**7,427**	**5.8J**	**335**	<10.0	**0.39**
TW-1	10/26/10	**8,720**	**293**	**2,370**	**11,900**	**23,283**	<250	**559**	<250	**20.6**
TW-2	10/26/10	**12,900**	**17,400**	**1,930**	**9,830**	**42,060**	**217J**	**624**	<500	**0.062**
TW-3	10/26/10	**152**	**12.9**	<5.0	**20.5**	**185.4**	<5.0	**5.2**	**3.6J**	**1.4**
WSW-Crock	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	**0.039**
WSW-Hill (Pre)	10/26/10	**14.0**	<5.0	<5.0	<10.0	**14.0**	<5.0	<5.0	**1.6J**	**0.33**
WSW-Hill (Post)	10/26/10	**2.4J**	<5.0	<5.0	<10.0	**2.4J**	<5.0	<5.0	**1.3J**	**0.034**
WSW-Smith	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
WSW-Swift (Pre)	10/26/10	**288**	<5.0	<5.0	**67.6**	**355.6**	<5.0	**11.8**	**23.5**	**1.3**
WSW-Swift (Post)	10/26/10	**157**	<5.0	**1.6J**	**46.7**	**205.3J**	**3.0J**	**13.6**	**12.5**	**0.60**

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

TABLE 3
PAGE 1 OF 2
GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
OCTOBER 26 AND 27, 2010 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 10-3035
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	tert-Amyl alcohol (µg/l)	tert-Amyl methyl ether (µg/l)	3,3-Dimethyl-1-butanol (µg/l)	tert Butyl Alcohol (µg/l)	tert-Butyl Formate (µg/l)	Diisopropyl ether (µg/l)	Ethanol (µg/l)	Ethyl tert-butyl ether (µg/l)
MW-1R	10/26/10	**325**	<10.0	<100	<100	<50.0	**61.1**	**334**	<10.0
MW-2	10/26/10	<2,000	<200	<2,000	<2,000	<1,000	**195**	<4,000	<200
MW-3	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-4R	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-5	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-6	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-7	10/26/10	<5,000	<500	<5,000	<5,000	<2,500	<250	<10,000	<500
MW-8	10/26/10	<10,000	<1,000	<10,000	<10,000	<5,000	<500	<20,000	<1,000
MW-9R	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-10	10/27/10	<5,000	<500	<5,000	<5,000	<2,500	**167J**	<10,000	<500
MW-11	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-12	10/26/10	**917**	<10.0	<100	<100	<50.0	**65.0**	<200	<10.0
MW-13	10/26/10	NS	NS	NS	NS	NS	NS	NS	NS
MW-14	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-15	10/26/10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

Notes:

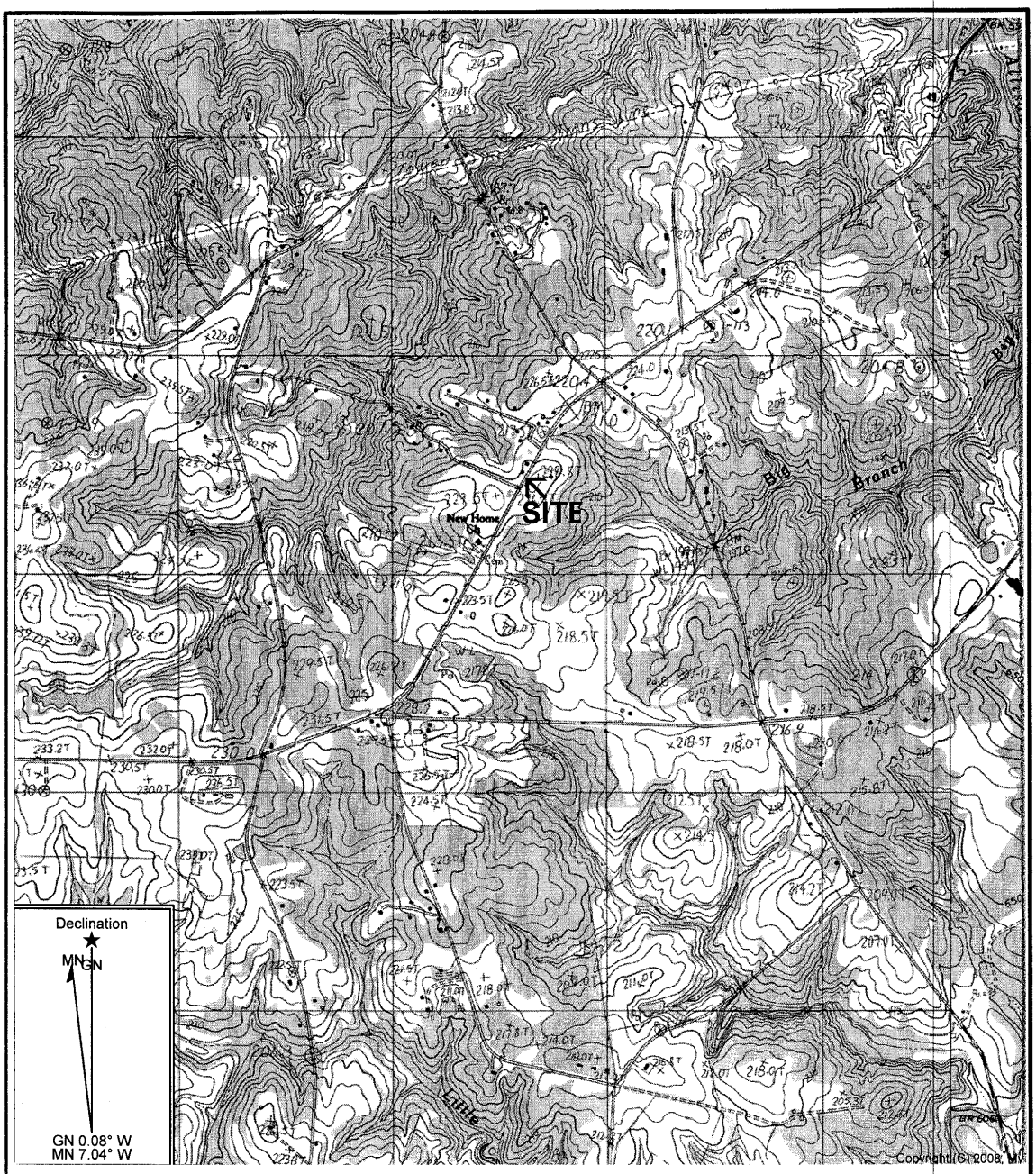
1. µg/l = micrograms per liter
2. NS = Not Sampled
3. DRY = Well Dry at the time of Sampling
4. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

TABLE 3
PAGE 2 OF 2
GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
OCTOBER 26 AND 27, 2010 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 10-3035
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	tert-Amyl alcohol (µg/l)	tert-Amyl methyl ether (µg/l)	3,3-Dimethyl-1-butanol (µg/l)	tert Butyl Alcohol (µg/l)	tert-Butyl Formate (µg/l)	Diisopropyl ether (µg/l)	Ethanol (µg/l)	Ethyl tert-butyl ether (µg/l)
MW-16	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-17	10/26/10	**90.5J**	<10.0	<100	<100	<50.0	**14.5**	<200	<10.0
MW-18	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-19	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-20	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
IW-9	10/26/10	**168J**	<20.0	<200	<200	<100	**8.2J**	<400	<20.0
TW-1	10/26/10	<5,000	<500	<5,000	<5,000	<2,500	**166J**	<10,000	<500
TW-2	10/26/10	**6,670J**	<1,000	<10,000	<10,000	<5,000	**541**	<20,000	<1,000
TW-3	10/26/10	**138**	<10.0	<100	<100	<50.0	**14.4**	<200	<10.0
WSW-Crock	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
WSW-Hill (Pre)	10/26/10	**66.4J**	<10.0	<100	<100	<50.0	**7.8**	<200	<10.0
WSW-Hill (Post)	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
WSW-Smith	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
WSW-Swift (Pre)	10/26/10	**506**	<10.0	<100	<100	<50.0	**42.0**	<200	<10.0
WSW-Swift (Post)	10/26/10	**395**	<10.0	**124**	<100	<50.0	**25.5**	<200	<10.0

Notes:
1. µg/l = micrograms per liter
2. NS = Not Sampled
3. DRY = Well Dry at the time of Sampling
4. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

FIGURES



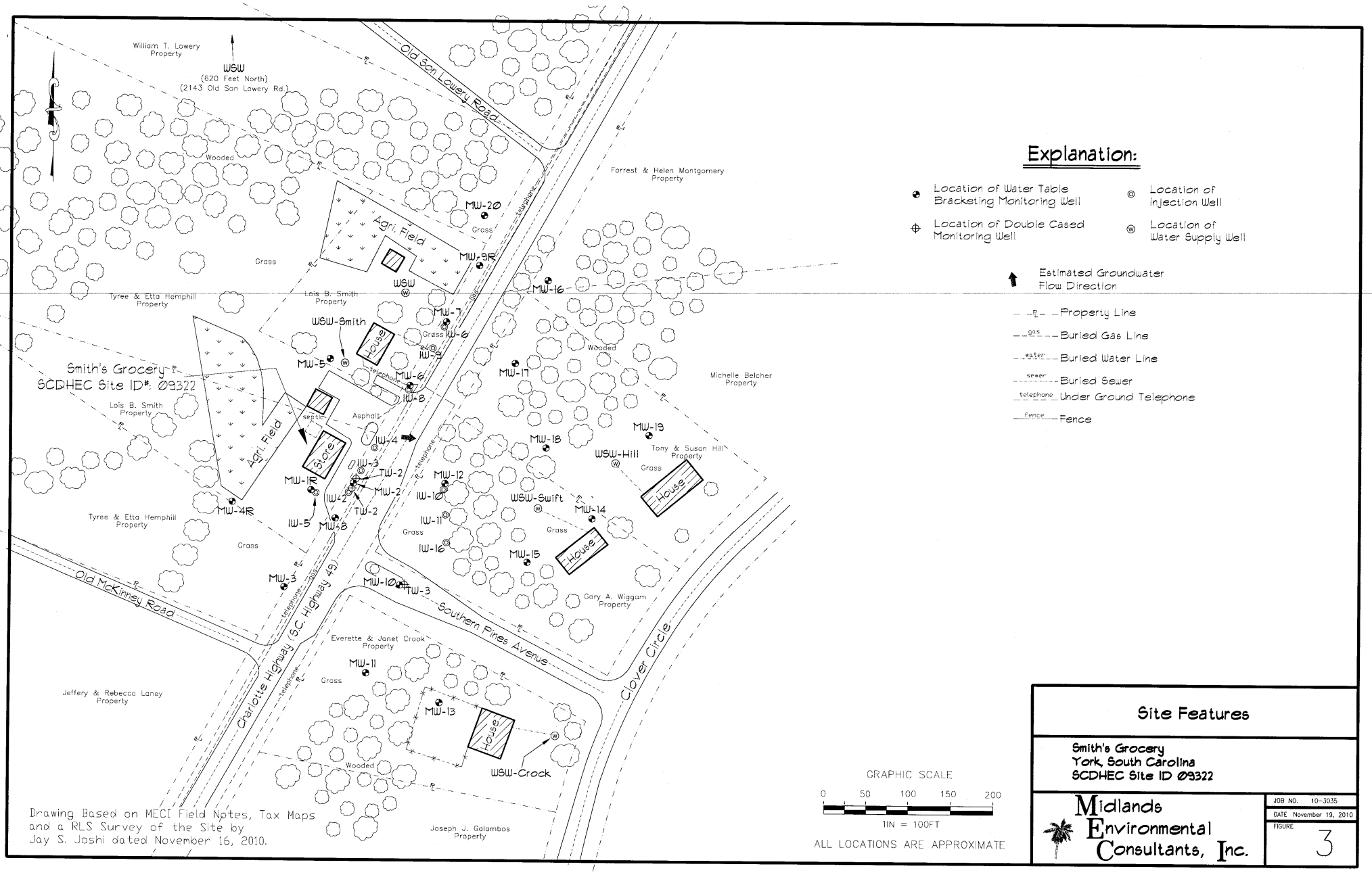
GRAPHIC SCALE

0 1000 2000 4000

1IN = 2000FT

Reference: Clover, South Carolina
USGS 7.5 Min. Quad
Countour Interval – 3 Meters

Midlands Environmental Consultants, Inc.	Site Location
Smith's Grocery S.C. Highway 49, Clover, SC SCDHEC Site ID# 09322	
Figure 1	MECI 10-3035

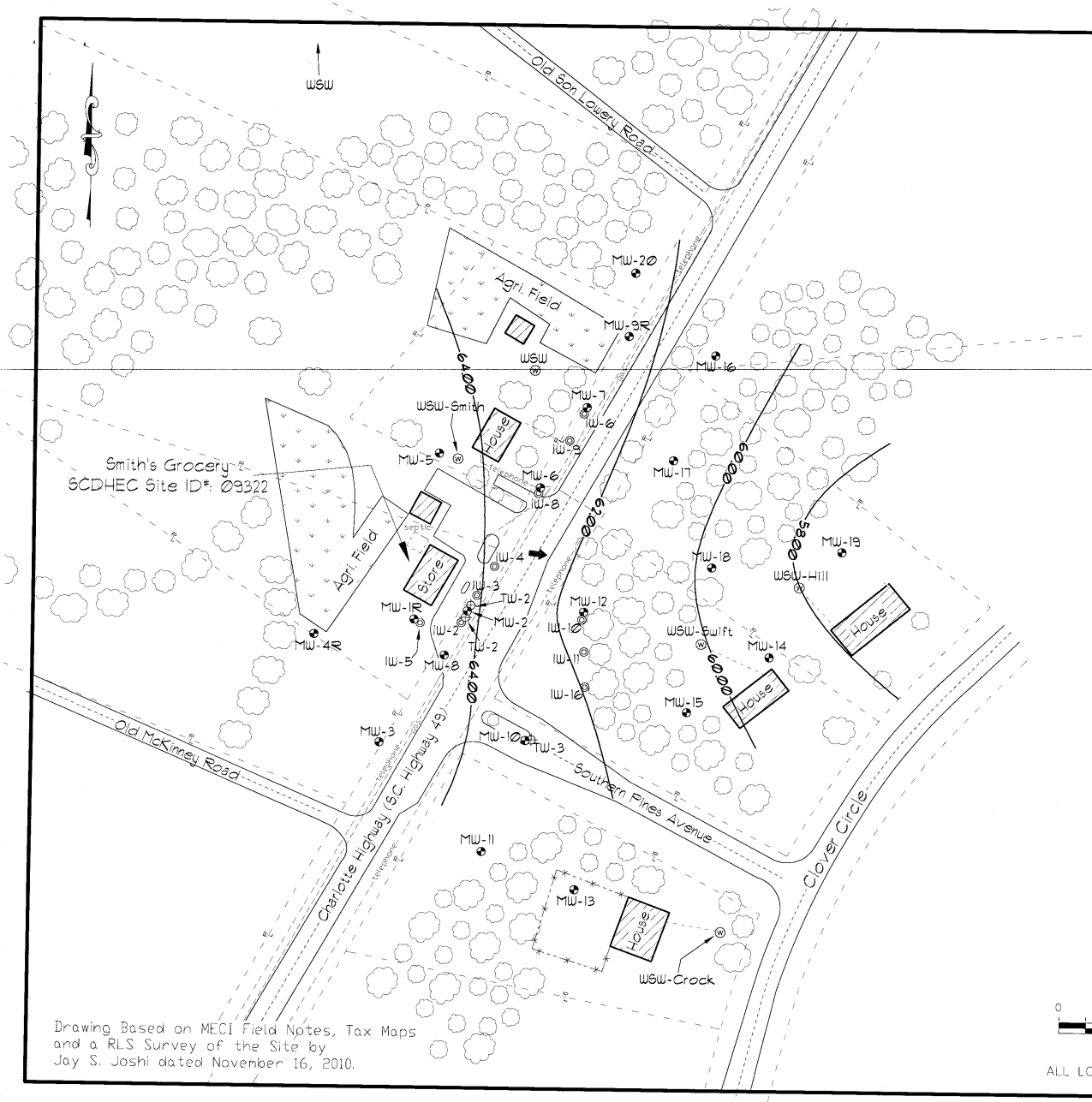


Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 10-3035
DATE November 19, 2010
FIGURE 3



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Groundwater Elevation Contour (feet)

Groundwater Elevation Data

Well #	Screened Interval (ft)	Depth to Water (ft)	Well Head Elevation	Groundwater Elevation
MW-1R	29-39	32.33	96.56	64.23
MW-2	23-38	35.45	99.67	64.22
MW-3	25-35	32.59	97.10	64.51
MW-4R	24-34	28.38	92.55	64.17
MW-5	20-30	29.84	94.36	64.52
MW-6	27-37	35.57	98.93	63.36
MW-7	21-36	34.19	96.71	62.52
MW-8	23-38	35.94	100.14	64.20
MW-9R	28-38	32.50	94.95	62.45
MW-10	29-44	41.12	104.83	63.71
MW-11	29-44	31.95	105.51	73.56
MW-12	29-44	43.45	104.56	61.11
MW-13	32-47	NS	105.35	NS
MW-14	35-50	44.51	103.95	59.44
MW-15	35-50	DRY	105.28	DRY
MW-16	22-37	33.81	95.06	61.25
MW-17	25-40	38.27	99.52	61.25
MW-18	31-46	43.79	103.17	59.38
MW-19	35-50	46.65	103.32	56.67
MW-20	20-35	30.84	93.39	62.55
IW-9	Unknown	34.55	98.87	64.32
TW-1	56-61	35.30	99.79	64.49
TW-2	86-88	35.72	99.79	64.07
TW-3	66-71	40.38	104.17	63.79

Notes: Depth to groundwater measured on October 26 & 27, 2010.

Contour Interval = 2.00 Foot

Site Datum Based on Assumed Spot Elevation.

TW-1, TW-2, TW-3, MW-11, and IW-9 not used in contouring.

Groundwater Contours Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

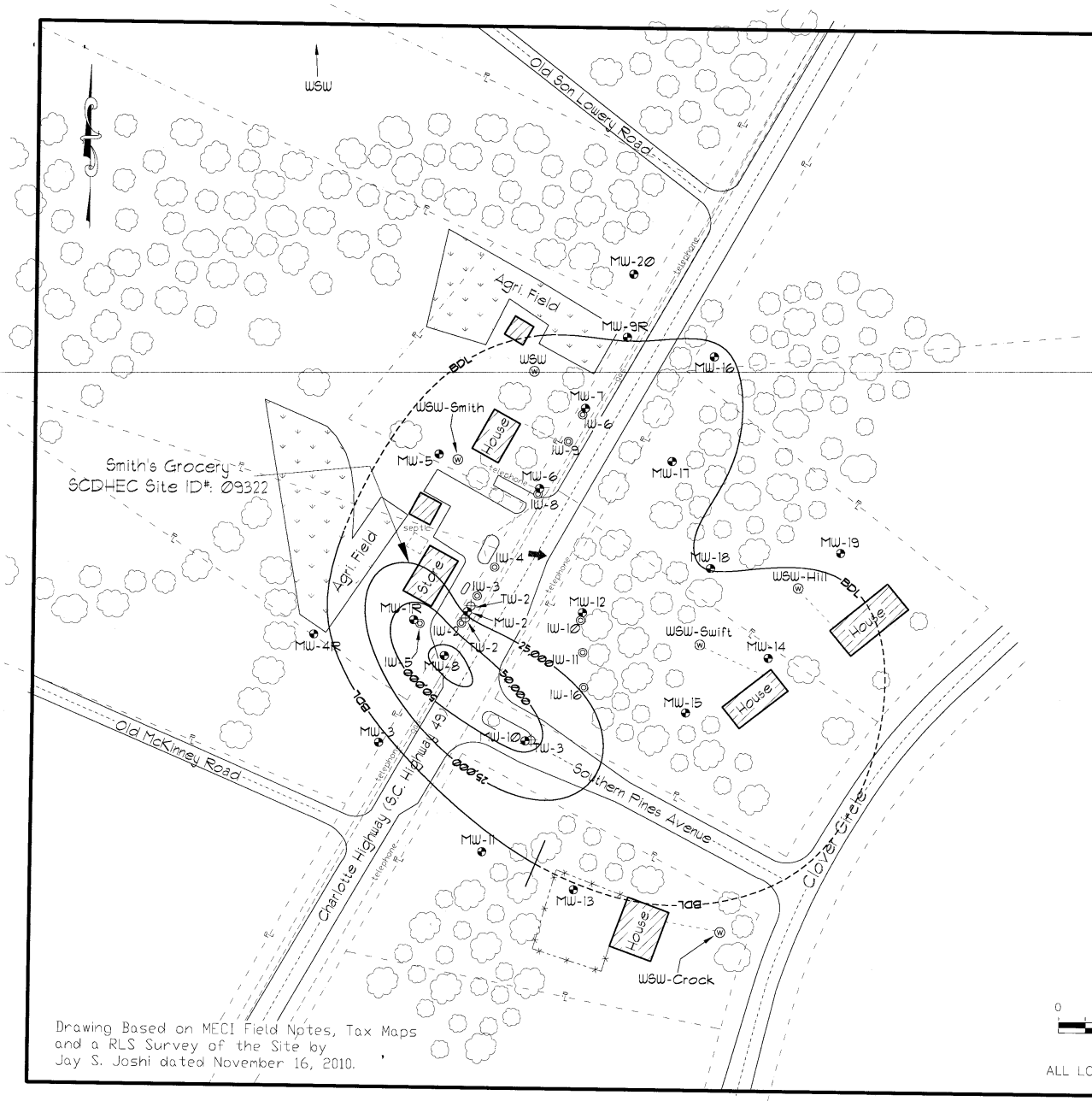
ALL LOCATIONS ARE APPROXIMATE

Groundwater Contour Map

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 10-3035
DATE November 19, 2010
FIGURE 4



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Watertable Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Total BTEX Concentration Isopleth (ug/l)

COC Concentration Data

Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
MW-1R	7,360	30,200	5,060	28,800	71,420	4.3J	1,190J	26.3	18.3
MW-2	2,860	3,630	390	3,710	10,590	79.5J	110	112	15.1
MW-3	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-4R	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-5	<5.0	101	1.9J	11.5	114.4J	<5.0	3.5J	<5.0	<0.020
MW-6	18.2	2.2J	14.8	74.4	109.6J	<5.0	5.6	<5.0	0.13
MW-7	<250	875	2,120	21,500	24,495	<250	1,150	<250	1.1
MW-8	10,100	37,700	4,420	26,100	78,320	<500	866	<500	29.2
MW-9R	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-10	6,280	17,700	5,220	26,000	55,200	<250	813	112J	48.9
MW-11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.19
MW-12	1,870	24.0	479	838	3,211.0	<5.0	112	38.8	0.95
MW-13	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-14	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-15	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	4.1J	<5.0	<5.0	<10.0	4.1J	<5.0	3.2J	<5.0	<0.019
MW-17	250	<5.0	<5.0	45.5	295.5	2.1J	8.7	<5.0	0.046
MW-18	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-19	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-20	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
IW-9	505	562	1,250	5,110	7,427	5.8J	335	<10.0	0.39
TW-1	8,720	293	2,370	11,900	23,283	<250	559	<250	20.6
TW-2	12,900	17,400	1,930	9,830	42,060	217J	624	<500	0.062
TW-3	152	12.9	<5.0	20.5	185.4	<5.0	5.2	3.6J	1.4
WSW-Crock	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	0.039
WSW-Hill(Pre)	14.0	<5.0	<5.0	<10.0	14.0	<5.0	<5.0	1.6J	0.33
WSW-Hill(Post)	2.4J	<5.0	<5.0	<10.0	2.4J	<5.0	<5.0	1.3J	0.034
WSW-Smith	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
WSW-Swift(Pre)	288	<5.0	<5.0	67.6	355.6	<5.0	11.8	23.5	1.3
WSW-Swift(Post)	157	<5.0	1.6J	46.7	205.3J	3.0J	13.6	12.5	0.60

Notes: Groundwater samples collected on October 26 & 27, 2010.

Concentration Isopleth Interval = 25,000 ug/l

BDL = Below Detection Limits

"J" Values included in Total BTEX Calculations

Concentration Isopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Total BTEX Isopleth Map

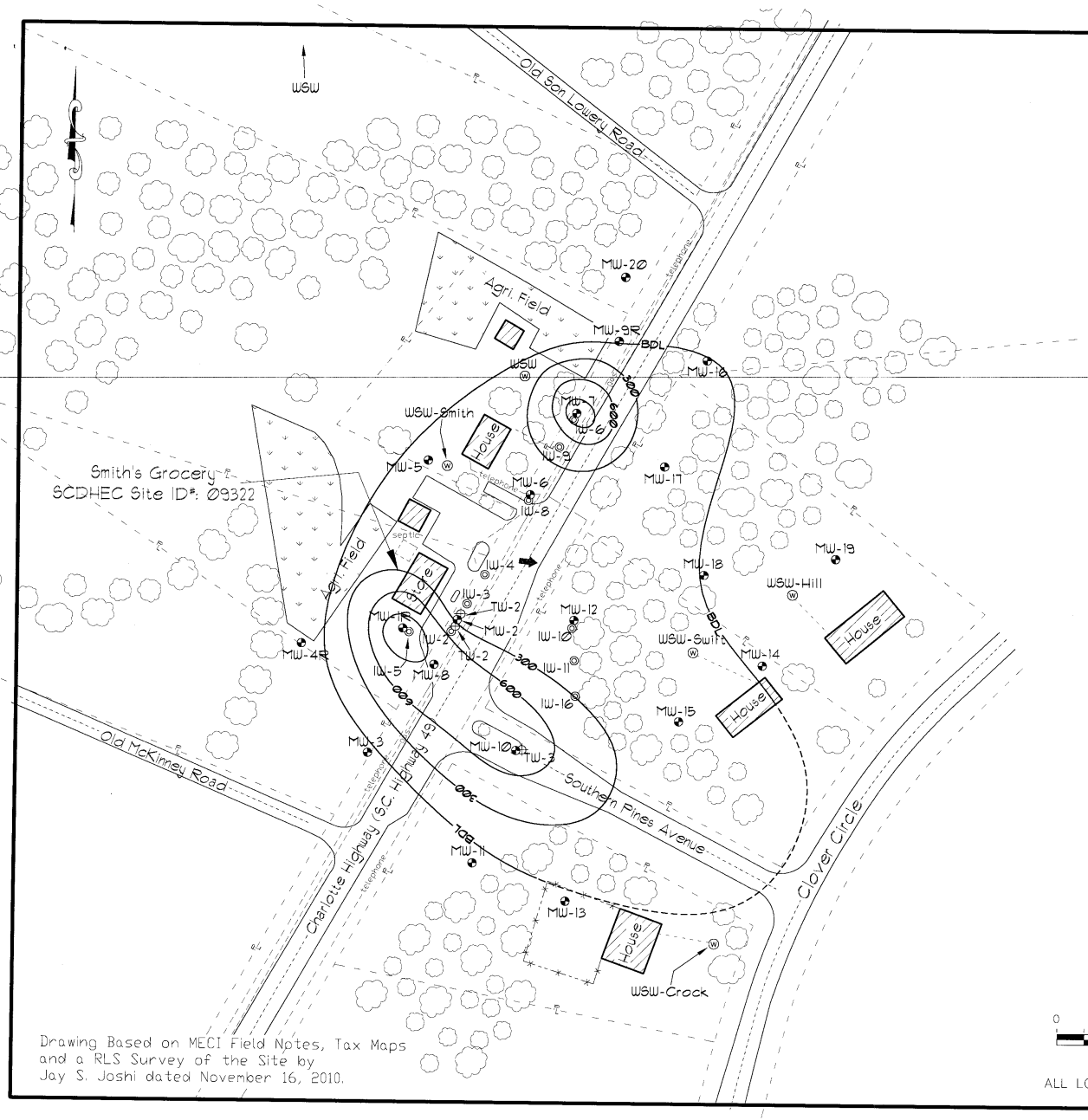
Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 10-3035

DATE November 19, 2010

FIGURE 5



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Watertable Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Naphthalene Concentration Isopleth (ug/l)

COC Concentration Data

Sample *	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	12 DCA (ug/l)	EDB (ug/l)
MW-1R	7,360	30,200	5,060	28,800	71,420	4.3J	1,190J	26.3	18.3
MW-2	2,860	3,630	390	3,710	10,590	79.5J	110	112	15.1
MW-3	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-4R	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-5	<5.0	101	1.9J	11.5	114.4J	<5.0	3.5J	<5.0	<0.020
MW-6	18.2	2.2J	14.8	74.4	109.6J	<5.0	5.6	<5.0	0.13
MW-7	<250	875	2,120	21,500	24,495	<250	1,150	<250	1.1
MW-8	10,100	37,700	4,420	26,100	78,320	<500	866	<500	29.2
MW-9R	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-10	6,280	17,700	5,220	26,000	55,200	<250	813	112J	48.9
MW-11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.19
MW-12	1,870	24.0	479	838	3,211.0	<5.0	112	38.8	0.95
MW-13	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-14	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-15	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	4.1J	<5.0	<5.0	<10.0	4.1J	<5.0	3.2J	<5.0	<0.019
MW-17	250	<5.0	<5.0	45.5	295.5	2.1J	8.7	<5.0	0.046
MW-18	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-19	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-20	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
IW-9	505	562	1,250	5,110	7,427	5.8J	335	<10.0	0.39
TW-1	8,720	293	2,370	11,900	23,283	<250	559	<250	20.6
TW-2	12,900	17,400	1,930	9,830	42,060	217J	624	<500	0.062
TW-3	152	12.9	<5.0	20.5	185.4	<5.0	5.2	3.6J	1.4
WSW-Crock	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	0.039
WSW-Hill(Pre)	14.0	<5.0	<5.0	<10.0	14.0	<5.0	<5.0	1.6J	0.33
WSW-Hill(Post)	2.4J	<5.0	<5.0	<10.0	2.4J	<5.0	<5.0	1.3J	0.034
WSW-Smith	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
WSW-Swift(Pre)	288	<5.0	<5.0	67.6	355.6	<5.0	11.8	23.5	1.3
WSW-Swift(Post)	157	<5.0	1.6J	46.7	205.3J	3.0J	13.6	12.5	0.60

Notes: Groundwater samples collected on October 26 & 27, 2010.

Concentration Isopleth Interval = 300 ug/l

BDL = Below Detection Limits

"J" Values included in Total BTEX Calculations

Concentration Isopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

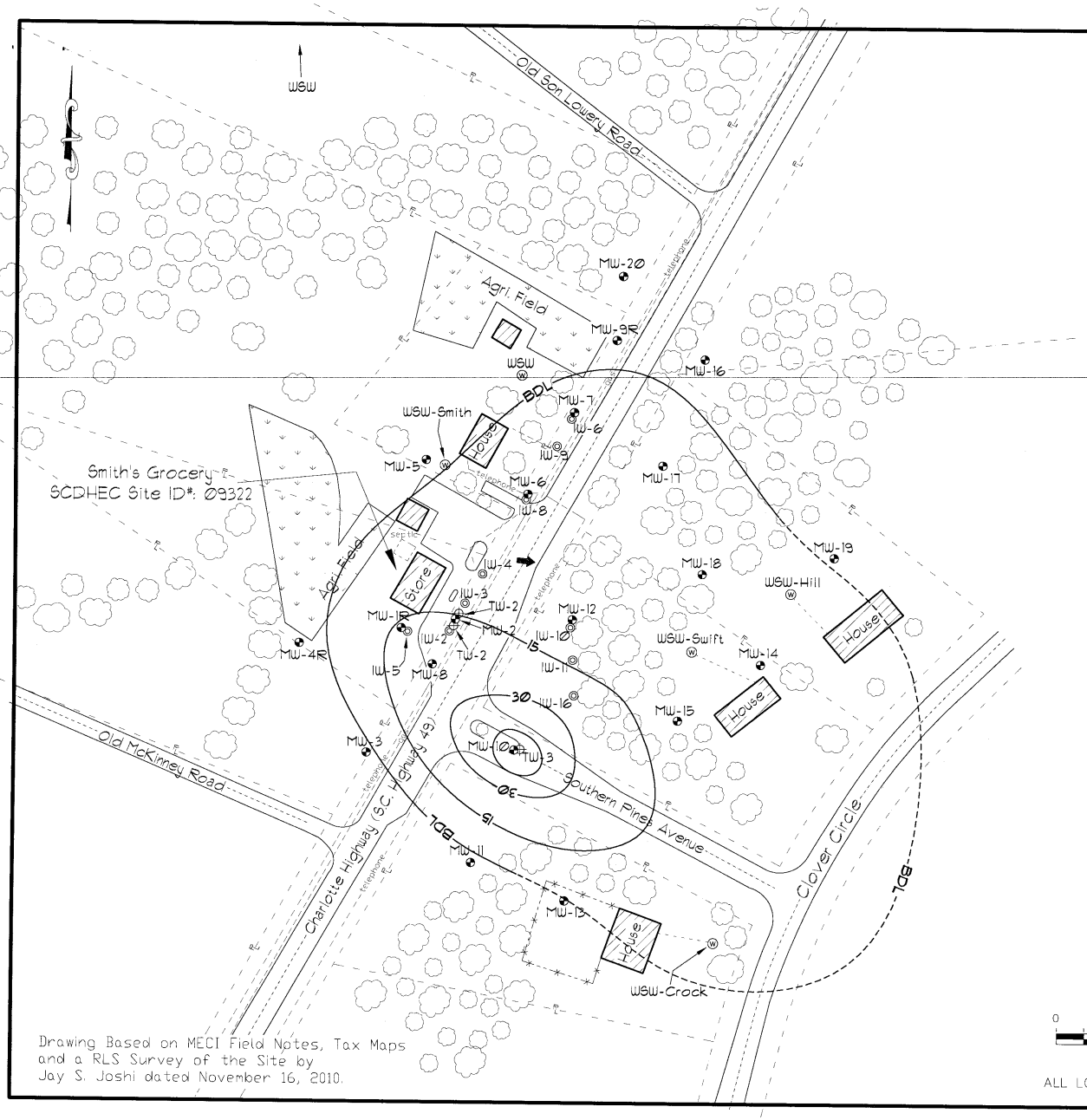
ALL LOCATIONS ARE APPROXIMATE

Naphthalene Isopleth Map

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 10-3035
DATE November 19, 2010
FIGURE 6



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Watertable Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- EDB Concentration Isopleth (ug/l)

COC Concentration Data

Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	MTBE (ug/l)	Napthalene (ug/l)	12 DCA (ug/l)	EDB (ug/l)
MW-1R	7,360	30,200	5,060	28,800	71,420	4.3J	1,190J	26.3	18.3
MW-2	2,860	3,630	390	3,710	10,590	79.5J	110	112	15.1
MW-3	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-4R	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-5	<5.0	101	1.9J	11.5	114.4J	<5.0	3.5J	<5.0	<0.020
MW-6	18.2	2.2J	14.8	74.4	109.6J	<5.0	5.6	<5.0	0.13
MW-7	<250	875	2,120	21,500	24,495	<250	1,150	<250	1.1
MW-8	10,100	37,700	4,420	26,100	78,320	<500	866	<500	29.2
MW-9R	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-10	6,280	17,700	5,220	26,000	55,200	<250	813	112J	48.9
MW-11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.19
MW-12	1,870	24.0	479	838	3,211.0	<5.0	112	38.8	0.95
MW-13	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-14	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-15	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	4.1J	<5.0	<5.0	<10.0	4.1J	<5.0	3.2J	<5.0	<0.019
MW-17	250	<5.0	<5.0	45.5	295.5	2.1J	8.7	<5.0	0.046
MW-18	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-19	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-20	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
IW-9	505	562	1,250	5,110	7,427	5.8J	335	<10.0	0.39
TW-1	8,720	293	2,370	11,900	23,283	<250	559	<250	20.6
TW-2	12,900	17,400	1,930	9,830	42,060	217J	624	<500	0.062
TW-3	152	12.9	<5.0	20.5	185.4	<5.0	5.2	3.6J	1.4
WSW-Crock	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	0.039
WSW-Hill(Pre)	14.0	<5.0	<5.0	<10.0	14.0	<5.0	<5.0	1.6J	0.33
WSW-Hill(Post)	2.4J	<5.0	<5.0	<10.0	2.4J	<5.0	<5.0	1.3J	0.034
WSW-Smith	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
WSW-Swift(Pre)	288	<5.0	<5.0	67.6	355.6	<5.0	11.8	23.5	1.3
WSW-Swift(Post)	157	<5.0	1.6J	46.7	205.3J	3.0J	13.6	12.5	0.60

Notes: Groundwater samples collected on October 26 & 27, 2010.

Concentration Isopleth Interval = 15 ug/l

BDL = Below Detection Limits

"J" Values included in Total BTEX Calculations

Concentration Isopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

EDB Isopleth Map

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

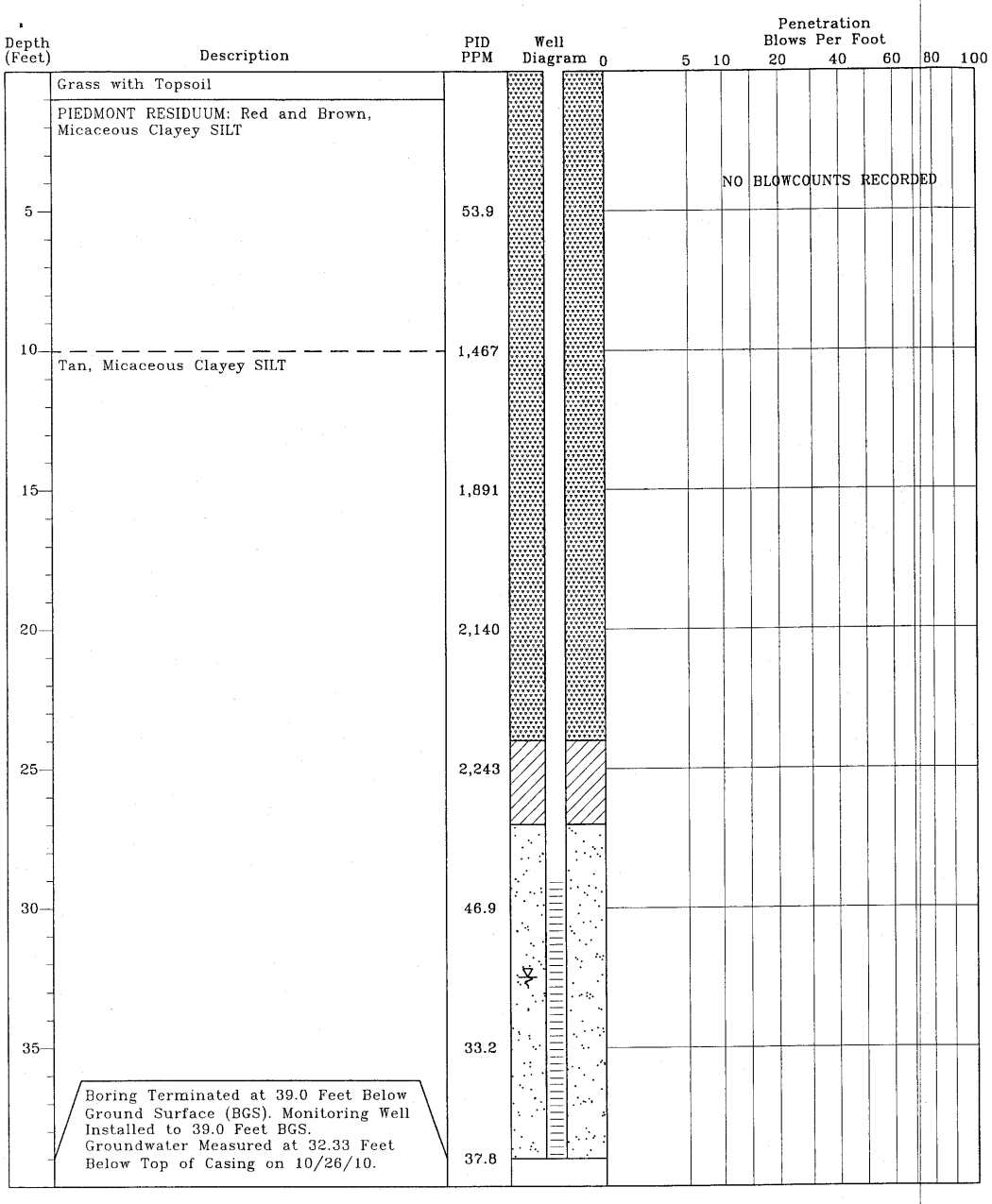
Midlands Environmental Consultants, Inc.

JOB NO. 10-3035

DATE November 19, 2010

FIGURE 7

TEST BORING AND MONITORING WELL INSTALLATION RECORDS



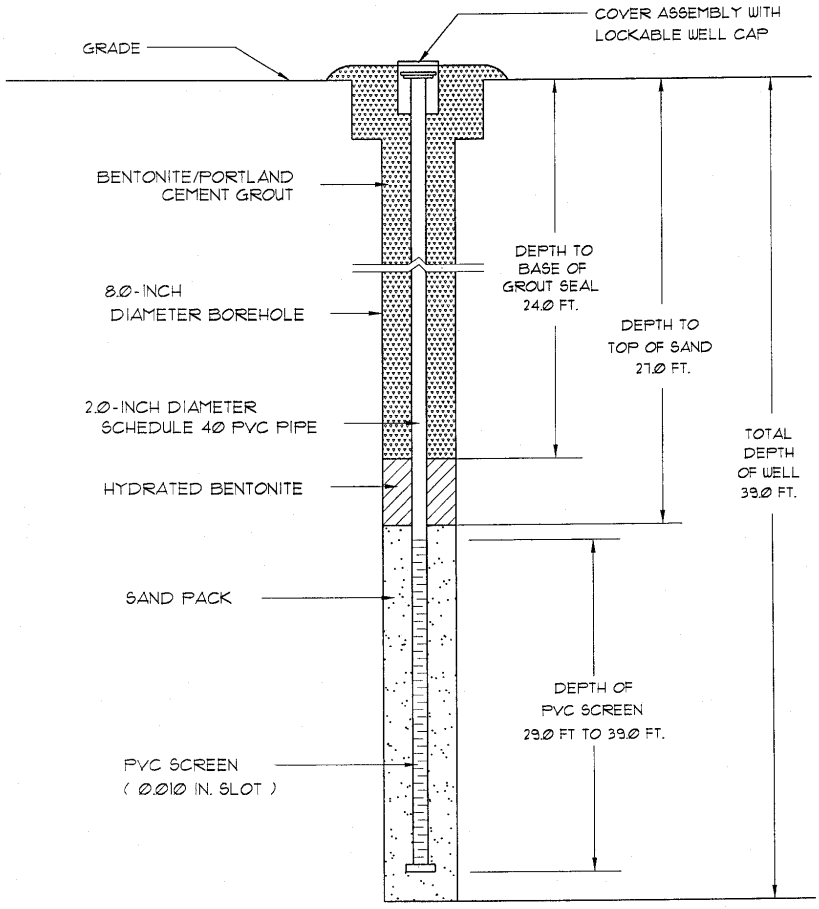
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID* 09322
MECI Project Number 10-3035

Boring Number:	MW-1R
Date Drilled:	10/22/10
Drilled By:	Geologic Exploration Inc.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

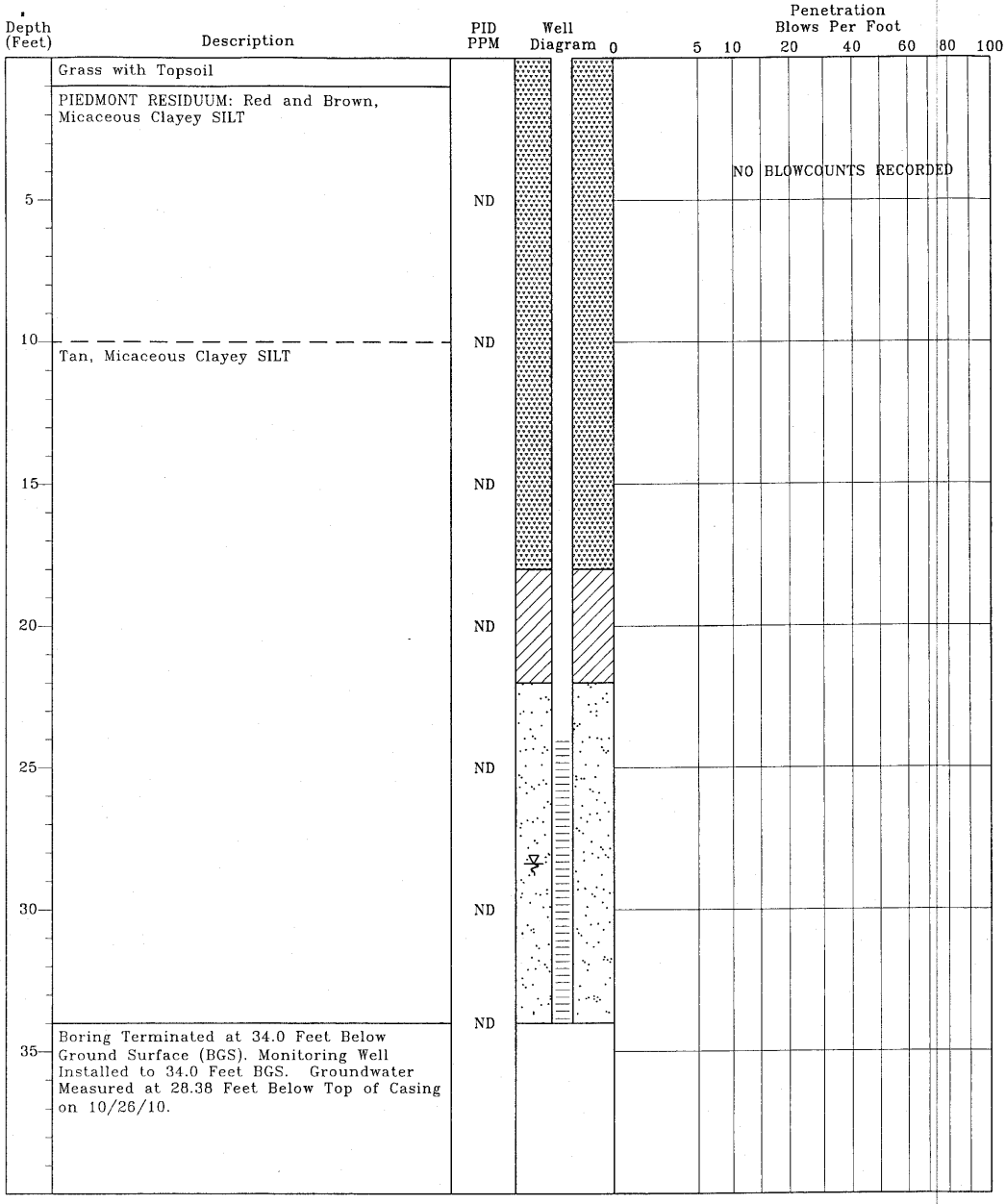
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 10-3035



Well Number:	MW-1R
Date Drilled:	10/22/10
Drilled By:	Geologic Exploration Inc.
Driller: B. Thomas	S.C. I.D. #: B 01465
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



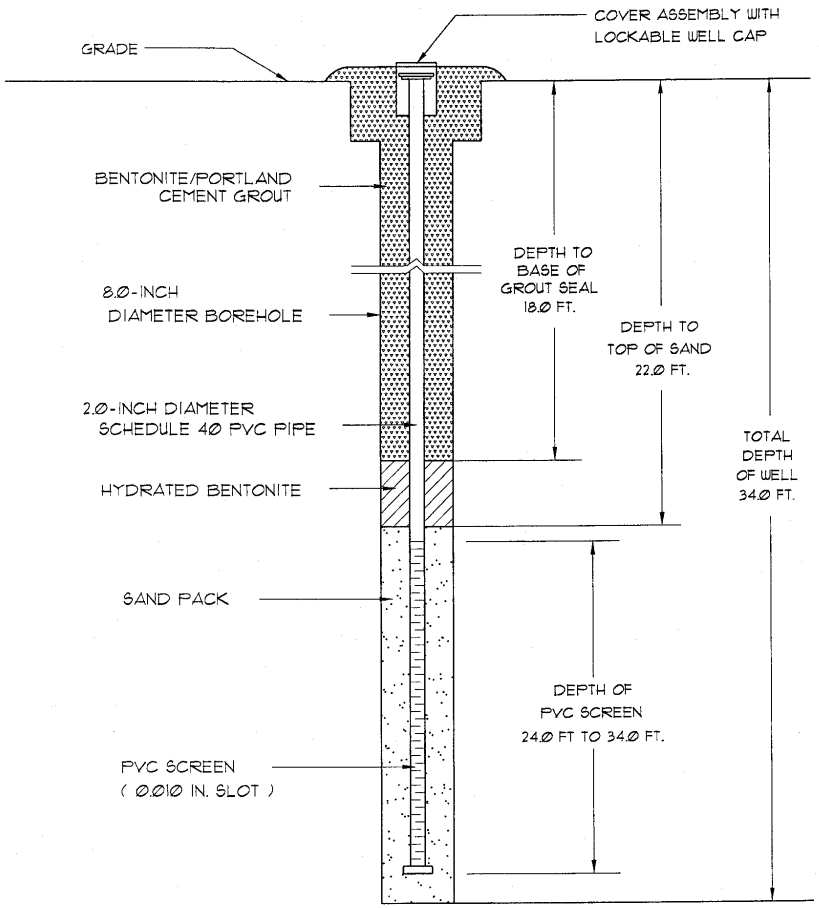
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 10-3035

Boring Number:	MW-4R
Date Drilled:	10/22/10
Drilled By:	Geologic Exploration Inc.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

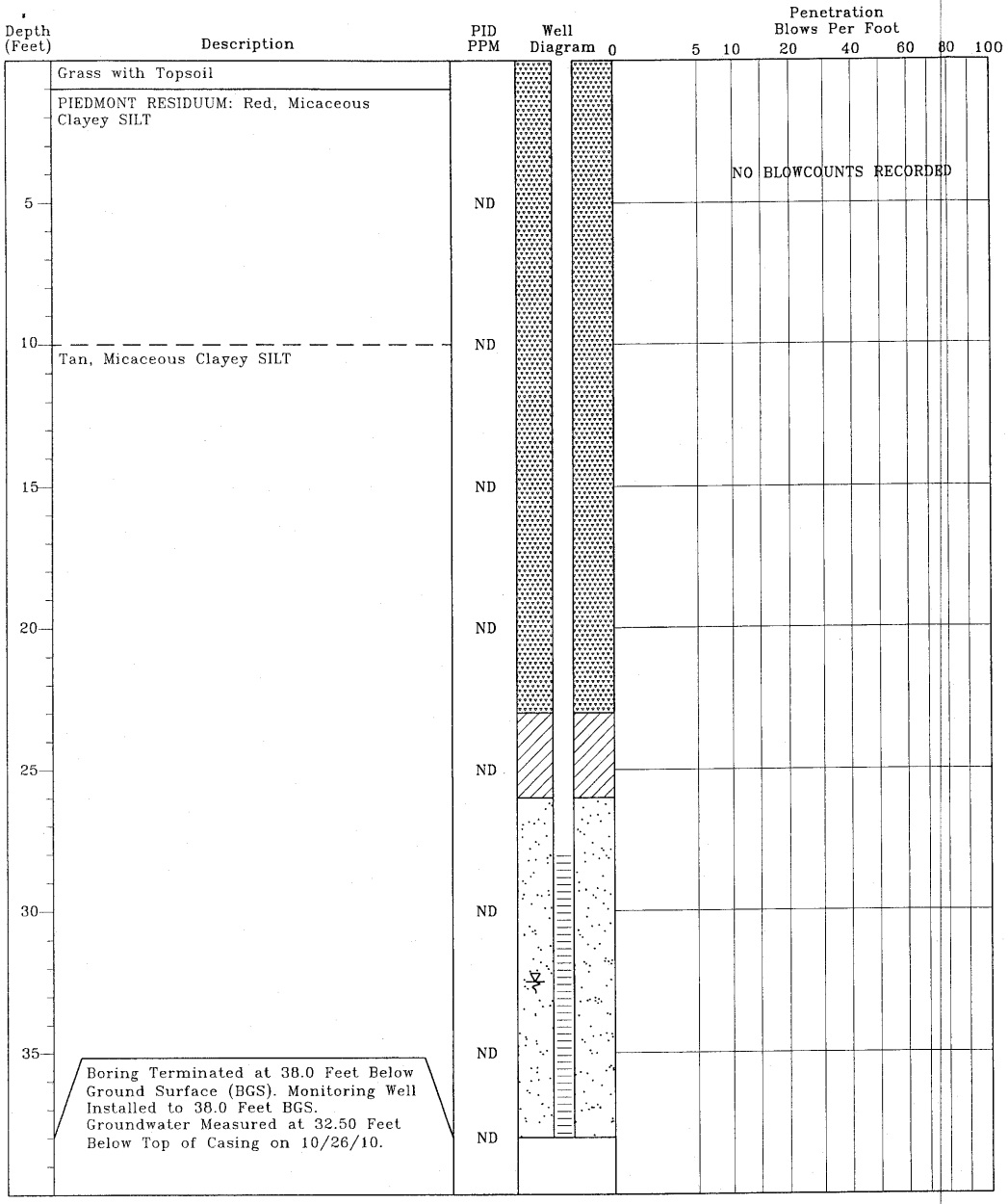
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 10-3035



Well Number:	MW-4R
Date Drilled:	10/22/10
Drilled By:	Geologic Exploration Inc.
Driller: B. Thomas	S.C. I.D. #: B 01465
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



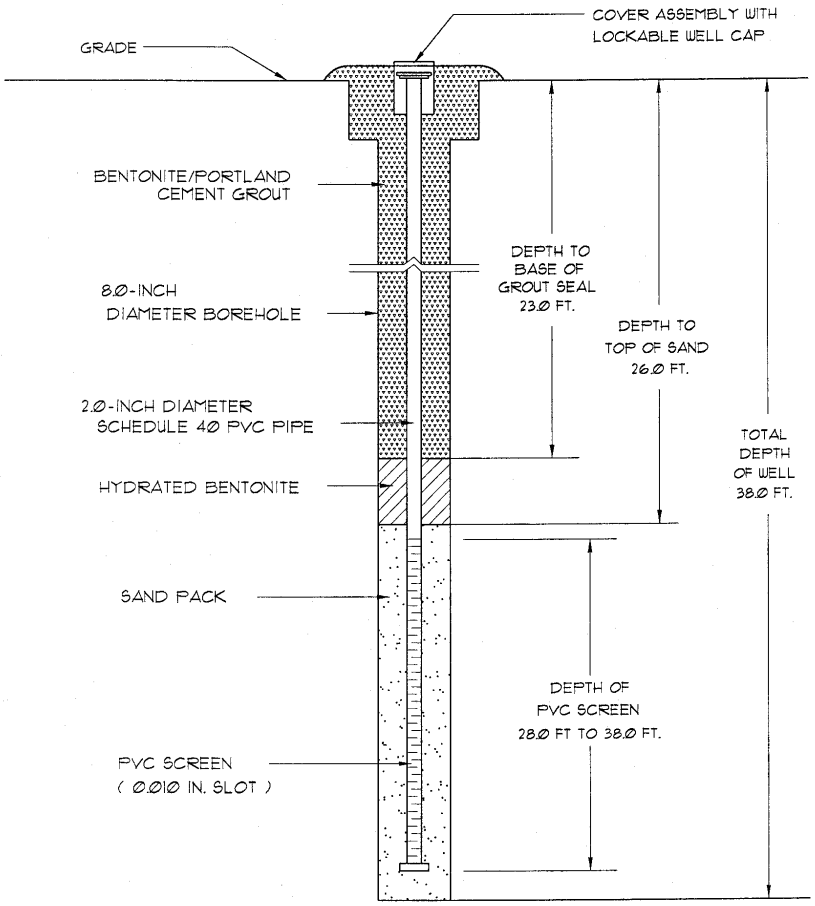
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 10-3035

Boring Number:	MW-9R
Date Drilled:	10/22/10
Drilled By:	Geologic Exploration Inc.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 10-3035



Well Number:	MW-9R
Date Drilled:	10/22/10
Drilled By:	Geologic Exploration Inc.
Driller: B. Thomas	S.C. I.D. #: B 01465
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SMITH, LOIS (last) (first)
Address: 3176 CHARLOTTE HIGHWAY
City: YORK State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL: SC **COUNTY:** YORK
Name: SMITH'S GROCERY
Street Address: SOUTHERN PINES AVENUE
City: YORK Zip: 29745
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
RED SILTY CLAY	6.0	6.0
TAN SILTY CLAY	11.0	17.0
BROWN SILTY CLAY	11.0	28.0
TAN SAND	11.0	39.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-1R BENTONITE SEAL FROM 24.0 TO 27.0 FT.

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other AUGER

7. PERMIT NUMBER: 09322

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 10/22/10
39.0 ft. Date Completed: 10/22/10

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2 INCH
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 29.0 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☐
Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: SCH 40 PVC Diam.: 2 INCH
Slot/Gauge: .010 Length: 10.0 FEET
Set Between: 29.0 ft. and 39.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 34.0 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 27.0 ft. to 39.0 ft.
Effective size 1.43 Uniformity Coefficient 1.30

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 24.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not Installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: BRIAN THOMAS **CERT. NO.:** 01465
Address: (Print) 176 COMMERCE BLVD
STATESVILLE, NC 28625
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 704-872-7686 Fax No.: 704-872-0248

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Brian Thomas Date: 10/28/10
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SMITH, LOIS (last) (first)
Address: 3176 CHARLOTTE HIGHWAY
City: YORK State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL: SC COUNTY: YORK
Name: SMITH'S GROCERY
Street Address: SOUTHERN PINES AVENUE
City: YORK Zip: 29745
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
RED SILTY CLAY	6.0	6.0
TAN SILTY CLAY	11.0	17.0
BROWN SILTY CLAY	11.0	28.0
TAN SAND	6.0	34.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-4R BENTONITE SEAL FROM 18.0 TO 22.0 FT.

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other AUGER

7. PERMIT NUMBER: 09322

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 34.0 ft. Date Started: 10/22/10 Date Completed: 10/22/10

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2 INCH
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 24.0 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☐
Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: SCH 40 PVC Diam.: 2 INCH
Slot/Gauge: .010 Length: 10.0 FEET
Set Between: 24.0 ft. and 34.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 27.0 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 22.0 ft. to 34.0 ft.
Effective size 1.43 Uniformity Coefficient 1.30

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 18.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: BRIAN THOMAS CERT. NO.: 01465
Address: (Print) 176 COMMERCE BLVD
STATESVILLE, NC 28625
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 704-872-7686 Fax No.: 704-872-0248

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Brian Thomas Date: 10/28/10
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SMITH, LOIS (last) (first)
Address: 3176 CHARLOTTE HIGHWAY
City: YORK State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL: SC **COUNTY:** YORK
Name: SMITH'S GROCERY
Street Address: SOUTHERN PINES AVENUE
City: YORK Zip: 29745
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
RED SILTY CLAY	6.0	6.0
TAN SILTY CLAY	11.0	17.0
BROWN SILTY CLAY	11.0	28.0
TAN SAND	10.0	38.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-9R BENTONITE SEAL FROM 23.0 TO 26.0 FT.

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other AUGER

7. PERMIT NUMBER: 09322

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 38.0 ft. Date Started: 10/22/10 Date Completed: 10/22/10

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2 INCH
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 28.0 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☐
Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: SCH 40 PVC Diam.: 2 INCH
Slot/Gauge: .010 Length: 10.0 FEET
Set Between: 28.0 ft. and 38.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 33.0 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 26.0 ft. to 38.0 ft.
Effective size 1.43 Uniformity Coefficient 1.30

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 23.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: BRIAN THOMAS **CERT. NO.:** 01465
Address: (Print) 176 COMMERCE BLVD
STATESVILLE, NC 28625
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 704-872-7686 Fax No.: 704-872-0248

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: Brian Thomas Well Driller Date: 10/28/10

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

ANALYTICAL RESULTS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

November 03, 2010

Mr. Bryan Shane
Midlands Environmental
PO Box 854
Lexington, SC 29071

RE: Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Dear Mr. Shane:
Enclosed are the analytical results for sample(s) received by the laboratory between October 27, 2010 and October 28, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Renee Spencer

Renee Spencer

renee.spencer@pacelabs.com
Project Manager

Enclosures

cc: Mr. Jeff Coleman, Midlands Environmental

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Charlotte Certification IDs
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
Pennsylvania Certification #: 68-00784
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Virginia Certification #: 00213
Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DHH Drinking Water # LA 100031
West Virginia Certification #: 357

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9280772001	MW-1R	Water	10/26/10 11:10	10/27/10 15:45
9280772002	MW-2	Water	10/26/10 09:50	10/27/10 15:45
9280772003	MW-3	Water	10/26/10 10:15	10/27/10 15:45
9280772004	MW-4R	Water	10/26/10 11:20	10/27/10 15:45
9280772005	MW-5	Water	10/26/10 12:05	10/27/10 15:45
9280772006	MW-6	Water	10/26/10 12:15	10/27/10 15:45
9280772007	IW-9	Water	10/26/10 12:20	10/27/10 15:45
9280772008	MW-8	Water	10/26/10 10:35	10/27/10 15:45
9280772009	MW-7	Water	10/26/10 12:35	10/27/10 15:45
9280772010	MW-11	Water	10/26/10 14:30	10/27/10 15:45
9280772011	MW-12	Water	10/26/10 14:20	10/27/10 15:45
9280772012	MW-14	Water	10/26/10 16:05	10/27/10 15:45
9280772013	MW-16	Water	10/26/10 13:50	10/27/10 15:45
9280772014	MW-17	Water	10/26/10 14:00	10/27/10 15:45
9280772015	MW-18	Water	10/26/10 16:00	10/27/10 15:45
9280772016	MW-19	Water	10/26/10 16:05	10/27/10 15:45
9280772017	MW-9R	Water	10/26/10 13:21	10/27/10 15:45
9280772018	TW-1	Water	10/26/10 10:52	10/27/10 15:45
9280772019	TW-2	Water	10/26/10 10:25	10/27/10 15:45
9280772020	TW-3	Water	10/26/10 14:55	10/27/10 15:45
9280772021	MW-20VN	Water	10/26/10 13:30	10/27/10 15:45
9280772022	WSW-SMITH	Water	10/26/10 12:05	10/27/10 15:45
9280772023	WSW-CROCK	Water	10/26/10 15:00	10/27/10 15:45
9280772024	WSW-SWIFT (PRE)	Water	10/26/10 15:25	10/27/10 15:45
9280772025	WSW-SWIFT (POST)	Water	10/26/10 15:20	10/27/10 15:45
9280772026	WSW-HILL (PRE)	Water	10/26/10 15:40	10/27/10 15:45
9280772027	WSW-HILL (POST)	Water	10/26/10 15:45	10/27/10 15:45
9280772028	MW-10	Water	10/27/10 12:00	10/28/10 15:05

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Lab ID	Sample ID	Method	Analysts	Analytes Reported
9280772001	MW-1R	EPA 8011	RES	2
		EPA 8260	MCK	21
9280772002	MW-2	EPA 8011	RES	2
		EPA 8260	MCK	21
9280772003	MW-3	EPA 8011	RES	2
		EPA 8260	MCK	21
9280772004	MW-4R	EPA 8011	RES	2
		EPA 8260	MCK	21
9280772005	MW-5	EPA 8011	RES	2
		EPA 8260	MCK	21
9280772006	MW-6	EPA 8011	RES	2
		EPA 8260	KJM	21
9280772007	IW-9	EPA 8011	RES	2
		EPA 8260	KJM, MCK	21
9280772008	MW-8	EPA 8011	RES	2
		EPA 8260	KJM	21
9280772009	MW-7	EPA 8011	RES	2
		EPA 8260	KJM	21
9280772010	MW-11	EPA 8011	CAH	2
		EPA 8260	KJM	21
9280772011	MW-12	EPA 8011	CAH	2
		EPA 8260	KJM	21
9280772012	MW-14	EPA 8011	CAH	2
		EPA 8260	KJM	21
9280772013	MW-16	EPA 8011	CAH	2
		EPA 8260	KJM	21
9280772014	MW-17	EPA 8011	CAH	2
		EPA 8260	KJM	21
9280772015	MW-18	EPA 8011	CAH	2
		EPA 8260	KJM	21
9280772016	MW-19	EPA 8011	CAH	2
		EPA 8260	KJM	21
9280772017	MW-9R	EPA 8011	CAH	2
		EPA 8260	KJM	21
9280772018	TW-1	EPA 8011	RES	2
		EPA 8260	KJM	21
9280772019	TW-2	EPA 8011	CAH	2

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 8260	KJM	21
9280772020	TW-3	EPA 8011	RES	2
		EPA 8260	KJM	21
9280772021	MW-20 N	EPA 8011	CAH	2
		EPA 8260	KJM	21
9280772022	WSW-SMITH	EPA 8011	CAH	2
		EPA 8260	KJM	21
9280772023	WSW-CROCK	EPA 8011	CAH	2
		EPA 8260	KJM	21
9280772024	WSW-SWIFT (PRE)	EPA 8011	RES	2
		EPA 8260	KJM	21
9280772025	WSW-SWIFT (POST)	EPA 8011	CAH	2
		EPA 8260	MCK	21
9280772026	WSW-HILL (PRE)	EPA 8011	CAH	2
		EPA 8260	KJM	21
9280772027	WSW-HILL (POST)	EPA 8011	CAH	2
		EPA 8260	MCK	21
9280772028	MW-10	EPA 8011	CAH	2
		EPA 8260	MCK	21

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: MW-1R **Lab ID: 9280772001** Collected: 10/26/10 11:10 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**18.3**	ug/L	0.39	0.39	20	10/28/10 12:17	11/01/10 16:07	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		20	10/28/10 12:17	11/01/10 16:07	301-79-56	S4
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	**325**	ug/L	100	62.0	1		10/30/10 08:40	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/30/10 08:40	994-05-8	
Benzene	**7360**	ug/L	1250	300	250		10/31/10 14:19	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/30/10 08:40	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/30/10 08:40	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/30/10 08:40	762-75-4	
1,2-Dichloroethane	**26.3**	ug/L	5.0	1.3	1		10/30/10 08:40	107-06-2	
Diisopropyl ether	**61.1**	ug/L	5.0	2.7	1		10/30/10 08:40	108-20-3	
Ethanol	**334**	ug/L	200	170	1		10/30/10 08:40	64-17-5	
Ethylbenzene	**5060**	ug/L	1250	275	250		10/31/10 14:19	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/30/10 08:40	637-92-3	
Methyl-tert-butyl ether	**4.3J**	ug/L	5.0	2.0	1		10/30/10 08:40	1634-04-4	
Naphthalene	**1190J**	ug/L	1250	725	250		10/31/10 14:19	91-20-3	
Toluene	**30200**	ug/L	1250	450	250		10/31/10 14:19	108-88-3	
Xylene (Total)	**28800**	ug/L	2500	675	250		10/31/10 14:19	1330-20-7	
m&p-Xylene	**20300**	ug/L	2500	675	250		10/31/10 14:19	179601-23-1	
o-Xylene	**8540**	ug/L	1250	425	250		10/31/10 14:19	95-47-6	
Dibromofluoromethane (S)	93	%	70-130		1		10/30/10 08:40	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		10/30/10 08:40	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1		10/30/10 08:40	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130		1		10/30/10 08:40	17060-07-0	

Sample: MW-2 **Lab ID: 9280772002** Collected: 10/26/10 09:50 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**15.1**	ug/L	0.40	0.40	20	10/28/10 12:17	11/01/10 16:27	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		20	10/28/10 12:17	11/01/10 16:27	301-79-56	S4
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	2000	1240	20		11/02/10 21:54	75-85-4	
tert-Amylmethyl ether	ND	ug/L	200	90.0	20		11/02/10 21:54	994-05-8	
Benzene	**2860**	ug/L	100	24.0	20		11/02/10 21:54	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	2000	960	20		11/02/10 21:54	624-95-3	
tert-Butyl Alcohol	ND	ug/L	2000	540	20		11/02/10 21:54	75-65-0	
tert-Butyl Formate	ND	ug/L	1000	180	20		11/02/10 21:54	762-75-4	
1,2-Dichloroethane	**112**	ug/L	100	26.0	20		11/02/10 21:54	107-06-2	
Diisopropyl ether	**195**	ug/L	100	54.0	20		11/02/10 21:54	108-20-3	
Ethanol	ND	ug/L	4000	3400	20		11/02/10 21:54	64-17-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: MW-2 **Lab ID: 9280772002** Collected: 10/26/10 09:50 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
Ethylbenzene	**390**	ug/L	100	22.0	20		11/02/10 21:54	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	200	92.0	20		11/02/10 21:54	637-92-3	
Methyl-tert-butyl ether	**79.5J**	ug/L	100	40.0	20		11/02/10 21:54	1634-04-4	
Naphthalene	**110**	ug/L	100	58.0	20		11/02/10 21:54	91-20-3	
Toluene	**3630**	ug/L	100	36.0	20		11/02/10 21:54	108-88-3	
Xylene (Total)	**3710**	ug/L	200	54.0	20		11/02/10 21:54	1330-20-7	
m&p-Xylene	**2190**	ug/L	200	54.0	20		11/02/10 21:54	179601-23-1	
o-Xylene	**1520**	ug/L	100	34.0	20		11/02/10 21:54	95-47-6	
Dibromofluoromethane (S)	100	%	70-130		20		11/02/10 21:54	1868-53-7	
Toluene-d8 (S)	98	%	70-130		20		11/02/10 21:54	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-130		20		11/02/10 21:54	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130		20		11/02/10 21:54	17060-07-0	

Sample: MW-3 **Lab ID: 9280772003** Collected: 10/26/10 10:15 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	10/28/10 12:18	10/28/10 18:42	106-93-4	
1-Chloro-2-bromopropane (S)	95	%	60-140		1	10/28/10 12:18	10/28/10 18:42	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		11/02/10 16:13	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		11/02/10 16:13	994-05-8	
Benzene	ND	ug/L	5.0	1.2	1		11/02/10 16:13	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		11/02/10 16:13	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		11/02/10 16:13	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		11/02/10 16:13	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		11/02/10 16:13	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		11/02/10 16:13	108-20-3	
Ethanol	ND	ug/L	200	170	1		11/02/10 16:13	64-17-5	
Ethylbenzene	ND	ug/L	5.0	1.1	1		11/02/10 16:13	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		11/02/10 16:13	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		11/02/10 16:13	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		11/02/10 16:13	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		11/02/10 16:13	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		11/02/10 16:13	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		11/02/10 16:13	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		11/02/10 16:13	95-47-6	
Dibromofluoromethane (S)	103	%	70-130		1		11/02/10 16:13	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		11/02/10 16:13	2037-26-5	
4-Bromofluorobenzene (S)	90	%	70-130		1		11/02/10 16:13	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		11/02/10 16:13	17060-07-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: MW-4R **Lab ID: 9280772004** Collected: 10/26/10 11:20 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	10/28/10 12:18	10/28/10 19:02	106-93-4	
1-Chloro-2-bromopropane (S)	85	%	60-140		1	10/28/10 12:18	10/28/10 19:02	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		11/02/10 16:39	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		11/02/10 16:39	994-05-8	
Benzene	ND	ug/L	5.0	1.2	1		11/02/10 16:39	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		11/02/10 16:39	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		11/02/10 16:39	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		11/02/10 16:39	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		11/02/10 16:39	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		11/02/10 16:39	108-20-3	
Ethanol	ND	ug/L	200	170	1		11/02/10 16:39	64-17-5	
Ethylbenzene	ND	ug/L	5.0	1.1	1		11/02/10 16:39	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		11/02/10 16:39	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		11/02/10 16:39	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		11/02/10 16:39	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		11/02/10 16:39	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		11/02/10 16:39	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		11/02/10 16:39	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		11/02/10 16:39	95-47-6	
Dibromofluoromethane (S)	104	%	70-130		1		11/02/10 16:39	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		11/02/10 16:39	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1		11/02/10 16:39	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130		1		11/02/10 16:39	17060-07-0	

Sample: MW-5 **Lab ID: 9280772005** Collected: 10/26/10 12:05 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	10/28/10 12:18	10/28/10 19:22	106-93-4	
1-Chloro-2-bromopropane (S)	92	%	60-140		1	10/28/10 12:18	10/28/10 19:22	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		10/30/10 09:35	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/30/10 09:35	994-05-8	
Benzene	ND	ug/L	5.0	1.2	1		10/30/10 09:35	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/30/10 09:35	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/30/10 09:35	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/30/10 09:35	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		10/30/10 09:35	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		10/30/10 09:35	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/30/10 09:35	64-17-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: MW-5 **Lab ID: 9280772005** Collected: 10/26/10 12:05 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
Ethylbenzene	**1.9J**	ug/L	5.0	1.1	1		10/30/10 09:35	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/30/10 09:35	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/30/10 09:35	1634-04-4	
Naphthalene	**3.5J**	ug/L	5.0	2.9	1		10/30/10 09:35	91-20-3	
Toluene	**101**	ug/L	5.0	1.8	1		10/30/10 09:35	108-88-3	
Xylene (Total)	**11.5**	ug/L	10.0	2.7	1		10/30/10 09:35	1330-20-7	
m&p-Xylene	**8.5J**	ug/L	10.0	2.7	1		10/30/10 09:35	179601-23-1	
o-Xylene	**3.0J**	ug/L	5.0	1.7	1		10/30/10 09:35	95-47-6	
Dibromofluoromethane (S)	96	%	70-130		1		10/30/10 09:35	1868-53-7	
Toluene-d8 (S)	104	%	70-130		1		10/30/10 09:35	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-130		1		10/30/10 09:35	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-130		1		10/30/10 09:35	17060-07-0	

Sample: MW-6 **Lab ID: 9280772006** Collected: 10/26/10 12:15 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.13**	ug/L	0.018	0.018	1	10/28/10 12:18	10/28/10 19:43	106-93-4	
1-Chloro-2-bromopropane (S)	99	%	60-140		1	10/28/10 12:18	10/28/10 19:43	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		10/28/10 18:22	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 18:22	994-05-8	
Benzene	**18.2**	ug/L	5.0	1.2	1		10/28/10 18:22	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 18:22	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 18:22	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 18:22	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		10/28/10 18:22	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		10/28/10 18:22	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 18:22	64-17-5	
Ethylbenzene	**14.8**	ug/L	5.0	1.1	1		10/28/10 18:22	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 18:22	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 18:22	1634-04-4	
Naphthalene	**5.6**	ug/L	5.0	2.9	1		10/28/10 18:22	91-20-3	
Toluene	**2.2J**	ug/L	5.0	1.8	1		10/28/10 18:22	108-88-3	
Xylene (Total)	**74.4**	ug/L	10.0	2.7	1		10/28/10 18:22	1330-20-7	
m&p-Xylene	**60.3**	ug/L	10.0	2.7	1		10/28/10 18:22	179601-23-1	
o-Xylene	**14.1**	ug/L	5.0	1.7	1		10/28/10 18:22	95-47-6	
Dibromofluoromethane (S)	100	%	70-130		1		10/28/10 18:22	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		10/28/10 18:22	2037-26-5	
4-Bromofluorobenzene (S)	93	%	70-130		1		10/28/10 18:22	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	70-130		1		10/28/10 18:22	17060-07-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: IW-9 **Lab ID: 9280772007** Collected: 10/26/10 12:20 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.39**	ug/L	0.020	0.020	1	10/28/10 12:18	10/28/10 20:03	106-93-4	
1-Chloro-2-bromopropane (S)	115	%	60-140		1	10/28/10 12:18	10/28/10 20:03	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	**168J**	ug/L	200	124	2		10/29/10 16:08	75-85-4	
tert-Amylmethyl ether	ND	ug/L	20.0	9.0	2		10/29/10 16:08	994-05-8	
Benzene	**505**	ug/L	100	24.0	20		10/30/10 16:43	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	200	96.0	2		10/29/10 16:08	624-95-3	
tert-Butyl Alcohol	ND	ug/L	200	54.0	2		10/29/10 16:08	75-65-0	
tert-Butyl Formate	ND	ug/L	100	18.0	2		10/29/10 16:08	762-75-4	
1,2-Dichloroethane	ND	ug/L	10.0	2.6	2		10/29/10 16:08	107-06-2	
Diisopropyl ether	**8.2J**	ug/L	10.0	5.4	2		10/29/10 16:08	108-20-3	
Ethanol	ND	ug/L	400	340	2		10/29/10 16:08	64-17-5	
Ethylbenzene	**1250**	ug/L	100	22.0	20		10/30/10 16:43	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	20.0	9.2	2		10/29/10 16:08	637-92-3	
Methyl-tert-butyl ether	**5.8J**	ug/L	10.0	4.0	2		10/29/10 16:08	1634-04-4	
Naphthalene	**335**	ug/L	10.0	5.8	2		10/29/10 16:08	91-20-3	
Toluene	**562**	ug/L	100	36.0	20		10/30/10 16:43	108-88-3	
Xylene (Total)	**5110**	ug/L	200	54.0	20		10/30/10 16:43	1330-20-7	
m&p-Xylene	**3350**	ug/L	200	54.0	20		10/30/10 16:43	179601-23-1	
o-Xylene	**1760**	ug/L	100	34.0	20		10/30/10 16:43	95-47-6	
Dibromofluoromethane (S)	99	%	70-130		2		10/29/10 16:08	1868-53-7	
Toluene-d8 (S)	103	%	70-130		2		10/29/10 16:08	2037-26-5	
4-Bromofluorobenzene (S)	104	%	70-130		2		10/29/10 16:08	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130		2		10/29/10 16:08	17060-07-0	

Sample: MW-8 **Lab ID: 9280772008** Collected: 10/26/10 10:35 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**29.2**	ug/L	0.79	0.79	40	10/28/10 12:19	11/01/10 16:47	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		40	10/28/10 12:19	11/01/10 16:47	301-79-56	S4
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	10000	6200	100		10/28/10 22:59	75-85-4	
tert-Amylmethyl ether	ND	ug/L	1000	450	100		10/28/10 22:59	994-05-8	
Benzene	**10100**	ug/L	500	120	100		10/28/10 22:59	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	10000	4800	100		10/28/10 22:59	624-95-3	
tert-Butyl Alcohol	ND	ug/L	10000	2700	100		10/28/10 22:59	75-65-0	
tert-Butyl Formate	ND	ug/L	5000	900	100		10/28/10 22:59	762-75-4	
1,2-Dichloroethane	ND	ug/L	500	130	100		10/28/10 22:59	107-06-2	
Diisopropyl ether	ND	ug/L	500	270	100		10/28/10 22:59	108-20-3	
Ethanol	ND	ug/L	20000	17000	100		10/28/10 22:59	64-17-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: MW-8 **Lab ID: 9280772008** Collected: 10/26/10 10:35 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
Ethylbenzene	**4420**	ug/L	500	110	100		10/28/10 22:59	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	1000	460	100		10/28/10 22:59	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	500	200	100		10/28/10 22:59	1634-04-4	
Naphthalene	**866**	ug/L	500	290	100		10/28/10 22:59	91-20-3	
Toluene	**37700**	ug/L	2500	900	500		10/30/10 17:19	108-88-3	
Xylene (Total)	**26100**	ug/L	1000	270	100		10/28/10 22:59	1330-20-7	
m&p-Xylene	**18500**	ug/L	1000	270	100		10/28/10 22:59	179601-23-1	
o-Xylene	**7590**	ug/L	500	170	100		10/28/10 22:59	95-47-6	
Dibromofluoromethane (S)	105	%	70-130		100		10/28/10 22:59	1868-53-7	
Toluene-d8 (S)	86	%	70-130		100		10/28/10 22:59	2037-26-5	
4-Bromofluorobenzene (S)	104	%	70-130		100		10/28/10 22:59	460-00-4	
1,2-Dichloroethane-d4 (S)	119	%	70-130		100		10/28/10 22:59	17060-07-0	

Sample: MW-7 **Lab ID: 9280772009** Collected: 10/26/10 12:35 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**1.1**	ug/L	0.040	0.040	2	10/28/10 15:40	11/01/10 17:10	106-93-4	
1-Chloro-2-bromopropane (S)	276	%	60-140		2	10/28/10 15:40	11/01/10 17:10	301-79-56	S5
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	5000	3100	50		10/28/10 23:18	75-85-4	
tert-Amylmethyl ether	ND	ug/L	500	225	50		10/28/10 23:18	994-05-8	
Benzene	ND	ug/L	250	60.0	50		10/28/10 23:18	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	5000	2400	50		10/28/10 23:18	624-95-3	
tert-Butyl Alcohol	ND	ug/L	5000	1350	50		10/28/10 23:18	75-65-0	
tert-Butyl Formate	ND	ug/L	2500	450	50		10/28/10 23:18	762-75-4	
1,2-Dichloroethane	ND	ug/L	250	65.0	50		10/28/10 23:18	107-06-2	
Diisopropyl ether	ND	ug/L	250	135	50		10/28/10 23:18	108-20-3	
Ethanol	ND	ug/L	10000	8500	50		10/28/10 23:18	64-17-5	
Ethylbenzene	**2120**	ug/L	250	55.0	50		10/28/10 23:18	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	500	230	50		10/28/10 23:18	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	250	100	50		10/28/10 23:18	1634-04-4	
Naphthalene	**1150**	ug/L	250	145	50		10/28/10 23:18	91-20-3	
Toluene	**875**	ug/L	250	90.0	50		10/28/10 23:18	108-88-3	
Xylene (Total)	**21500**	ug/L	500	135	50		10/28/10 23:18	1330-20-7	
m&p-Xylene	**14300**	ug/L	500	135	50		10/28/10 23:18	179601-23-1	
o-Xylene	**7210**	ug/L	250	85.0	50		10/28/10 23:18	95-47-6	
Dibromofluoromethane (S)	106	%	70-130		50		10/28/10 23:18	1868-53-7	
Toluene-d8 (S)	88	%	70-130		50		10/28/10 23:18	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		50		10/28/10 23:18	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70-130		50		10/28/10 23:18	17060-07-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH NELAC
nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: MW-11 **Lab ID: 9280772010** Collected: 10/26/10 14:30 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	10/28/10 15:40	10/28/10 22:24	106-93-4	
1-Chloro-2-bromopropane (S)	77	%	60-140		1	10/28/10 15:40	10/28/10 22:24	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		10/28/10 18:41	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 18:41	994-05-8	
Benzene	ND	ug/L	5.0	1.2	1		10/28/10 18:41	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 18:41	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 18:41	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 18:41	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		10/28/10 18:41	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		10/28/10 18:41	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 18:41	64-17-5	
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/28/10 18:41	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 18:41	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 18:41	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		10/28/10 18:41	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/28/10 18:41	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		10/28/10 18:41	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		10/28/10 18:41	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		10/28/10 18:41	95-47-6	
Dibromofluoromethane (S)	101	%	70-130		1		10/28/10 18:41	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		10/28/10 18:41	2037-26-5	
4-Bromofluorobenzene (S)	91	%	70-130		1		10/28/10 18:41	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	70-130		1		10/28/10 18:41	17060-07-0	

Sample: MW-12 **Lab ID: 9280772011** Collected: 10/26/10 14:20 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.95**	ug/L	0.019	0.019	1	10/28/10 15:40	10/28/10 22:44	106-93-4	
1-Chloro-2-bromopropane (S)	97	%	60-140		1	10/28/10 15:40	10/28/10 22:44	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	**917**	ug/L	100	62.0	1		10/28/10 18:59	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 18:59	994-05-8	
Benzene	**1870**	ug/L	125	30.0	25		10/30/10 17:01	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 18:59	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 18:59	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 18:59	762-75-4	
1,2-Dichloroethane	**38.8**	ug/L	5.0	1.3	1		10/28/10 18:59	107-06-2	
Diisopropyl ether	**65.0**	ug/L	5.0	2.7	1		10/28/10 18:59	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 18:59	64-17-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: MW-12 **Lab ID: 9280772011** Collected: 10/26/10 14:20 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
Ethylbenzene	**479**	ug/L	125	27.5	25		10/30/10 17:01	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 18:59	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 18:59	1634-04-4	
Naphthalene	**112**	ug/L	5.0	2.9	1		10/28/10 18:59	91-20-3	
Toluene	**24.0**	ug/L	5.0	1.8	1		10/28/10 18:59	108-88-3	
Xylene (Total)	**838**	ug/L	250	67.5	25		10/30/10 17:01	1330-20-7	
m&p-Xylene	**763**	ug/L	250	67.5	25		10/30/10 17:01	179601-23-1	
o-Xylene	**74.5**	ug/L	5.0	1.7	1		10/28/10 18:59	95-47-6	
Dibromofluoromethane (S)	98	%	70-130		1		10/28/10 18:59	1868-53-7	
Toluene-d8 (S)	92	%	70-130		1		10/28/10 18:59	2037-26-5	
4-Bromofluorobenzene (S)	95	%	70-130		1		10/28/10 18:59	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		10/28/10 18:59	17060-07-0	

Sample: MW-14 **Lab ID: 9280772012** Collected: 10/26/10 16:05 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	10/28/10 15:40	10/28/10 23:04	106-93-4	
1-Chloro-2-bromopropane (S)	78	%	60-140		1	10/28/10 15:40	10/28/10 23:04	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		10/30/10 14:36	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/30/10 14:36	994-05-8	
Benzene	ND	ug/L	5.0	1.2	1		10/30/10 14:36	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/30/10 14:36	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/30/10 14:36	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/30/10 14:36	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		10/30/10 14:36	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		10/30/10 14:36	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/30/10 14:36	64-17-5	
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/30/10 14:36	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/30/10 14:36	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/30/10 14:36	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		10/30/10 14:36	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/30/10 14:36	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		10/30/10 14:36	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		10/30/10 14:36	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		10/30/10 14:36	95-47-6	
Dibromofluoromethane (S)	107	%	70-130		1		10/30/10 14:36	1868-53-7	
Toluene-d8 (S)	111	%	70-130		1		10/30/10 14:36	2037-26-5	
4-Bromofluorobenzene (S)	104	%	70-130		1		10/30/10 14:36	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		10/30/10 14:36	17060-07-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: MW-16 **Lab ID: 9280772013** Collected: 10/26/10 13:50 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	10/28/10 15:40	10/28/10 23:24	106-93-4	
1-Chloro-2-bromopropane (S)	80	%	60-140		1	10/28/10 15:40	10/28/10 23:24	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		10/28/10 19:36	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 19:36	994-05-8	
Benzene	**4.1J**	ug/L	5.0	1.2	1		10/28/10 19:36	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 19:36	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 19:36	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 19:36	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		10/28/10 19:36	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		10/28/10 19:36	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 19:36	64-17-5	
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/28/10 19:36	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 19:36	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 19:36	1634-04-4	
Naphthalene	**3.2J**	ug/L	5.0	2.9	1		10/28/10 19:36	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/28/10 19:36	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		10/28/10 19:36	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		10/28/10 19:36	179601-23-1	
o-Xylene	**1.9J**	ug/L	5.0	1.7	1		10/28/10 19:36	95-47-6	
Dibromofluoromethane (S)	107	%	70-130		1		10/28/10 19:36	1868-53-7	
Toluene-d8 (S)	94	%	70-130		1		10/28/10 19:36	2037-26-5	
4-Bromofluorobenzene (S)	91	%	70-130		1		10/28/10 19:36	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	70-130		1		10/28/10 19:36	17060-07-0	

Sample: MW-17 **Lab ID: 9280772014** Collected: 10/26/10 14:00 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.046**	ug/L	0.023	0.023	1	10/28/10 15:41	10/28/10 23:44	106-93-4	
1-Chloro-2-bromopropane (S)	77	%	60-140		1	10/28/10 15:41	10/28/10 23:44	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	**90.5J**	ug/L	100	62.0	1		10/28/10 19:55	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 19:55	994-05-8	
Benzene	**250**	ug/L	25.0	6.0	5		10/30/10 14:57	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 19:55	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 19:55	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 19:55	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		10/28/10 19:55	107-06-2	
Diisopropyl ether	**14.5**	ug/L	5.0	2.7	1		10/28/10 19:55	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 19:55	64-17-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH ISO 17025 nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: MW-17 **Lab ID: 9280772014** Collected: 10/26/10 14:00 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/28/10 19:55	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 19:55	637-92-3	
Methyl-tert-butyl ether	**2.1J**	ug/L	5.0	2.0	1		10/28/10 19:55	1634-04-4	
Naphthalene	**8.7**	ug/L	5.0	2.9	1		10/28/10 19:55	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/28/10 19:55	108-88-3	
Xylene (Total)	**45.5**	ug/L	10.0	2.7	1		10/28/10 19:55	1330-20-7	
m&p-Xylene	**28.7**	ug/L	10.0	2.7	1		10/28/10 19:55	179601-23-1	
o-Xylene	**16.8**	ug/L	5.0	1.7	1		10/28/10 19:55	95-47-6	
Dibromofluoromethane (S)	103	%	70-130		1		10/28/10 19:55	1868-53-7	
Toluene-d8 (S)	94	%	70-130		1		10/28/10 19:55	2037-26-5	
4-Bromofluorobenzene (S)	94	%	70-130		1		10/28/10 19:55	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130		1		10/28/10 19:55	17060-07-0	

Sample: MW-18 **Lab ID: 9280772015** Collected: 10/26/10 16:00 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	10/28/10 15:41	10/29/10 00:04	106-93-4	
1-Chloro-2-bromopropane (S)	83	%	60-140		1	10/28/10 15:41	10/29/10 00:04	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		10/28/10 20:13	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 20:13	994-05-8	
Benzene	ND	ug/L	5.0	1.2	1		10/28/10 20:13	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 20:13	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 20:13	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 20:13	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		10/28/10 20:13	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		10/28/10 20:13	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 20:13	64-17-5	
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/28/10 20:13	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 20:13	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 20:13	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		10/28/10 20:13	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/28/10 20:13	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		10/28/10 20:13	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		10/28/10 20:13	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		10/28/10 20:13	95-47-6	
Dibromofluoromethane (S)	118	%	70-130		1		10/28/10 20:13	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		10/28/10 20:13	2037-26-5	
4-Bromofluorobenzene (S)	92	%	70-130		1		10/28/10 20:13	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-130		1		10/28/10 20:13	17060-07-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: MW-19 **Lab ID: 9280772016** Collected: 10/26/10 16:05 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	10/28/10 15:41	10/29/10 00:24	106-93-4	
1-Chloro-2-bromopropane (S)	80	%	60-140		1	10/28/10 15:41	10/29/10 00:24	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		10/28/10 20:32	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 20:32	994-05-8	
Benzene	ND	ug/L	5.0	1.2	1		10/28/10 20:32	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 20:32	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 20:32	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 20:32	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		10/28/10 20:32	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		10/28/10 20:32	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 20:32	64-17-5	
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/28/10 20:32	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 20:32	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 20:32	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		10/28/10 20:32	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/28/10 20:32	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		10/28/10 20:32	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		10/28/10 20:32	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		10/28/10 20:32	95-47-6	
Dibromofluoromethane (S)	108	%	70-130		1		10/28/10 20:32	1868-53-7	
Toluene-d8 (S)	104	%	70-130		1		10/28/10 20:32	2037-26-5	
4-Bromofluorobenzene (S)	92	%	70-130		1		10/28/10 20:32	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		10/28/10 20:32	17060-07-0	

Sample: MW-9R **Lab ID: 9280772017** Collected: 10/26/10 13:21 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	10/28/10 15:41	10/29/10 00:45	106-93-4	
1-Chloro-2-bromopropane (S)	80	%	60-140		1	10/28/10 15:41	10/29/10 00:45	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		10/28/10 20:50	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 20:50	994-05-8	
Benzene	ND	ug/L	5.0	1.2	1		10/28/10 20:50	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 20:50	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 20:50	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 20:50	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		10/28/10 20:50	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		10/28/10 20:50	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 20:50	64-17-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: MW-9R **Lab ID: 9280772017** Collected: 10/26/10 13:21 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/28/10 20:50	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 20:50	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 20:50	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		10/28/10 20:50	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/28/10 20:50	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		10/28/10 20:50	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		10/28/10 20:50	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		10/28/10 20:50	95-47-6	
Dibromofluoromethane (S)	108	%	70-130		1		10/28/10 20:50	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		10/28/10 20:50	2037-26-5	
4-Bromofluorobenzene (S)	94	%	70-130		1		10/28/10 20:50	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130		1		10/28/10 20:50	17060-07-0	

Sample: TW-1 **Lab ID: 9280772018** Collected: 10/26/10 10:52 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**20.6**	ug/L	0.78	0.78	40	10/28/10 15:41	11/02/10 14:30	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		40	10/28/10 15:41	11/02/10 14:30	301-79-56	S4
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	5000	3100	50		10/28/10 23:36	75-85-4	
tert-Amylmethyl ether	ND	ug/L	500	225	50		10/28/10 23:36	994-05-8	
Benzene	**8720**	ug/L	250	60.0	50		10/28/10 23:36	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	5000	2400	50		10/28/10 23:36	624-95-3	
tert-Butyl Alcohol	ND	ug/L	5000	1350	50		10/28/10 23:36	75-65-0	
tert-Butyl Formate	ND	ug/L	2500	450	50		10/28/10 23:36	762-75-4	
1,2-Dichloroethane	ND	ug/L	250	65.0	50		10/28/10 23:36	107-06-2	
Diisopropyl ether	**166J**	ug/L	250	135	50		10/28/10 23:36	108-20-3	
Ethanol	ND	ug/L	10000	8500	50		10/28/10 23:36	64-17-5	
Ethylbenzene	**2370**	ug/L	250	55.0	50		10/28/10 23:36	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	500	230	50		10/28/10 23:36	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	250	100	50		10/28/10 23:36	1634-04-4	
Naphthalene	**559**	ug/L	250	145	50		10/28/10 23:36	91-20-3	
Toluene	**293**	ug/L	250	90.0	50		10/28/10 23:36	108-88-3	
Xylene (Total)	**11900**	ug/L	500	135	50		10/28/10 23:36	1330-20-7	
m&p-Xylene	**9750**	ug/L	500	135	50		10/28/10 23:36	179601-23-1	
o-Xylene	**2110**	ug/L	250	85.0	50		10/28/10 23:36	95-47-6	
Dibromofluoromethane (S)	107	%	70-130		50		10/28/10 23:36	1868-53-7	
Toluene-d8 (S)	87	%	70-130		50		10/28/10 23:36	2037-26-5	
4-Bromofluorobenzene (S)	95	%	70-130		50		10/28/10 23:36	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	70-130		50		10/28/10 23:36	17060-07-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: TW-2 **Lab ID: 9280772019** Collected: 10/26/10 10:25 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.062**	ug/L	0.020	0.020	1	10/28/10 15:41	10/29/10 01:25	106-93-4	
1-Chloro-2-bromopropane (S)	92	%	60-140		1	10/28/10 15:41	10/29/10 01:25	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	**6670J**	ug/L	10000	6200	100		10/28/10 23:55	75-85-4	
tert-Amylmethyl ether	ND	ug/L	1000	450	100		10/28/10 23:55	994-05-8	
Benzene	**12900**	ug/L	500	120	100		10/28/10 23:55	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	10000	4800	100		10/28/10 23:55	624-95-3	
tert-Butyl Alcohol	ND	ug/L	10000	2700	100		10/28/10 23:55	75-65-0	
tert-Butyl Formate	ND	ug/L	5000	900	100		10/28/10 23:55	762-75-4	
1,2-Dichloroethane	ND	ug/L	500	130	100		10/28/10 23:55	107-06-2	
Diisopropyl ether	**541**	ug/L	500	270	100		10/28/10 23:55	108-20-3	
Ethanol	ND	ug/L	20000	17000	100		10/28/10 23:55	64-17-5	
Ethylbenzene	**1930**	ug/L	500	110	100		10/28/10 23:55	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	1000	460	100		10/28/10 23:55	637-92-3	
Methyl-tert-butyl ether	**217J**	ug/L	500	200	100		10/28/10 23:55	1634-04-4	
Naphthalene	**624**	ug/L	500	290	100		10/28/10 23:55	91-20-3	
Toluene	**17400**	ug/L	500	180	100		10/28/10 23:55	108-88-3	
Xylene (Total)	**9830**	ug/L	1000	270	100		10/28/10 23:55	1330-20-7	
m&p-Xylene	**6590**	ug/L	1000	270	100		10/28/10 23:55	179601-23-1	
o-Xylene	**3250**	ug/L	500	170	100		10/28/10 23:55	95-47-6	
Dibromofluoromethane (S)	105	%	70-130		100		10/28/10 23:55	1868-53-7	
Toluene-d8 (S)	89	%	70-130		100		10/28/10 23:55	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130		100		10/28/10 23:55	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70-130		100		10/28/10 23:55	17060-07-0	

Sample: TW-3 **Lab ID: 9280772020** Collected: 10/26/10 14:55 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**1.4**	ug/L	0.040	0.040	2	10/28/10 15:41	11/01/10 17:50	106-93-4	
1-Chloro-2-bromopropane (S)	89	%	60-140		2	10/28/10 15:41	11/01/10 17:50	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	**138**	ug/L	100	62.0	1		10/28/10 21:09	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 21:09	994-05-8	
Benzene	**152**	ug/L	5.0	1.2	1		10/28/10 21:09	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 21:09	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 21:09	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 21:09	762-75-4	
1,2-Dichloroethane	**3.6J**	ug/L	5.0	1.3	1		10/28/10 21:09	107-06-2	
Diisopropyl ether	**14.4**	ug/L	5.0	2.7	1		10/28/10 21:09	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 21:09	64-17-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: TW-3 **Lab ID: 9280772020** Collected: 10/26/10 14:55 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/28/10 21:09	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 21:09	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 21:09	1634-04-4	
Naphthalene	**5.2**	ug/L	5.0	2.9	1		10/28/10 21:09	91-20-3	
Toluene	**12.9**	ug/L	5.0	1.8	1		10/28/10 21:09	108-88-3	
Xylene (Total)	**20.5**	ug/L	10.0	2.7	1		10/28/10 21:09	1330-20-7	
m&p-Xylene	**11.8**	ug/L	10.0	2.7	1		10/28/10 21:09	179601-23-1	
o-Xylene	**8.7**	ug/L	5.0	1.7	1		10/28/10 21:09	95-47-6	
Dibromofluoromethane (S)	110	%	70-130		1		10/28/10 21:09	1868-53-7	
Toluene-d8 (S)	93	%	70-130		1		10/28/10 21:09	2037-26-5	
4-Bromofluorobenzene (S)	92	%	70-130		1		10/28/10 21:09	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		10/28/10 21:09	17060-07-0	

Sample: MW-20 **Lab ID: 9280772021** Collected: 10/26/10 13:30 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	10/28/10 15:41	10/29/10 03:05	106-93-4	
1-Chloro-2-bromopropane (S)	79	%	60-140		1	10/28/10 15:41	10/29/10 03:05	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		10/28/10 21:27	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 21:27	994-05-8	
Benzene	ND	ug/L	5.0	1.2	1		10/28/10 21:27	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 21:27	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 21:27	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 21:27	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		10/28/10 21:27	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		10/28/10 21:27	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 21:27	64-17-5	
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/28/10 21:27	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 21:27	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 21:27	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		10/28/10 21:27	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/28/10 21:27	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		10/28/10 21:27	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		10/28/10 21:27	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		10/28/10 21:27	95-47-6	
Dibromofluoromethane (S)	107	%	70-130		1		10/28/10 21:27	1868-53-7	
Toluene-d8 (S)	92	%	70-130		1		10/28/10 21:27	2037-26-5	
4-Bromofluorobenzene (S)	91	%	70-130		1		10/28/10 21:27	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		10/28/10 21:27	17060-07-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: WSW-SMITH **Lab ID: 9280772022** Collected: 10/26/10 12:05 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	10/28/10 15:42	10/29/10 03:25	106-93-4	
1-Chloro-2-bromopropane (S)	80	%	60-140		1	10/28/10 15:42	10/29/10 03:25	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		10/28/10 21:46	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 21:46	994-05-8	
Benzene	ND	ug/L	5.0	1.2	1		10/28/10 21:46	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 21:46	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 21:46	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 21:46	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		10/28/10 21:46	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		10/28/10 21:46	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 21:46	64-17-5	
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/28/10 21:46	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 21:46	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 21:46	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		10/28/10 21:46	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/28/10 21:46	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		10/28/10 21:46	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		10/28/10 21:46	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		10/28/10 21:46	95-47-6	
Dibromofluoromethane (S)	108	%	70-130		1		10/28/10 21:46	1868-53-7	
Toluene-d8 (S)	91	%	70-130		1		10/28/10 21:46	2037-26-5	
4-Bromofluorobenzene (S)	94	%	70-130		1		10/28/10 21:46	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		10/28/10 21:46	17060-07-0	

Sample: WSW-CROCK **Lab ID: 9280772023** Collected: 10/26/10 15:00 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.039**	ug/L	0.019	0.019	1	10/28/10 15:42	10/29/10 03:45	106-93-4	
1-Chloro-2-bromopropane (S)	90	%	60-140		1	10/28/10 15:42	10/29/10 03:45	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		10/28/10 22:04	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 22:04	994-05-8	
Benzene	ND	ug/L	5.0	1.2	1		10/28/10 22:04	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 22:04	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 22:04	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 22:04	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		10/28/10 22:04	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		10/28/10 22:04	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 22:04	64-17-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH ISO/IEC 17025 nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: WSW-CROCK **Lab ID: 9280772023** Collected: 10/26/10 15:00 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/28/10 22:04	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 22:04	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 22:04	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		10/28/10 22:04	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/28/10 22:04	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		10/28/10 22:04	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		10/28/10 22:04	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		10/28/10 22:04	95-47-6	
Dibromofluoromethane (S)	108	%	70-130		1		10/28/10 22:04	1868-53-7	
Toluene-d8 (S)	92	%	70-130		1		10/28/10 22:04	2037-26-5	
4-Bromofluorobenzene (S)	92	%	70-130		1		10/28/10 22:04	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	70-130		1		10/28/10 22:04	17060-07-0	

Sample: WSW-SWIFT (PRE) **Lab ID: 9280772024** Collected: 10/26/10 15:25 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**1.3**	ug/L	0.039	0.039	2	10/28/10 15:42	11/01/10 18:30	106-93-4	
1-Chloro-2-bromopropane (S)	95	%	60-140		2	10/28/10 15:42	11/01/10 18:30	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	**506**	ug/L	100	62.0	1		10/28/10 22:22	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 22:22	994-05-8	
Benzene	**288**	ug/L	25.0	6.0	5		10/30/10 15:18	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 22:22	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 22:22	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 22:22	762-75-4	
1,2-Dichloroethane	**23.5**	ug/L	5.0	1.3	1		10/28/10 22:22	107-06-2	
Diisopropyl ether	**42.0**	ug/L	5.0	2.7	1		10/28/10 22:22	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 22:22	64-17-5	
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/28/10 22:22	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 22:22	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 22:22	1634-04-4	
Naphthalene	**11.8**	ug/L	5.0	2.9	1		10/28/10 22:22	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/28/10 22:22	108-88-3	
Xylene (Total)	**67.6**	ug/L	10.0	2.7	1		10/28/10 22:22	1330-20-7	
m&p-Xylene	**41.7**	ug/L	10.0	2.7	1		10/28/10 22:22	179601-23-1	
o-Xylene	**25.9**	ug/L	5.0	1.7	1		10/28/10 22:22	95-47-6	
Dibromofluoromethane (S)	107	%	70-130		1		10/28/10 22:22	1868-53-7	
Toluene-d8 (S)	90	%	70-130		1		10/28/10 22:22	2037-26-5	
4-Bromofluorobenzene (S)	93	%	70-130		1		10/28/10 22:22	460-00-4	
1,2-Dichloroethane-d4 (S)	115	%	70-130		1		10/28/10 22:22	17060-07-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: WSW-SWIFT (POST) **Lab ID: 9280772025** Collected: 10/26/10 15:20 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.60**	ug/L	0.020	0.020	1	10/28/10 15:42	10/29/10 04:25	106-93-4	
1-Chloro-2-bromopropane (S)	83	%	60-140		1	10/28/10 15:42	10/29/10 04:25	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	**395**	ug/L	100	62.0	1		10/29/10 16:26	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/29/10 16:26	994-05-8	
Benzene	**157**	ug/L	5.0	1.2	1		10/29/10 16:26	71-43-2	
3,3-Dimethyl-1-Butanol	**124**	ug/L	100	48.0	1		10/29/10 16:26	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/29/10 16:26	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/29/10 16:26	762-75-4	
1,2-Dichloroethane	**12.5**	ug/L	5.0	1.3	1		10/29/10 16:26	107-06-2	
Diisopropyl ether	**25.5**	ug/L	5.0	2.7	1		10/29/10 16:26	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/29/10 16:26	64-17-5	
Ethylbenzene	**1.6J**	ug/L	5.0	1.1	1		10/29/10 16:26	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/29/10 16:26	637-92-3	
Methyl-tert-butyl ether	**3.0J**	ug/L	5.0	2.0	1		10/29/10 16:26	1634-04-4	
Naphthalene	**13.6**	ug/L	5.0	2.9	1		10/29/10 16:26	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/29/10 16:26	108-88-3	
Xylene (Total)	**46.7**	ug/L	10.0	2.7	1		10/29/10 16:26	1330-20-7	
m&p-Xylene	**28.7**	ug/L	10.0	2.7	1		10/29/10 16:26	179601-23-1	
o-Xylene	**18.0**	ug/L	5.0	1.7	1		10/29/10 16:26	95-47-6	
Dibromofluoromethane (S)	97	%	70-130		1		10/29/10 16:26	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		10/29/10 16:26	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130		1		10/29/10 16:26	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130		1		10/29/10 16:26	17060-07-0	

Sample: WSW-HILL (PRE) **Lab ID: 9280772026** Collected: 10/26/10 15:40 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.33**	ug/L	0.020	0.020	1	10/28/10 15:42	10/29/10 04:45	106-93-4	
1-Chloro-2-bromopropane (S)	99	%	60-140		1	10/28/10 15:42	10/29/10 04:45	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	**66.4J**	ug/L	100	62.0	1		10/28/10 22:41	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/28/10 22:41	994-05-8	
Benzene	**14.0**	ug/L	5.0	1.2	1		10/28/10 22:41	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/28/10 22:41	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/28/10 22:41	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/28/10 22:41	762-75-4	
1,2-Dichloroethane	**1.6J**	ug/L	5.0	1.3	1		10/28/10 22:41	107-06-2	
Diisopropyl ether	**7.8**	ug/L	5.0	2.7	1		10/28/10 22:41	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/28/10 22:41	64-17-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: WSW-HILL (PRE) **Lab ID: 9280772026** Collected: 10/26/10 15:40 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/28/10 22:41	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/28/10 22:41	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/28/10 22:41	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		10/28/10 22:41	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/28/10 22:41	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		10/28/10 22:41	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		10/28/10 22:41	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		10/28/10 22:41	95-47-6	
Dibromofluoromethane (S)	107	%	70-130		1		10/28/10 22:41	1868-53-7	
Toluene-d8 (S)	85	%	70-130		1		10/28/10 22:41	2037-26-5	
4-Bromofluorobenzene (S)	92	%	70-130		1		10/28/10 22:41	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	70-130		1		10/28/10 22:41	17060-07-0	

Sample: WSW-HILL (POST) **Lab ID: 9280772027** Collected: 10/26/10 15:45 Received: 10/27/10 15:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.034**	ug/L	0.020	0.020	1	10/28/10 15:42	10/29/10 05:06	106-93-4	
1-Chloro-2-bromopropane (S)	86	%	60-140		1	10/28/10 15:42	10/29/10 05:06	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		10/29/10 16:45	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		10/29/10 16:45	994-05-8	
Benzene	**2.4J**	ug/L	5.0	1.2	1		10/29/10 16:45	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		10/29/10 16:45	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		10/29/10 16:45	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		10/29/10 16:45	762-75-4	
1,2-Dichloroethane	**1.3J**	ug/L	5.0	1.3	1		10/29/10 16:45	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		10/29/10 16:45	108-20-3	
Ethanol	ND	ug/L	200	170	1		10/29/10 16:45	64-17-5	
Ethylbenzene	ND	ug/L	5.0	1.1	1		10/29/10 16:45	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		10/29/10 16:45	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		10/29/10 16:45	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		10/29/10 16:45	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		10/29/10 16:45	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		10/29/10 16:45	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		10/29/10 16:45	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		10/29/10 16:45	95-47-6	
Dibromofluoromethane (S)	96	%	70-130		1		10/29/10 16:45	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		10/29/10 16:45	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130		1		10/29/10 16:45	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-130		1		10/29/10 16:45	17060-07-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

Sample: MW-10 **Lab ID: 9280772028** Collected: 10/27/10 12:00 Received: 10/28/10 15:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**48.9**	ug/L	1.1	1.1	50	11/01/10 15:30	11/02/10 14:50	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		50	11/01/10 15:30	11/02/10 14:50	301-79-56	S4
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	5000	3100	50		11/02/10 21:25	75-85-4	
tert-Amylmethyl ether	ND	ug/L	500	225	50		11/02/10 21:25	994-05-8	
Benzene	**6280**	ug/L	250	60.0	50		11/02/10 21:25	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	5000	2400	50		11/02/10 21:25	624-95-3	
tert-Butyl Alcohol	ND	ug/L	5000	1350	50		11/02/10 21:25	75-65-0	
tert-Butyl Formate	ND	ug/L	2500	450	50		11/02/10 21:25	762-75-4	
1,2-Dichloroethane	**112J**	ug/L	250	65.0	50		11/02/10 21:25	107-06-2	
Diisopropyl ether	**167J**	ug/L	250	135	50		11/02/10 21:25	108-20-3	
Ethanol	ND	ug/L	10000	8500	50		11/02/10 21:25	64-17-5	
Ethylbenzene	**5220**	ug/L	250	55.0	50		11/02/10 21:25	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	500	230	50		11/02/10 21:25	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	250	100	50		11/02/10 21:25	1634-04-4	
Naphthalene	**813**	ug/L	250	145	50		11/02/10 21:25	91-20-3	
Toluene	**17700**	ug/L	2500	900	500		11/03/10 11:33	108-88-3	
Xylene (Total)	**26000**	ug/L	500	135	50		11/02/10 21:25	1330-20-7	
m&p-Xylene	**16800**	ug/L	500	135	50		11/02/10 21:25	179601-23-1	
o-Xylene	**9280**	ug/L	250	85.0	50		11/02/10 21:25	95-47-6	
Dibromofluoromethane (S)	98	%	70-130		50		11/02/10 21:25	1868-53-7	
Toluene-d8 (S)	98	%	70-130		50		11/02/10 21:25	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130		50		11/02/10 21:25	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		50		11/02/10 21:25	17060-07-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

QC Batch: OEXT/11650 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9280772001, 9280772002, 9280772003, 9280772004, 9280772005, 9280772006, 9280772007, 9280772008

METHOD BLANK: 519211 Matrix: Water
Associated Lab Samples: 9280772001, 9280772002, 9280772003, 9280772004, 9280772005, 9280772006, 9280772007, 9280772008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	10/28/10 11:27	
1-Chloro-2-bromopropane (S)	%	100	60-140	10/28/10 11:27	

LABORATORY CONTROL SAMPLE & LCSD: 519212 519213

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.29	0.31	0.31	108	108	60-140	0	20	
1-Chloro-2-bromopropane (S)	%				99	100	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 519214 519215

Parameter	Units	9280262004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	.28	.28	0.30	0.30	106	106	60-140	0	20	
1-Chloro-2-bromopropane (S)	%						101	98	60-140			

SAMPLE DUPLICATE: 519216

Parameter	Units	9280262005 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	99	98	2		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH NELAC
nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

QC Batch: OEXT/11651 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9280772009, 9280772010, 9280772011, 9280772012, 9280772013, 9280772014, 9280772015, 9280772016, 9280772017, 9280772018, 9280772019, 9280772020, 9280772021, 9280772022, 9280772023, 9280772024, 9280772025, 9280772026, 9280772027

METHOD BLANK: 519244 Matrix: Water
Associated Lab Samples: 9280772009, 9280772010, 9280772011, 9280772012, 9280772013, 9280772014, 9280772015, 9280772016, 9280772017, 9280772018, 9280772019, 9280772020, 9280772021, 9280772022, 9280772023, 9280772024, 9280772025, 9280772026, 9280772027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	10/28/10 21:03	
1-Chloro-2-bromopropane (S)	%	81	60-140	10/28/10 21:03	

LABORATORY CONTROL SAMPLE & LCSD: 519245 519246

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.29	0.26	0.26	90	90	60-140	1	20	
1-Chloro-2-bromopropane (S)	%				83	84	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 519247 519248

Parameter	Units	9280772019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	0.062	.28	.28	0.26	0.26	72	70	60-140	2	20	
1-Chloro-2-bromopropane (S)	%						87	85	60-140			

SAMPLE DUPLICATE: 519249

Parameter	Units	9280772020 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	1.4	1.4	5	20	
1-Chloro-2-bromopropane (S)	%	89	89	2		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH NELAC

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

QC Batch: OEXT/11679
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9280772028

METHOD BLANK: 520841 Matrix: Water
Associated Lab Samples: 9280772028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	11/01/10 20:30	
1-Chloro-2-bromopropane (S)	%	102	60-140	11/01/10 20:30	

LABORATORY CONTROL SAMPLE & LCSD: 520842 520843

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.29	0.32	0.32	110	112	60-140	0	20	
1-Chloro-2-bromopropane (S)	%				103	103	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 520844 520845

Parameter	Units	9280572009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	.28	.28	0.34	0.35	122	126	60-140	3	20	
1-Chloro-2-bromopropane (S)	%						100	102	60-140			

SAMPLE DUPLICATE: 520846

Parameter	Units	9280572010 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.13	0.15	13	20	
1-Chloro-2-bromopropane (S)	%	96	99	4		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

QC Batch: MSV/12846
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Oxygenates SC
Associated Lab Samples: 9280772001, 9280772005

METHOD BLANK: 519398
Matrix: Water
Associated Lab Samples: 9280772001, 9280772005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	10/30/10 02:18	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	10/30/10 02:18	
Benzene	ug/L	ND	5.0	10/30/10 02:18	
Diisopropyl ether	ug/L	ND	5.0	10/30/10 02:18	
Ethanol	ug/L	ND	200	10/30/10 02:18	
Ethyl-tert-butyl ether	ug/L	ND	10.0	10/30/10 02:18	
Ethylbenzene	ug/L	ND	5.0	10/30/10 02:18	
m&p-Xylene	ug/L	ND	10.0	10/30/10 02:18	
Methyl-tert-butyl ether	ug/L	ND	5.0	10/30/10 02:18	
Naphthalene	ug/L	ND	5.0	10/30/10 02:18	
o-Xylene	ug/L	ND	5.0	10/30/10 02:18	
tert-Amyl Alcohol	ug/L	ND	100	10/30/10 02:18	
tert-Amylmethyl ether	ug/L	ND	10.0	10/30/10 02:18	
tert-Butyl Alcohol	ug/L	ND	100	10/30/10 02:18	
tert-Butyl Formate	ug/L	ND	50.0	10/30/10 02:18	
Toluene	ug/L	ND	5.0	10/30/10 02:18	
Xylene (Total)	ug/L	ND	10.0	10/30/10 02:18	
1,2-Dichloroethane-d4 (S)	%	91	70-130	10/30/10 02:18	
4-Bromofluorobenzene (S)	%	91	70-130	10/30/10 02:18	
Dibromofluoromethane (S)	%	97	70-130	10/30/10 02:18	
Toluene-d8 (S)	%	103	70-130	10/30/10 02:18	

LABORATORY CONTROL SAMPLE: 519399

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	58.0	116	70-130	
3,3-Dimethyl-1-Butanol	ug/L	1000	946	95	70-130	
Benzene	ug/L	50	59.5	119	70-130	
Diisopropyl ether	ug/L	50	62.8	126	70-130	
Ethanol	ug/L	2000	2400	120	70-130	
Ethyl-tert-butyl ether	ug/L	100	121	121	70-130	
Ethylbenzene	ug/L	50	52.1	104	70-130	
m&p-Xylene	ug/L	100	104	104	70-130	
Methyl-tert-butyl ether	ug/L	50	56.7	113	70-130	
Naphthalene	ug/L	50	52.2	104	70-130	
o-Xylene	ug/L	50	51.7	103	70-130	
tert-Amyl Alcohol	ug/L	1000	1040	104	70-130	
tert-Amylmethyl ether	ug/L	100	119	119	70-130	
tert-Butyl Alcohol	ug/L	500	569	114	70-130	
tert-Butyl Formate	ug/L	400	377	94	70-130	
Toluene	ug/L	50	60.1	120	70-130	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

LABORATORY CONTROL SAMPLE: 519399

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Xylene (Total)	ug/L	150	156	104	70-130	
1,2-Dichloroethane-d4 (S)	%			93	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Dibromofluoromethane (S)	%			99	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 519400 519401

Parameter	Units	9280579002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	55.2	57.5	110	115	70-130	4	30	
3,3-Dimethyl-1-Butanol	ug/L	ND	1000	1000	810	929	81	93	70-130	14	30	
Benzene	ug/L	47.1	50	50	103	104	111	113	70-130	1	30	
Diisopropyl ether	ug/L	3.2J	50	50	62.4	64.5	118	123	70-130	3	30	
Ethanol	ug/L	ND	2000	2000	901	1910	45	95	70-130	72	30	M0,R1
Ethyl-tert-butyl ether	ug/L	ND	100	100	118	120	117	119	70-130	2	30	
Ethylbenzene	ug/L	77.3	50	50	124	123	94	92	70-130	1	30	
m&p-Xylene	ug/L	24.0	100	100	124	126	100	102	70-130	1	30	
Methyl-tert-butyl ether	ug/L	6.7	50	50	57.6	60.8	102	108	70-130	5	30	
Naphthalene	ug/L	50.4	50	50	89.0	95.1	77	89	70-130	7	30	
o-Xylene	ug/L	4.1J	50	50	56.2	55.2	104	102	70-130	2	30	
tert-Amyl Alcohol	ug/L	87.3J	1000	1000	846	751	76	66	70-130	12	30	M0
tert-Amylmethyl ether	ug/L	ND	100	100	110	112	110	112	70-130	2	30	
tert-Butyl Alcohol	ug/L	ND	500	500	461	575	89	112	70-130	22	30	
tert-Butyl Formate	ug/L	ND	400	400	ND	ND	0	0	70-130		30	P5
Toluene	ug/L	8.8	50	50	60.9	58.0	104	98	70-130	5	30	
1,2-Dichloroethane-d4 (S)	%						91	94	70-130			
4-Bromofluorobenzene (S)	%						98	102	70-130			
Dibromofluoromethane (S)	%						98	101	70-130			
Toluene-d8 (S)	%						102	102	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

QC Batch: MSV/12847 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Oxygenates SC
Associated Lab Samples: 9280772006, 9280772008, 9280772009, 9280772010, 9280772011, 9280772013, 9280772014, 9280772015, 9280772016, 9280772017, 9280772018, 9280772019, 9280772020, 9280772021, 9280772022, 9280772023, 9280772024, 9280772026

METHOD BLANK: 519402 Matrix: Water
Associated Lab Samples: 9280772006, 9280772008, 9280772009, 9280772010, 9280772011, 9280772013, 9280772014, 9280772015, 9280772016, 9280772017, 9280772018, 9280772019, 9280772020, 9280772021, 9280772022, 9280772023, 9280772024, 9280772026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	10/28/10 16:31	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	10/28/10 16:31	
Benzene	ug/L	ND	5.0	10/28/10 16:31	
Diisopropyl ether	ug/L	ND	5.0	10/28/10 16:31	
Ethanol	ug/L	ND	200	10/28/10 16:31	
Ethyl-tert-butyl ether	ug/L	ND	10.0	10/28/10 16:31	
Ethylbenzene	ug/L	ND	5.0	10/28/10 16:31	
m&p-Xylene	ug/L	ND	10.0	10/28/10 16:31	
Methyl-tert-butyl ether	ug/L	ND	5.0	10/28/10 16:31	
Naphthalene	ug/L	ND	5.0	10/28/10 16:31	
o-Xylene	ug/L	ND	5.0	10/28/10 16:31	
tert-Amyl Alcohol	ug/L	ND	100	10/28/10 16:31	
tert-Amylmethyl ether	ug/L	ND	10.0	10/28/10 16:31	
tert-Butyl Alcohol	ug/L	ND	100	10/28/10 16:31	
tert-Butyl Formate	ug/L	ND	50.0	10/28/10 16:31	
Toluene	ug/L	ND	5.0	10/28/10 16:31	
Xylene (Total)	ug/L	ND	10.0	10/28/10 16:31	
1,2-Dichloroethane-d4 (S)	%	116	70-130	10/28/10 16:31	
4-Bromofluorobenzene (S)	%	92	70-130	10/28/10 16:31	
Dibromofluoromethane (S)	%	104	70-130	10/28/10 16:31	
Toluene-d8 (S)	%	104	70-130	10/28/10 16:31	

LABORATORY CONTROL SAMPLE: 519403

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	49.0	98	70-130	
3,3-Dimethyl-1-Butanol	ug/L	1000	677	68	70-130	L0
Benzene	ug/L	50	49.3	99	70-130	
Diisopropyl ether	ug/L	50	48.6	97	70-130	
Ethanol	ug/L	2000	2060	103	70-130	
Ethyl-tert-butyl ether	ug/L	100	98.3	98	70-130	
Ethylbenzene	ug/L	50	49.6	99	70-130	
m&p-Xylene	ug/L	100	96.3	96	70-130	
Methyl-tert-butyl ether	ug/L	50	47.6	95	70-130	
Naphthalene	ug/L	50	47.7	95	70-130	
o-Xylene	ug/L	50	44.5	89	70-130	
tert-Amyl Alcohol	ug/L	1000	751	75	70-130	
tert-Amylmethyl ether	ug/L	100	93.8	94	70-130	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

LABORATORY CONTROL SAMPLE: 519403

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butyl Alcohol	ug/L	500	490	98	70-130	
tert-Butyl Formate	ug/L	400	334	83	70-130	
Toluene	ug/L	50	44.9	90	70-130	
Xylene (Total)	ug/L	150	141	94	70-130	
1,2-Dichloroethane-d4 (S)	%			102	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Dibromofluoromethane (S)	%			100	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 519404 519405

Parameter	Units	9280772010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	59.2	54.9	118	110	70-130	8	30	
3,3-Dimethyl-1-Butanol	ug/L	ND	1000	1000	579	697	58	70	70-130	18	30	M0
Benzene	ug/L	ND	50	50	54.0	53.4	108	107	70-130	1	30	
Diisopropyl ether	ug/L	ND	50	50	46.5	48.6	93	97	70-130	4	30	
Ethanol	ug/L	ND	2000	2000	1280	1700	64	85	70-130	28	30	M0
Ethyl-tert-butyl ether	ug/L	ND	100	100	96.9	108	97	108	70-130	11	30	
Ethylbenzene	ug/L	ND	50	50	51.5	53.1	103	106	70-130	3	30	
m&p-Xylene	ug/L	ND	100	100	99.0	99.8	99	100	70-130	1	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	43.1	44.3	86	89	70-130	3	30	
Naphthalene	ug/L	ND	50	50	43.6	51.4	87	103	70-130	16	30	
o-Xylene	ug/L	ND	50	50	43.7	44.8	87	89	70-130	2	30	
tert-Amyl Alcohol	ug/L	ND	1000	1000	690	768	69	77	70-130	11	30	M0
tert-Amylmethyl ether	ug/L	ND	100	100	97.8	98.4	98	98	70-130	1	30	
tert-Butyl Alcohol	ug/L	ND	500	500	334	413	67	83	70-130	21	30	M0
tert-Butyl Formate	ug/L	ND	400	400	ND	ND	0	0	70-130		30	P5
Toluene	ug/L	ND	50	50	40.5	42.5	81	85	70-130	5	30	
1,2-Dichloroethane-d4 (S)	%						110	105	70-130			
4-Bromofluorobenzene (S)	%						93	92	70-130			
Dibromofluoromethane (S)	%						107	105	70-130			
Toluene-d8 (S)	%						86	89	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

QC Batch: MSV/12850 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Oxygenates SC
Associated Lab Samples: 9280772007, 9280772025, 9280772027

METHOD BLANK: 519805 Matrix: Water
Associated Lab Samples: 9280772007, 9280772025, 9280772027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	10/29/10 13:59	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	10/29/10 13:59	
Benzene	ug/L	ND	5.0	10/29/10 13:59	
Diisopropyl ether	ug/L	ND	5.0	10/29/10 13:59	
Ethanol	ug/L	ND	200	10/29/10 13:59	
Ethyl-tert-butyl ether	ug/L	ND	10.0	10/29/10 13:59	
Ethylbenzene	ug/L	ND	5.0	10/29/10 13:59	
m&p-Xylene	ug/L	ND	10.0	10/29/10 13:59	
Methyl-tert-butyl ether	ug/L	ND	5.0	10/29/10 13:59	
Naphthalene	ug/L	ND	5.0	10/29/10 13:59	
o-Xylene	ug/L	ND	5.0	10/29/10 13:59	
tert-Amyl Alcohol	ug/L	ND	100	10/29/10 13:59	
tert-Amylmethyl ether	ug/L	ND	10.0	10/29/10 13:59	
tert-Butyl Alcohol	ug/L	ND	100	10/29/10 13:59	
tert-Butyl Formate	ug/L	ND	50.0	10/29/10 13:59	
Toluene	ug/L	ND	5.0	10/29/10 13:59	
Xylene (Total)	ug/L	ND	10.0	10/29/10 13:59	
1,2-Dichloroethane-d4 (S)	%	92	70-130	10/29/10 13:59	
4-Bromofluorobenzene (S)	%	105	70-130	10/29/10 13:59	
Dibromofluoromethane (S)	%	95	70-130	10/29/10 13:59	
Toluene-d8 (S)	%	100	70-130	10/29/10 13:59	

LABORATORY CONTROL SAMPLE: 519806

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	53.6	107	70-130	
3,3-Dimethyl-1-Butanol	ug/L	1000	987	99	70-130	
Benzene	ug/L	50	54.2	108	70-130	
Diisopropyl ether	ug/L	50	53.1	106	70-130	
Ethanol	ug/L	2000	2060	103	70-130	
Ethyl-tert-butyl ether	ug/L	100	108	108	70-130	
Ethylbenzene	ug/L	50	50.9	102	70-130	
m&p-Xylene	ug/L	100	101	101	70-130	
Methyl-tert-butyl ether	ug/L	50	50.9	102	70-130	
Naphthalene	ug/L	50	46.2	92	70-130	
o-Xylene	ug/L	50	49.2	98	70-130	
tert-Amyl Alcohol	ug/L	1000	949	95	70-130	
tert-Amylmethyl ether	ug/L	100	106	106	70-130	
tert-Butyl Alcohol	ug/L	500	555	111	70-130	
tert-Butyl Formate	ug/L	400	370	93	70-130	
Toluene	ug/L	50	52.6	105	70-130	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH NELAC
nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

LABORATORY CONTROL SAMPLE: 519806

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Xylene (Total)	ug/L	150	151	100	70-130	
1,2-Dichloroethane-d4 (S)	%			93	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Dibromofluoromethane (S)	%			98	70-130	
Toluene-d8 (S)	%			105	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 519807 519808

Parameter	Units	9280785002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	56.4	54.8	113	110	70-130	3	30	
3,3-Dimethyl-1-Butanol	ug/L	ND	1000	1000	886	830	89	83	70-130	7	30	
Benzene	ug/L	ND	50	50	54.5	54.8	108	108	70-130	1	30	
Diisopropyl ether	ug/L	ND	50	50	56.5	56.9	113	114	70-130	1	30	
Ethanol	ug/L	ND	2000	2000	9040	1980	452	99	70-130	128	30	E,M0, R1
Ethyl-tert-butyl ether	ug/L	ND	100	100	112	113	112	113	70-130	1	30	
Ethylbenzene	ug/L	ND	50	50	52.0	55.4	103	110	70-130	6	30	
m&p-Xylene	ug/L	ND	100	100	106	102	105	101	70-130	4	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	54.3	55.4	109	111	70-130	2	30	
Naphthalene	ug/L	ND	50	50	48.9	53.4	94	103	70-130	9	30	
o-Xylene	ug/L	ND	50	50	50.8	51.9	101	103	70-130	2	30	
tert-Amyl Alcohol	ug/L	ND	1000	1000	886	845	89	84	70-130	5	30	
tert-Amylmethyl ether	ug/L	ND	100	100	113	112	113	112	70-130	1	30	
tert-Butyl Alcohol	ug/L	ND	500	500	471	441	94	88	70-130	7	30	
tert-Butyl Formate	ug/L	ND	400	400	38.1J	38.2J	10	10	70-130		30	P5
Toluene	ug/L	ND	50	50	53.7	54.5	106	107	70-130	1	30	
1,2-Dichloroethane-d4 (S)	%						97	93	70-130			
4-Bromofluorobenzene (S)	%						102	102	70-130			
Dibromofluoromethane (S)	%						95	93	70-130			
Toluene-d8 (S)	%						102	102	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH NELAC
nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

QC Batch: MSV/12877
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Oxygenates SC
Associated Lab Samples: 9280772012

METHOD BLANK: 520716
Matrix: Water
Associated Lab Samples: 9280772012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	10/30/10 13:59	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	10/30/10 13:59	
Benzene	ug/L	ND	5.0	10/30/10 13:59	
Diisopropyl ether	ug/L	ND	5.0	10/30/10 13:59	
Ethanol	ug/L	ND	200	10/30/10 13:59	
Ethyl-tert-butyl ether	ug/L	ND	10.0	10/30/10 13:59	
Ethylbenzene	ug/L	ND	5.0	10/30/10 13:59	
m&p-Xylene	ug/L	ND	10.0	10/30/10 13:59	
Methyl-tert-butyl ether	ug/L	ND	5.0	10/30/10 13:59	
Naphthalene	ug/L	ND	5.0	10/30/10 13:59	
o-Xylene	ug/L	ND	5.0	10/30/10 13:59	
tert-Amyl Alcohol	ug/L	ND	100	10/30/10 13:59	
tert-Amylmethyl ether	ug/L	ND	10.0	10/30/10 13:59	
tert-Butyl Alcohol	ug/L	ND	100	10/30/10 13:59	
tert-Butyl Formate	ug/L	ND	50.0	10/30/10 13:59	
Toluene	ug/L	ND	5.0	10/30/10 13:59	
Xylene (Total)	ug/L	ND	10.0	10/30/10 13:59	
1,2-Dichloroethane-d4 (S)	%	93	70-130	10/30/10 13:59	
4-Bromofluorobenzene (S)	%	100	70-130	10/30/10 13:59	
Dibromofluoromethane (S)	%	96	70-130	10/30/10 13:59	
Toluene-d8 (S)	%	104	70-130	10/30/10 13:59	

LABORATORY CONTROL SAMPLE: 520717

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	54.2	108	70-130	
3,3-Dimethyl-1-Butanol	ug/L	1000	887	89	70-130	
Benzene	ug/L	50	55.5	111	70-130	
Diisopropyl ether	ug/L	50	59.3	119	70-130	
Ethanol	ug/L	2000	2190	109	70-130	
Ethyl-tert-butyl ether	ug/L	100	117	117	70-130	
Ethylbenzene	ug/L	50	50.6	101	70-130	
m&p-Xylene	ug/L	100	101	101	70-130	
Methyl-tert-butyl ether	ug/L	50	55.4	111	70-130	
Naphthalene	ug/L	50	49.2	98	70-130	
o-Xylene	ug/L	50	50.8	102	70-130	
tert-Amyl Alcohol	ug/L	1000	948	95	70-130	
tert-Amylmethyl ether	ug/L	100	113	113	70-130	
tert-Butyl Alcohol	ug/L	500	533	107	70-130	
tert-Butyl Formate	ug/L	400	397	99	70-130	
Toluene	ug/L	50	56.5	113	70-130	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

LABORATORY CONTROL SAMPLE: 520717

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Xylene (Total)	ug/L	150	152	102	70-130	
1,2-Dichloroethane-d4 (S)	%			93	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			99	70-130	
Toluene-d8 (S)	%			105	70-130	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

QC Batch: MSV/12890 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Oxygenates SC
Associated Lab Samples: 9280772002, 9280772003, 9280772004, 9280772028

METHOD BLANK: 521300 Matrix: Water
Associated Lab Samples: 9280772002, 9280772003, 9280772004, 9280772028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	11/02/10 15:48	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	11/02/10 15:48	
Benzene	ug/L	ND	5.0	11/02/10 15:48	
Diisopropyl ether	ug/L	ND	5.0	11/02/10 15:48	
Ethanol	ug/L	ND	200	11/02/10 15:48	
Ethyl-tert-butyl ether	ug/L	ND	10.0	11/02/10 15:48	
Ethylbenzene	ug/L	ND	5.0	11/02/10 15:48	
m&p-Xylene	ug/L	ND	10.0	11/02/10 15:48	
Methyl-tert-butyl ether	ug/L	ND	5.0	11/02/10 15:48	
Naphthalene	ug/L	ND	5.0	11/02/10 15:48	
o-Xylene	ug/L	ND	5.0	11/02/10 15:48	
tert-Amyl Alcohol	ug/L	ND	100	11/02/10 15:48	
tert-Amylmethyl ether	ug/L	ND	10.0	11/02/10 15:48	
tert-Butyl Alcohol	ug/L	ND	100	11/02/10 15:48	
tert-Butyl Formate	ug/L	ND	50.0	11/02/10 15:48	
Toluene	ug/L	ND	5.0	11/02/10 15:48	
Xylene (Total)	ug/L	ND	10.0	11/02/10 15:48	
1,2-Dichloroethane-d4 (S)	%	104	70-130	11/02/10 15:48	
4-Bromofluorobenzene (S)	%	93	70-130	11/02/10 15:48	
Dibromofluoromethane (S)	%	104	70-130	11/02/10 15:48	
Toluene-d8 (S)	%	100	70-130	11/02/10 15:48	

LABORATORY CONTROL SAMPLE: 521301

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	51.4	103	70-130	
3,3-Dimethyl-1-Butanol	ug/L	1000	946	95	70-130	
Benzene	ug/L	50	54.2	108	70-130	
Diisopropyl ether	ug/L	50	48.7	97	70-130	
Ethanol	ug/L	2000	1640	82	70-130	
Ethyl-tert-butyl ether	ug/L	100	99.8	100	70-130	
Ethylbenzene	ug/L	50	51.6	103	70-130	
m&p-Xylene	ug/L	100	104	104	70-130	
Methyl-tert-butyl ether	ug/L	50	48.5	97	70-130	
Naphthalene	ug/L	50	52.1	104	70-130	
o-Xylene	ug/L	50	53.5	107	70-130	
tert-Amyl Alcohol	ug/L	1000	1030	103	70-130	
tert-Amylmethyl ether	ug/L	100	117	117	70-130	
tert-Butyl Alcohol	ug/L	500	468	94	70-130	
tert-Butyl Formate	ug/L	400	411	103	70-130	
Toluene	ug/L	50	48.5	97	70-130	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

LABORATORY CONTROL SAMPLE: 521301

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Xylene (Total)	ug/L	150	158	105	70-130	
1,2-Dichloroethane-d4 (S)	%			104	70-130	
4-Bromofluorobenzene (S)	%			102	70-130	
Dibromofluoromethane (S)	%			95	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 521302 521303

Parameter	Units	9280772004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	58.5	56.8	117	114	70-130	3	30	
3,3-Dimethyl-1-Butanol	ug/L	ND	1000	1000	1000	1030	100	103	70-130	3	30	
Benzene	ug/L	ND	50	50	59.4	61.2	119	122	70-130	3	30	
Diisopropyl ether	ug/L	ND	50	50	55.9	56.5	112	113	70-130	1	30	
Ethanol	ug/L	ND	2000	2000	1710	1940	86	97	70-130	13	30	
Ethyl-tert-butyl ether	ug/L	ND	100	100	122	122	122	122	70-130	1	30	
Ethylbenzene	ug/L	ND	50	50	57.9	58.2	116	116	70-130	1	30	
m&p-Xylene	ug/L	ND	100	100	120	121	120	121	70-130	1	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	59.9	60.1	120	120	70-130	0	30	
Naphthalene	ug/L	ND	50	50	58.4	57.3	117	115	70-130	2	30	
o-Xylene	ug/L	ND	50	50	61.0	63.2	122	126	70-130	4	30	
tert-Amyl Alcohol	ug/L	ND	1000	1000	1240	1200	124	120	70-130	3	30	
tert-Amylmethyl ether	ug/L	ND	100	100	124	128	124	128	70-130	3	30	
tert-Butyl Alcohol	ug/L	ND	500	500	601	565	120	113	70-130	6	30	
tert-Butyl Formate	ug/L	ND	400	400	ND	ND	0	0	70-130		30	P5
Toluene	ug/L	ND	50	50	58.2	60.5	116	121	70-130	4	30	
1,2-Dichloroethane-d4 (S)	%						105	100	70-130			
4-Bromofluorobenzene (S)	%						102	105	70-130			
Dibromofluoromethane (S)	%						103	102	70-130			
Toluene-d8 (S)	%						100	98	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: SMITH GROCERY 10-3035
Pace Project No.: 9280772

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
S - Surrogate
1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
P5	The EPA or method required sample preservation degrades this compound, therefore acceptable recoveries may not be achieved in sample matrix spikes.
R1	RPD value was outside control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
S5	Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 3

1409654

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: MECi	Report To: B. Shene	Attention:
Address: 235 B Dooly Rd	Copy To:	Company Name:
Lexington, SC 29073		Address:
Email To: JLC @ mec.net	Purchase Order No.:	Pace Quote Reference:
Phone: 803-808-2093 Fax: 803-808-2098	Project Name: Smiths Grocery	Pace Project Manager: R. Spencer
Requested Due Date/TAT:	Project Number: 10-3035	Pace Profile #: 836-5

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Requested Analysis Filtered (Y/N)

Section D Required Client Information

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: BTEX, Naph, MTBE	1,2 DCA, & arsenic	EDB	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-1R	WT	G			10/26	1110		6				X						X	X	X		001
2	MW-2						950		6				X						X	X	X		002
3	MW-3						1015		6				X						X	X	X		Added 3 Bolts 003
4	MW-4R						1120		6				X						X	X	X		004
5	MW-5						1205		2				X						X	X	X		Added 1 Bolt 005
6	MW-6						1215		6				X						X	X	X		Added 2 Bolts 006
7	~~MW-7~~ IW-9 (JC)						1220		6				X						X	X	X		007
8	MW-8						1035		6				X						X	X	X		008
9	~~MW-9~~ MW-7 (JC)						1235		6				X						X	X	X		009
10	MW-11						1430		6				X						X	X	X		010
11	MW-12						1420		6				X						X	X	X		Added 3 Bolts 011
12	MW-14	WT	G			10/26	1605		6				X						X	X	X		012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Report "J" Values		10-27-10	9:42	B Moody - Pace	10-27-10	9:42				
	B Moody	10-27-10	15:45	FDLK	10/27/10	1545	2.1	Y	W	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Lasky

SIGNATURE of SAMPLER: Chris Lasky

DATE Signed (MM/DD/YY): 10/26/10

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1409655

Section A Required Client Information:

Company:	MECI
Address:	235 B Dooley Rd Lexington, SC 29073
Email To:	JLC @ meci.net
Phone:	(803) - 808-2048 Fax: 803-808-2048
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	B Shealy
Copy To:	
Purchase Order No.:	
Project Name:	Smith Creek
Project Number:	10-3035

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	R. Spencer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: BTEX, Naph, MTBE	1,2 DCA, 8 oxygenates	EDB	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 9280772
1	MW-16	WT	G			10/26	~~1353~~ 1355		6				X					Y	Y	Y		013
2	MW-17						1400		6				X					Y	Y	Y		014
3	MW-18						1600		6				X					Y	Y	Y		015
4	MW-19						1605		6				X					Y	Y	Y		016
5	~~MW-20R~~ MW-9R (JC)						1721		6				X					Y	Y	Y		017
6	TW-1						1052		6				X					Y	Y	Y		Added 1 Bott 018
7	TW-2						1025		6				X					Y	Y	Y		Added 1 Bott 019
8	TW-3						1455		6				X					Y	Y	Y		020
9	~~MW-UNKNOWN~~ MW-20 (JC)						1330		6				X					Y	Y	Y		021
10	WSW-Smith						1215		6				X					Y	Y	Y		022
11	WSW-Creek						1500		6				X					Y	Y	Y		023
12	WCW-Swift (PRE)	WT	C			10/26	1525		6				X					Y	Y	Y		024

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Report "J" Values		10-27-10	9:44	JMoody - Pace	10/27/10	9:44	
	JMoody	10-27-10	15:45		10/27/10	1545	2.1 4 W 4

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Leahy

SIGNATURE of SAMPLER: Chris Leahy

DATE Signed (MM/DD/YY): 10/26/10

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 3

1409656

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: MECi	Report To: B. Shane	Attention:
Address: 235 B Dooly Rd Lexington, SC 29073	Copy To:	Company Name:
Email To: JLC@meci.net	Purchase Order No.:	Address:
Phone: 803-808-2043 Fax: 803-808-2048	Project Name: Smiths Crocy	Pace Quote Reference:
Requested Due Date/TAT:	Project Number: 10-3035	Pace Project Manager: R Spencer
		Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	BTEX, Naph, MTBE	1,2 DCA, EDB, Styrene	CBR	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WSW-Swift (Post)		WT	G			10/26	1520		6				X					X	X	X	X		826
2	WSW-Hill (Pre)		WT	G			10/26	1540		6				X					X	X	X	X		827
3	WGW-Hill (Post)		WT	G			10/26	1545		6				X					X	X	X	X		
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

9280772

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Report "J" Values		10-27-10	9:44	B Moody - Pace	10-27-10	9:44				
	B Moody	10-27-10	15:45		10/27/10	1545	2.1	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Lashly

SIGNATURE of SAMPLER: Chris Lashly

DATE Signed (MM/DD/YY): 10/26/10

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1409662

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: MECI	Report To: B. Shane	Attention:
Address: 2358 Dooley Rd	Copy To:	Company Name:
Lexington SC 29073		Address:
Email To: JCB@mecinet	Purchase Order No.:	Pace Quote Reference:
Phone: 808-2043 Fax:	Project Name: Smith Grocery	Pace Project Manager: R. Spencer
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☒ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: 8260, BTEX, Napth, mtbe	EDB	1,2-DCA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW1-10	WT	G			10-27	12:00		3				3						X	X	X		9280772
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Boone			D Moody - Pace	10-28-10	12:25	
	D Moody	10-28-10	15:05	CMT Pace	10/28/10	15:25	3 4 Yes No NA

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John C. Bryant

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-27-10

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

FIELD DATA INFORMATION SHEETS

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 10/26/2010

Field Personnel: Chris Lashley, Gavin Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** MW-1R

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Free Product (DFP)			feet
Depth to Ground Water (DGW)	32.33		feet
Total Well Depth (TWD)	39		feet
Length of the water column (LWC=TWD-DGW)		6.67	feet
1 casing volume (CV=LWC X C)= ____ X	0.163	1.09	gallons
3 casing volume (3 X CV)=	3	3.26	gallons

Total Volume of Water Purged Before Sampling 1.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:06	11:07	11:08	11:10				
pH (s.u.)	6.19	5.96	5.88	5.77				
Specific Conductivity (µmhos/cm)	79.8	72.7	70.7	65.9				
Water Temperature (°C)	19.0	19.0	18.9	17.8				
Dissolved Oxygen	4.17	4.94	5.20	5.19				
PID readings, if required								

Remarks: Sample Time: 11:10

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 10/26/2010

Field Personnel: Chris Lashley, Gavin Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** MW-4R

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	28.38			feet
Total Well Depth (TWD)	34			feet
Length of the water column (LWC=TWD-DGW)			5.62	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	0.92	gallons
3 casing volume (3 X CV)=		3	2.75	gallons

Total Volume of Water Purged Before Sampling 3 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:15	11:16	11:18	11:20				
pH (s.u.)	5.89	5.71	5.63	5.56				
Specific Conductivity (µmhos/cm)	45.2	36.3	33.8	33.9				
Water Temperature (°C)	17.8	17.3	17.3	17.3				
~~Dissolved Oxygen~~	~~6.81~~	~~6.73~~	~~7.31~~	~~6.78~~				
PID readings, if required								

Remarks: Sample Time: 11:20

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 10/26/2010

Field Personnel: Chris Lashley, Gavin Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** MW-9R

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	32.50			feet
Total Well Depth (TWD)	38			feet
Length of the water column (LWC=TWD-DGW)			5.5	feet
1 casing volume (CV=LWC X C)=	____ X	0.163	0.90	gallons
3 casing volume (3 X CV)=		3	2.69	gallons

Total Volume of Water Purged Before Sampling 3 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:15	13:17	13:19	13:21				
pH (s.u.)	6.64	6.43	6.00	5.63				
Specific Conductivity (µmhos/cm)	33.2	27.1	25.5	25.5				
Water Temperature (°C)	18.5	17.9	17.6	17.6				
~~Dissolved Oxygen~~	~~5.91~~	~~6.59~~	~~6.41~~	~~6.17~~				
PID readings, if required								

Remarks: Sample Time: 13:21

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 10/26/2010

Field Personnel: Chris Lashley, Gavin Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-1

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Free Product (DFP)			feet
Depth to Ground Water (DGW)	35.30		feet
Total Well Depth (TWD)	61		feet
Length of the water column (LWC=TWD-DGW)		25.7	feet
1 casing volume (CV=LWC X C)= ____ X	0.163	4.19	gallons
3 casing volume (3 X CV)=	3	12.57	gallons

Total Volume of Water Purged Before Sampling 13 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	10:35	10:40	10:45	10:52				
pH (s.u.)	6.51	6.50	6.21	6.18				
Specific Conductivity (µmhos/cm)	191.3	180.9	183.5	190.6				
Water Temperature (°C)	20.3	19.6	19.5	19.3				
Dissolved Oxygen	0.94	1.38	1.55	1.32				
PID readings, if required								

Remarks: Sample Time: 10:52

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 10/26/2010

Field Personnel: Chris Lashley, Gavin Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-2

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	35.72			feet
Total Well Depth (TWD)	88			feet
Length of the water column (LWC=TWD-DGW)			52.28	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	8.52	gallons
3 casing volume (3 X CV)=		3	25.56	gallons

Total Volume of Water Purged Before Sampling 26 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	9:45	9:54	10:03	10:25				
pH (s.u.)	9.38	9.56	6.98	6.64				
Specific Conductivity (µmhos/cm)	213.5	173.0	330.9	296.8				
Water Temperature (°C)	20.0	19.0	18.6	18.5				
Dissolved Oxygen	1.00	1.48	1.45	1.71				
PID readings, if required								

Remarks: Sample Time: 10:25

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 10/26/2010

Field Personnel: Chris Lashley, Gavin Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-3

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	40.38			feet
Total Well Depth (TWD)	71			feet
Length of the water column (LWC=TWD-DGW)			30.62	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	4.99	gallons
3 casing volume (3 X CV)=		3	14.97	gallons

Total Volume of Water Purged Before Sampling 16 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	14:27	14:33	14:43	14:55				
pH (s.u.)	5.72	5.71	5.35	5.41				
Specific Conductivity (µmhos/cm)	51.3	27.0	63.5	63.1				
Water Temperature (°C)	20.5	19.2	19.5	18.8				
~~Dissolved Oxygen~~	~~0.72~~	~~1.64~~	~~1.85~~	~~1.46~~				
PID readings, if required								

Remarks: Sample Time: 14:55

WASTE DISPOSAL MANIFESTS

Midlands Environmental Consultants, Inc.

November 19, 2010

Re: Treatment of Purge Water
Smith's Grocery
York, South Carolina
SCDHEC Site ID Number 09322
MECI Project Number 10-3035

To Whom it May Concern;

Midlands Environmental Consultants, Inc. is providing the following letter as certification that treatment of the referenced purge water complied with the conditions of "Proposed Conditions for Use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater", as described in the following:

Applicability:

Groundwater treated was obtained as a result development of wells and sampling.

Conditions:

1. The purge/bail water from all wells is mixed before usage of the Activated Carbon Unit.
2. No free-product was detected in any of the purge water drums.
3. Analytical results of from well sampling show average concentrations of petroleum hydrocarbon constituents less than 5000 parts per billion (ppb) Benzene and less than 20,000 ppb total BTEX.
4. The existing carbon pack will be replaced/reactivated every 5,000 gallons.
5. Record of usage is maintained by Contractor.
6. Any and all recommendations and conditions issued by the Manufacturer have been adhered to.
7. Any and all recommendations and conditions (even on a site by site basis) issued by the SCDHEC must be adhered to.

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

All purge waters were treated on-site using an up-flow treatment drum loaded with 30 pounds of activated carbon. Carbon will be loaded to a maximum of 3 pounds of total organic compounds or 5,000 gallons of development/purge water, whichever occurs first.

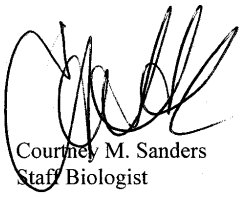
One 55-gallon drum was treated on October 26, 2010 at the referenced site.

A total of one (1) 55-gallon drum was treated at the referenced site.

Midlands Environmental also tracks cumulative organic compounds adsorbed on the activated carbon to ensure the capacity of carbon mass is not over-charged. This data is available upon request.

Should you have any questions or comments, please contact the undersigned.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist

WASTE MANAGEMENT

Richland County LF
1047 Highway Church Road
Elgin, SC, 29045
Ph: (803) 788-3054

Original
Ticket# 1061806

Customer Name MIDLANDSENVIRON MIDLANDS ENVI
Ticket Date 10/25/2010
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest 0
Destination
PO
Profile VA2718 (SOIL FROM UST ASSESSMENT)
Generator 126-MIDLANDSENVIRONMENTAL MIDLANDS ENVIRONMENTAL

Carrier MIDLANDSENVIRON MIDLANDS ENVIRONMENT
Vehicle# 1
Container
Driver
Check#
Billing # 0000463
Gen EPA ID

Volume

	Time	Scale	ScaleMaster		
In	10/25/2010 09:24:06	Scale1	Dwayne	Gross	12140 lb
Out	10/25/2010 09:39:53	Scale2	Dwayne	Tare	10280 lb
				Net	1860 lb
				Tons	0.93

Comments

	Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1	SOIL-Cont. Soil -	100	0.93	Tons				46-YORK
2	FUEL-Fuel Surcharg	100		%				46-YORK
3	EVF-P-Standard Env	100		%				46-YORK

Total Fees
Total Ticket

SIGNATURE

403WM

SPECIAL WASTE MANIFEST

WASTE ID NUMBER VA2718	*Richland Landfill* 1047 Highway Church Road Elgin, SC 29045
EXPIRATION DATE December 7, 2010	Special Waste Phone: 803-744-3346 Fax: 866-904-7194
Prepared by:	Karen Truett/Carol Weldon
GENERATOR OF WASTE:	Midlands Env. Consultants, Inc. - Various
CUSTOMER Midlands Env. Consultants	ACCOUNT NUMBER: 820-469
LOCATION OF WASTE: CITY: Rock Hill	Site Address: COUNTY: York
PHONE NUM 803-808-2043	CONTACT: Bryan Shane
FAX NUMBER:	
GENERATOR'S SIGNATURE	DATE: 10-25-10
TRANSPORTER OF WASTE: MECI	
DATE: 10-25-10	TRUCK NUMBER: 1
DRIVER'S SIGNATURE	
**** TO BE COMPLETED BY RICHLAND LANDFILL******	
DISPOSAL SITE: RICHLAND LANDFILL ELGIN, SC	Waste Class: Soil
DESCRIPTION OF WASTE: Soil from UST Assessment	
TICKET NUMBER: 226156	
RECEIVED BY:	

Smith's Grocery

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

JAN 20 2011

4/Tech UST DOCKET

Re: Groundwater Sampling and GAC Change Directive
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322; CA#40784
Release reported June 30, 1993
Report of MW Installation and Groundwater Sampling received November 19, 2010
York County

Dear Ms. Smith

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (SCDHEC) recognizes your commitment to continue work at this site utilizing Midlands Environmental Consultants, Inc. (MECI). The next scope of work needed is a comprehensive groundwater sampling and granulated activated carbon (GAC) filter change

Cost Agreement #40784 has been approved in the amount shown on the enclosed cost agreement for the work to be completed. Groundwater samples from all monitoring wells associated with the release and water supply wells (Crock, Hill Pre- and Post-GAC, Smith, and Swift Pre- and Post-GAC) should be collected and analyzed for BTEX, Naphthalene, MTBE and 1,2-DCA by EPA method 8260B and EDB by EPA Method 8011. In addition, the GAC filter should be changed at the Hill and Swift water supply wells. Pre- and Post-GAC sampling must be conducted **prior** to the GAC filter change. Please note, previously installed monitoring wells that bracket the water table do not require purging prior to sample collection.

The report submitted at the completion of these activities should include the following:

- A narrative portion documenting the sampling event noting site conditions, the names of the field personnel, date, times the event started and ended, ambient air temperature, and general weather conditions during the sampling event. Wells containing free phase product should not be sampled.
- Well purging data, pH, specific conductivity, water temperature, PID readings (where applicable) and turbidity comments Please note that all previously installed wells that properly bracket the water table do not require purging prior to sample collection.
- Groundwater elevations, depth to groundwater, remaining measurable free product thickness (if any), total well depth and screened interval for all monitoring wells associated with the site, unless otherwise directed by the Department, shall be presented in tabular form. Groundwater laboratory analytical data for all monitoring wells shall be presented in tabular format.
- A groundwater elevation contour map of the site based on current groundwater potentiometric data.
- A CoC map based on current groundwater laboratory analytical data. The groundwater data should be adjacent to the relevant monitoring well.
- Manifests for any contaminated soil and/or groundwater removed from the site for treatment and/or disposal.
- The report must be signed and sealed by a professional geologist or engineer registered in the State of South Carolina.

MECI can submit an invoice for direct billing from the State Underground Petroleum Environmental Response Bank (SUPERB) Account. Please note that all applicable South Carolina certification requirements apply to the laboratory services, well installation, and report preparation. All site rehabilitation activities must be performed and submitted by a South Carolina Certified Underground Storage Tank Site Rehabilitation Contractor.

A Monitoring Report and Invoice are due within **60 days** from the date of this letter. If the invoice and completed report are not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

Please note that Sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that no costs will be allowed unless prior approval from the Division is obtained. If for any reason additional tasks will be completed, these additional tasks and the associated cost must be pre-approved by the Division for the cost to be paid. The SCDHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, SCDHEC reserves the right to question and/or reject costs if deemed unreasonable and the right to audit project records at any time during the project or after completion of work.

The Department grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the COC concentrations based on laboratory analysis is below Risk Based Screening Levels (RBSLs), please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence or inquiries regarding this project, please reference **UST Permit #09322.** If you have any questions, please feel free to contact me by phone at (803) 896-6397, by fax at (803) 896-6245,or email at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Approved cost agreement (ACA)

cc: MECI, PO Box 854, Lexington, SC, 29071 (w/ enc.)
Technical file (w/o enc)

Approved Cost Agreement 40784

Facility: 09322 SMITHS GROCERY

THOMADL

PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB						
		B	PERSONNEL	3.0000	290.00	870.00
10 SAMPLE COLLECTION						
		A	GROUND WATER	4.0000	55.00	220.00
		C	WATER SUPPLY	6.0000	25.00	150.00
		D	GROUNDWATER NO-PURGE	20.0000	35.00	700.00
11 ANALYSES	GW GROUNDWATER					
		A	BTEX+NAPTH+MTBE	30.0000	100.00	3,000.00
		BB	1,2-DCA	30.0000	10.75	322.50
		F	EDB	30.0000	55.00	1,650.00
17 DISPOSAL						
		A1	WASTEWATER - PURGING/SAMPLING	1.0000	90.00	90.00
19 RPT/PROJECT MNGT & COORDINATIO						
		PCT	PERCENT	0.1500	7,902.50	1,185.38
24 GAC SYSTEM						
		C	FILTER REPLACEMENT/REMOVAL	2.0000	450.00	900.00
					Total Amount	9,087.88

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAR 02 2011

42 tech UST DOCKET

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: GAC Replacement Directive
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322; CA#41174
Release reported June 30, 1993
York County

Dear Ms. Smith

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (SCDHEC) recognizes your commitment to continue work at this site utilizing Midlands Environmental Consultants, Inc. (MECI). The next scope of work needed is the removal of two Granulated Activated Carbon (GAC) Unit and the installation of replacement units. A report documenting the removal of the existing units and the installation of the new units is due within 60 days from the date of this letter. The report should also indude a schematic of the systems and pertinent model information (model number, serial number, etc).

MECI can submit an invoice for direct billing from the State Underground Petroleum Environmental Response Bank (SUPERB) Account. Please note that all applicable South Carolina certification requirements apply to the laboratory services, well installation, and report preparation. All site rehabilitation activities must be performed and submitted by a South Carolina Certified Underground Storage Tank Site Rehabilitation Contractor.

On all correspondence or inquiries regarding this project, please reference **UST Permit #09322.** If you have any questions, please feel free to contact me by phone at (803) 896-6397, by fax at (803) 896-6245,or email at thomadl@dhec.sc.gov.

Sincerely,

Debra L Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Approved cost agreement (ACA)

cc: MECI, PO Box 854, Lexington, SC, 29071 (w/ enc.)
Technical file (w/o enc)

Approved Cost Agreement 41174

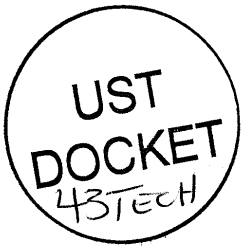
Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB					
		B PERSONNEL	1.0000	290.00	290.00
11 ANALYSES					
	GW GROUNDWATER	BB 1,2-DCA	30.0000	10.75	322.50
19 RPT/PROJECT MNGT & COORDINATIO					
		PCT PERCENT	0.1500	6,512.50	976.88
24 GAC SYSTEM					
		A NEW SYSTEM INSTALLATION	2.0000	2,500.00	5,000.00
		D SYST REMOVAL, CLEANING, REBUR	2.0000	450.00	900.00
			Total Amount		7,489.38

Midlands
Environmental
Consultants, Inc.

February 24, 2011

Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201



Subject: Report of Groundwater Sampling and Chemical Analyses
Smith's Grocery
S.C. Highway 49
York, South Carolina
SCDHEC Site ID# 09322, CA # 40784
MECI Project Number 11-3208
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached Report of Well Installation, Groundwater Sampling, and Chemical Analyses of Groundwater Samples for the referenced site. This report describes assessment activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

PROJECT INFORMATION

The subject site (Smith's Grocery) is located near the intersection of S.C. Highway 49 and Southern Pines Road, York, York County, South Carolina (see Figure 1). The site consists of an approximately 2.00 acre parcel of land (see Figure 2), and currently occupied by a convenience store. The site formerly maintained one 6,000 gallon gasoline UST and one 8,000 gallon gasoline UST. The South Carolina Department of Health and Environmental Control (SCDHEC) reported release of petroleum product from two single walled underground storage tanks (UST) at the subject site in June of 1993, which was confirmed in September of 1996.

The above project information is based on SCDHEC files.

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

FIELD EXPLORATION

Field exploration conducted at the site include:

- groundwater sampling; chemical analyses: and,
- water supply well sampling and chemical analyses.

MONITORING WELL SAMPLING AND CHEMICAL ANALYSES

On February 1, 2011, MECI personnel collected groundwater samples from twenty (20) monitoring wells at the subject site. Monitoring wells MW-6, MW-10, and MW-15 were gauged and determined to have insufficient water for sampling. Monitoring well MW-7 was gauged and determined to contain 0.09 feet of free phase petroleum product. Based on a request by SCDHEC personnel, not all of the wells were purged prior to sampling. Purging was completed by bailing at least three well volumes of water from the well or until pH, conductivity, dissolved oxygen stabilized to within 10%, whichever occurred first. Where applicable, field measurements of pH, conductivity, dissolved oxygen, dissolved carbon dioxide, and water temperature were obtained before well sampling process. Monitoring wells MW-3, MW-5, MW-11, MW-13, MW-14, MW-17, and MW-18 had insufficient water to collect field measurements, but were sampled. Table 1 presents the results of the field measurements obtained. The wells were sampled in accordance with SCDHEC guidelines.

Groundwater samples obtained were sent to Pace Analytical Services, Inc. of Huntersville, NC (SCDHEC Laboratory Certification #99006) for analysis.

The following sampling matrix contains well development and requested analyses for each well:

Monitoring Well	Purge	No Purge	Gauge Only	BTEX, Naphthalene, MTBE (EPA Method 8260-B)	EDB (EPA Method 8011)	1,2 DCA (EPA Method 8260-B)	8 Oxygenates (EPA Method 8260-B)	Total Lead (EPA Method 6010)	Sulfate (EPA Method 375.2)	Nitrate (EPA Method 335.2)	Methane (RSK Method)	PAH's (EPA Method 8270)	Ferrous Iron (Field Test)
				Analyte Sampled									
MW-1R		X		X	X	X							
MW-2		X		X	X	X							
MW-3		X		X	X	X							
MW-4R		X		X	X	X							
MW-5		X		X		X							
MW-6			X										
MW-7			X										
MW-8		X		X	X	X							
MW-9R		X		X	X	X							
MW-10			X										
MW-11		X		X		X							

Monitoring Well	Purge	No Purge	Gauge Only	BTEX, Naphthalene, MTBE (EPA Method 8260-B)	EDB (EPA Method 8011)	1,2 DCA (EPA Method 8260-B)	8 Oxygenates (EPA Method 8260-B)	Total Lead (EPA Method 6010)	Sulfate (EPA Method 375.2)	Nitrate (EPA Method 335.2)	Methane (RSK Method)	PAH's (EPA Method 8270)	Ferrous Iron (Field Test)
				Analyte Sampled									
MW-12		X		X	X	X							
MW-13		X		X	X	X							
MW-14		X		X	X	X							
MW-15			X										
MW-16		X		X	X	X							
MW-17		X		X		X							
MW-18		X		X	X	X							
MW-19		X		X	X	X							
MW-20		X		X	X	X							
IW-9		X		X	X	X							
TW-1	X			X	X	X							
TW-2	X			X	X	X							
TW-3	X			X	X	X							

Notes: BTEX = benzene, toluene, ethylbenzene, & total xylenes MTBE=methyl tertiary butyl ether 1,2 DCA = 1,2 dicloroethane PAH = polycyclic aromatic hydrocarbons

The results of the laboratory analyses are summarized in Table 2, and presented in the attached Analytical data.

WATER SUPPLY WELL SAMPLING AND CHEMICAL ANALYSES

On February 1, 2011, MECI personnel sampled four water supply wells. WSW-Hill and WSW-Swift both contain granular activated carbon units (GAC) (WSW-Smith does not have a GAC unit). Pre-Gac and Post-Gac samples were obtained from WSW-Hill and WSW-Swift. The following matrix contains well status, owner(s), and tax map identification numbers:

Water Supply Well Number	Well Owner	York County Tax Map Number:	Notes:	Well Status
WSW-Crock	Everette D. Crook Jr.	4890401001	3035 Clover Circle	Currently in Use
WSW-Hill	Tony H. Hill	4890401023	3049 Clover Circle	Currently in Use
WSW-Smith	Lois B. Smith	4560000005	3176 Charlotte Highway	Currently in Use
WSW-Swift	Gary A. Wiggam	4890401024	3043 Clover Circle	Currently in Use

The samples collected from WSW-Crock, WSW-Hill, WSW-Smith, and WSW-Swift were sent to Pace Analytical of Huntersville, North Carolina (SCDHEC Laboratory Certification #99006) for analysis. The samples collected were analyzed for BTEX, Naphthalene, MTBE, 1,2 DCA (EPA Method 8260B), and EDB (EPA Method 8011). The results of the laboratory analyses are summarized in Table 2, and presented in Appendix B.

On February 9, 2011, MECI personnel attempted to change the GAC filters on WSW-Swift and on WSW-Hill. During this attempt it was observed that the electronic head on both water supply wells were not functioning properly and read error messages. After consultation with the manufacturer (Ecowater Systems), it was the manufacturers suggestion that both the GAC units were in need of replacing and/or more in depth repair. After consultation with SCDHEC Project Manager, it was decided to replace the GAC units under a new cost agreement number at a later date.

GROUNDWATER ANALYTICAL RESULTS

As discussed above, groundwater samples obtained from the monitoring wells were analyzed for dissolved phase petroleum constituents. Monitoring well MW-7 was gauged and determined to contain 0.09 feet of free phase petroleum product. The analytical results indicate petroleum impact to the local groundwater with the highest dissolved concentrations detected in the area of monitoring well MW-8. The analytical results indicate dissolved total BTEX concentrations ranging from levels below detection limits (BDL) to 98,660 micrograms per liter in MW-8. The analytical results indicate dissolved MTBE concentrations ranging from levels below detection limits (BDL) to 191J micrograms per liter in monitoring well TW-2. The analytical results indicate dissolved Naphthalene concentrations ranging from levels below detection limits (BDL) to 978J micrograms per liter in monitoring well MW-8. The analytical results indicate dissolved EDB concentrations ranging from levels below detection limits (BDL) to 20.1 micrograms per liter in monitoring well MW-1R. The results of the analyses for each monitoring well and specific parameters are listed on Table 2. The detection limit for each parameter is provided in the attached laboratory reports.

WATER SUPPLY WELL ANALYTICAL RESULTS

Six samples were collected from water water supply wells located near the subject site. Analytical results indicate EBD concentrations at 0.022 micrograms per liter in the sample collected from WSW-Crock. Analytical results indicate Benzene concentrations at 27.4 micrograms per liter, 1,2, DCA concentrations at 6.0 micrograms per liter, total Xylenes concentrations at 5.9J micrograms per liter, and EDB concentration at 0.33 micrograms per liter in the Pre-GAC sample obtained from WSW-Hill. Analytical results indicate Benzene concentrations at 3.7J micrograms per liter and EDB concentration at 0.062 micrograms per liter in the Post-GAC sample obtained from WSW-Hill. Analytical results indicate Benzene concentrations at 7.5 micrograms per liter, 1,2 DCA concentrations at 6.7 micrograms per liter, total Xylenes concentrations at 9.7J micrograms per liter, and EDB concentration at 0.45 micrograms per liter in the Pre-GAC sample obtained from WSW-Swift. Analytical results indicate Benzene concentrations at 7.8 micrograms per liter, total Xylenes concentrations at 8.8J micrograms per liter, and EDB concentration at 0.45 micrograms per liter in the Post-GAC sample obtained from WSW-Swift. Samples collected from WSW-Smith did not indicate petroleum impact. The results of the analyses are presented on Table 2 and in the attached laboratory reports.

ASSESSMENT SUMMARY

Groundwater elevation data for the February 1, 2011, gauging events was plotted, and points of equal elevation were interpolated between the monitoring wells. A groundwater contour map of the surficial aquifer was thus prepared and is presented on Figure 3.

Monitoring well MW-7 was gauged and determined to contain 0.09 feet of free phase petroleum product. The analytical results indicate petroleum impact to the local groundwater with the highest

dissolved concentrations detected in the area of monitoring well MW-8. The analytical results indicate dissolved total BTEX concentrations ranging from levels below detection limits (BDL) to 98,660 micrograms per liter in MW-8. The analytical results indicate dissolved MTBE concentrations ranging from levels below detection limits (BDL) to 191J micrograms per liter in monitoring well TW-2. The analytical results indicate dissolved Naphthalene concentrations ranging from levels below detection limits (BDL) to 978J micrograms per liter in monitoring well MW-8. The analytical results indicate dissolved EDB concentrations ranging from levels below detection limits (BDL) to 20.1 micrograms per liter in monitoring well MW-1R. . The results of the analyses for each monitoring well and specific parameters are listed on Table 2 and in the attached laboratory reports. Figure 4 depicts graphically the concentrations of Total BTEX (indicator for plume migration) dissolved in the groundwater at the site. Figure 5 depicts graphically the concentrations of Naphthalene dissolved in the groundwater at the site. Figure 6 depicts graphically the concentrations of EDB dissolved in the groundwater at the site.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assessment are consistent with those normally employed in hydrogeological assessment and waste management projects of this type. Our evaluation of site conditions has been based on our understanding of the site, project information provided to us, and data obtained in our exploration. The general subsurface conditions utilized in our evaluation have been based on interpretation of subsurface data between borings. Contents of this report are intended for the sole use by the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.

Jeff L. Coleman
Senior Scientist

Bryan T. Shane, P.G.
Principal Geologist

Attachments

TABLES

TABLE 1

FIELD PARAMETERS
FEBRUARY 01, 2010 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3208
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	Dissolved CO_2 (mg/l)	Dissolved Oxygen (mg/l)	Temperature (^{o} Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well-head Elevation (ft)	Groundwater Elevation (ft)
MW-1R	10/26/2010	175	4.17	19.0	6.19	5.77	79.8	65.9	29-39	***	32.33	***	96.56	64.23
	2/1/2011	85	2.46	17.3	5.04	NT	57.7	NT	-	***	33.64	***	96.56	62.92
MW-2	10/26/2010	120	0.69	21.5	6.31	NT	117.1	NT	23-38	***	35.45	***	99.67	64.22
	2/1/2011	65	3.12	18.2	5.31	NT	96.9	NT	-	***	36.80	***	99.67	62.87
MW-3	10/26/2010	125	2.93	18.8	6.88	NT	31.9	NT	25-35	***	32.59	***	97.10	64.51
	2/1/2011	INS	INS	INS	INS	INS	INS	INS	-	***	34.67	***	97.10	62.43
MW-4R	10/26/2010	45	6.81	17.8	5.89	5.56	45.2	33.9	24-34	***	28.38	***	92.55	64.17
	2/1/2011	55	6.21	17.5	5.73	NT	38.9	NT	-	***	29.43	***	92.55	63.12
MW-5	10/26/2010	INS	INS	INS	INS	INS	INS	INS	20-30	***	29.84	***	94.36	64.52
	2/1/2011	INS	INS	INS	INS	INS	INS	INS	-	***	30.10	***	94.36	64.26
MW-6	10/26/2010	INS	INS	INS	INS	INS	INS	INS	27-37	***	35.57	***	98.93	63.36
	2/1/2011	DRY	DRY	DRY	DRY	DRY	DRY	DRY	-	***	36.95	***	98.93	61.98
MW-7	10/26/2010	INS	INS	INS	INS	INS	INS	INS	21-36	***	34.19	***	96.71	62.52
	2/1/2011	PROD	PROD	PROD	PROD	PROD	PROD	PROD	-	35.48	35.57	0.09	96.71	61.22
MW-8	10/26/2010	200+	0.54	19.7	6.24	NT	119.9	NT	23-38	***	35.94	***	100.14	64.20
	2/1/2011	75	1.35	17.9	6.14	NT	108.1	NT	-	***	37.31	***	100.14	62.83
MW-9R	10/26/2010	65	5.91	18.5	6.64	5.63	33.2	25.5	28-38	***	32.50	***	94.95	62.45
	2/1/2011	70	2.15	16.3	4.48	NT	34.9	NT	-	***	33.77	***	94.95	61.18
MW-10	10/27/2010	INS	INS	INS	INS	INS	INS	INS	29-44	***	41.12	***	104.83	63.71
	2/1/2011	DRY	DRY	DRY	DRY	DRY	DRY	DRY	-	***	42.41	***	104.83	62.42
MW-11	10/26/2010	INS	INS	INS	INS	INS	INS	INS	29-44	***	31.95	***	105.51	73.56
	2/1/2011	INS	INS	INS	INS	INS	INS	INS	-	***	43.42	***	105.51	62.09
MW-12	10/26/2010	INS	INS	INS	INS	INS	INS	INS	29-44	***	43.45	***	104.56	61.11
	2/1/2011	Cloudy	7.03	13.9	3.28	NT	124.5	NT	-	***	42.75	***	104.56	61.81

Notes:

1. mg/l = milligrams per liter.
2. Groundwater depths were measured from the top of the PVC riser pipe.
3. Stabalized groundwater levels measured 2/1/11.
4. NT = Not Tested.
5. INS = Insufficient Water for Field Measurements
6. DRY = Monitoring well Dry at time of Sampling
7. NS = Not Sampled
8. TD = Total Depth
9. PROD = Free Phase Petroleum Product
10. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on 02/01/11.
11. Groundwater elevation for MW-7 corrected for the presence of free phase petroleum product using a specific gravity for fuel of 0.85.

TABLE 1
PAGE 2 OF 2
FIELD PARAMETERS
FEBRUARY 01, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3208
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	Dissolved CO_2 (mg/l)	Dissolved Oxygen (mg/l)	Temperature (^{O} Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well-head Elevation (ft)	Groundwater Elevation (ft)
MW-13	10/26/2010	NS	NS	NS	NS	NS	NS	NS	32-47	***	NS	***	105.35	NS
	2/1/2011	INS	INS	INS	INS	INS	INS	INS	-	***	45.85	***	105.35	59.50
MW-14	10/26/2010	INS	INS	INS	INS	INS	INS	INS	35-50 (TD=46.50)	***	44.51	***	103.95	59.44
	2/1/2011	INS	INS	INS	INS	INS	INS	INS	-	***	44.67	***	103.95	59.28
MW-15	10/26/2010	DRY	DRY	DRY	DRY	DRY	DRY	DRY	35-50 (TD=47.60)	***	DRY	***	105.28	DRY
	2/1/2011	DRY	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	105.28	DRY
MW-16	10/26/2010	95	1.28	17.4	6.09	NT	27.6	NT	22-37	***	33.81	***	95.06	61.25
	2/1/2011	30	4.20	14.9	3.35	NT	33.3	NT	-	***	35.06	***	95.06	60.00
MW-17	10/26/2010	INS	INS	INS	INS	INS	INS	INS	25-40	***	38.27	***	99.52	61.25
	2/1/2011	INS	INS	INS	INS	INS	INS	INS	-	***	39.60	***	99.52	59.92
MW-18	10/26/2010	INS	INS	INS	INS	INS	INS	INS	31-46	***	43.79	***	103.17	59.38
	2/1/2011	INS	INS	INS	INS	INS	INS	INS	-	***	45.22	***	103.17	57.95
MW-19	10/26/2010	INS	INS	INS	INS	INS	INS	INS	35-50	***	46.65	***	103.32	56.67
	2/1/2011	25	3.84	16.8	5.79	NT	113.0	NT	-	***	47.99	***	103.32	55.33
MW-20	10/26/2010	90	4.13	19.0	5.35	NT	30.1	NT	20-35	***	30.84	***	93.39	62.55
	2/1/2011	40	5.13	15.7	4.62	NT	22.6	NT	-	***	32.13	***	93.39	61.26
IW-9	10/26/2010	190	0.84	20.5	6.28	NT	124.5	NT	TD = 42.90	***	34.55	***	98.87	64.32
	2/1/2011	20	4.88	16.4	2.79	3.58	92.7	256.6	-	***	35.80	***	98.87	63.07
TW-1	10/26/2010	120	0.94	20.3	6.51	6.18	191.3	190.6	56-61	***	35.30	***	99.79	64.49
	2/1/2011	35	1.69	18.0	5.10	5.28	160.6	276.7	-	***	36.92	***	99.79	62.87
TW-2	10/26/2010	<5	1.00	20.0	9.38	6.64	213.5	296.8	86-88	***	35.72	***	99.79	64.07
	2/1/2011	105	1.81	17.5	5.63	5.07	270.1	302.3	-	***	37.08	***	99.79	62.71
TW-3	10/26/2010	165	0.72	20.5	5.72	5.41	51.3	63.1	66-71	***	40.38	***	104.17	63.79
	2/1/2011	100	6.84	16.9	5.82	4.22	54.3	60.2	-	***	41.83	***	104.17	62.34

Notes:

1. mg/l = milligrams per liter.
2. Groundwater depths were measured from the top of the PVC riser pipe.
3. Stabalized groundwater levels measured 2/1/11.
4. NT = Not Tested.
5. INS = Insufficient Water for Field Measurements
6. DRY = Monitoring well Dry at time of Sampling
7. NS = Not Sampled
8. TD = Total Depth
9. PROD = Free Phase Petroleum Product
10. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on 02/01/11.
11. Groundwater elevation for MW-7 corrected for the presence of free phase petroleum product using a specific gravity for fuel of 0.85.

TABLE 2
PAGE 1 OF 3
GROUNDWATER ANALYTICAL RESULTS
FEBRUARY 1, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3208
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-1R	10/26/10	**7,360**	**30,200**	**5,060**	**28,800**	**71,420**	**4.3J**	**1,190J**	**26.3**	**18.3**
	02/01/11	**7,900**	**28,100**	**6,080**	**28,100**	**70,180**	<250	**583**	<250	**20.1**
MW-2	10/26/10	**2,860**	**3,630**	**390**	**3,710**	**10,590**	**79.5J**	**110**	**112**	**15.1**
	02/01/11	**2,100**	**2,590**	**174**	**1,750**	**6,614**	**199**	<125	**224**	**18.2**
MW-3	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-4R	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-5	10/26/10	<5.0	**101**	**1.9J**	**11.5**	**114.4J**	<5.0	**3.5J**	<5.0	<0.020
	02/01/11	<5.0	**4.8J**	<5.0	<10.0	**4.8J**	<5.0	<5.0	<5.0	NT
MW-6	10/26/10	**18.2**	**2.2J**	**14.8**	**74.4**	**109.6J**	<5.0	**5.6**	<5.0	**0.13**
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	10/26/10	<250	**875**	**2,120**	**21,500**	**24,495**	<250	**1,150**	<250	**1.1**
	02/01/11	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
MW-8	10/26/10	**10,100**	**37,700**	**4,420**	**26,100**	**78,320**	<500	**866**	<500	**29.2**
	02/01/11	**11,400**	**52,000**	**5,360**	**29,900**	**98,660**	<1,250	**978J**	<1,250	**18.0**
MW-9R	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-10	10/27/10	**6,280**	**17,700**	**5,220**	**26,000**	**55,200**	<250	**813**	**112J**	**48.9**
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

TABLE 2
PAGE 2 OF 3
GROUNDWATER ANALYTICAL RESULTS
FEBRUARY 1, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3208
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-11	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	NT
MW-12	10/26/10	**1,870**	**24.0**	**479**	**838**	**3,211.0**	<5.0	**112**	**38.8**	**0.95**
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	**1.8J**	**0.057**
MW-13	10/26/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-14	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-15	10/26/10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	10/26/10	**4.1J**	<5.0	<5.0	<10.0	**4.1J**	<5.0	**3.2J**	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	**2.8J**	**2.8J**	<5.0	<5.0	<5.0	**0.034**
MW-17	10/26/10	**250**	<5.0	<5.0	**45.5**	**295.5**	**2.1J**	**8.7**	<5.0	**0.046**
	02/01/11	**34.5**	<10.0	<10.0	**21.5**	**56.0**	<10.0	<10.0	<10.0	NT
MW-18	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.021
MW-19	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	**253**	<5.0	<10.0	**253**	<5.0	<5.0	<5.0	<0.020
MW-20	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

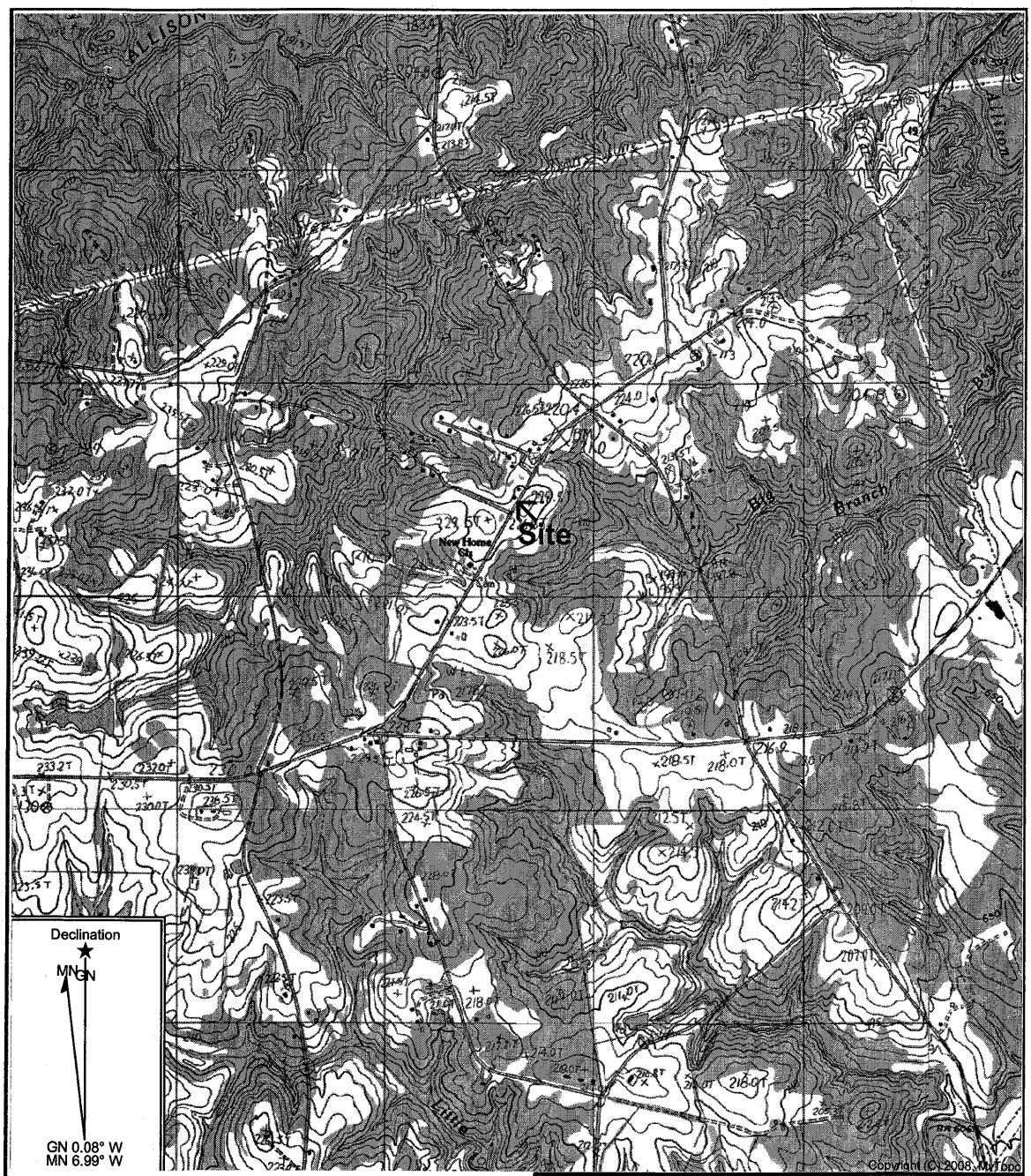
TABLE 2
PAGE 3 OF 3
GROUNDWATER ANALYTICAL RESULTS
FEBRUARY 1, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3208
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
IW-9	10/26/10	**505**	**562**	**1,250**	**5,110**	**7,427**	**5.8J**	**335**	<10.0	**0.39**
	02/01/11	**408**	**642**	**1,340**	**6,090**	**8,480**	<5.0	**389**	<5.0	**0.52**
TW-1	10/26/10	**8,720**	**293**	**2,370**	**11,900**	**23,283**	<250	**559**	<250	**20.6**
	02/01/11	**1,920**	**106**	**785**	**4,230**	**7,041**	<100	**228**	<100	**4.0**
TW-2	10/26/10	**12,900**	**17,400**	**1,930**	**9,830**	**42,060**	**217J**	**624**	<500	**0.062**
	02/01/11	**12,500**	**19,400**	**1,850**	**9,440**	**43,190**	**191J**	**296J**	<500	<0.020
TW-3	10/26/10	**152**	**12.9**	<5.0	**20.5**	**185.4**	<5.0	**5.2**	**3.6J**	**1.4**
	02/01/11	**242**	**9.0**	**2.1J**	**37.0**	**290.1J**	<5.0	**6.5**	**13.4**	**2.1**
WSW-Crock	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	**0.039**
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	**0.022**
WSW-Hill (Pre)	10/26/10	**14.0**	<5.0	<5.0	<10.0	**14.0**	<5.0	<5.0	**1.6J**	**0.33**
	02/01/11	**27.4**	<5.0	<5.0	**5.9J**	**33.3J**	<5.0	<5.0	**6.0**	**0.33**
WSW-Hill (Post)	10/26/10	**2.4J**	<5.0	<5.0	<10.0	**2.4J**	<5.0	<5.0	**1.3J**	**0.034**
	02/01/11	**3.7J**	<5.0	<5.0	<10.0	**3.7J**	<5.0	<5.0	<5.0	**0.062**
WSW-Smith	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
WSW-Swift (Pre)	10/26/10	**288**	<5.0	<5.0	**67.6**	**355.6**	<5.0	**11.8**	**23.5**	**1.3**
	02/01/11	**7.5**	<5.0	<5.0	**9.7J**	**17.2J**	<5.0	<5.0	**6.7**	**0.45**
WSW-Swift (Post)	10/26/10	**157**	<5.0	**1.6J**	**46.7**	**205.3J**	**3.0J**	**13.6**	**12.5**	**0.60**
	02/01/11	**7.8**	<5.0	<5.0	**8.8J**	**16.6J**	<5.0	<5.0	**7.1**	**0.45**

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

FIGURES



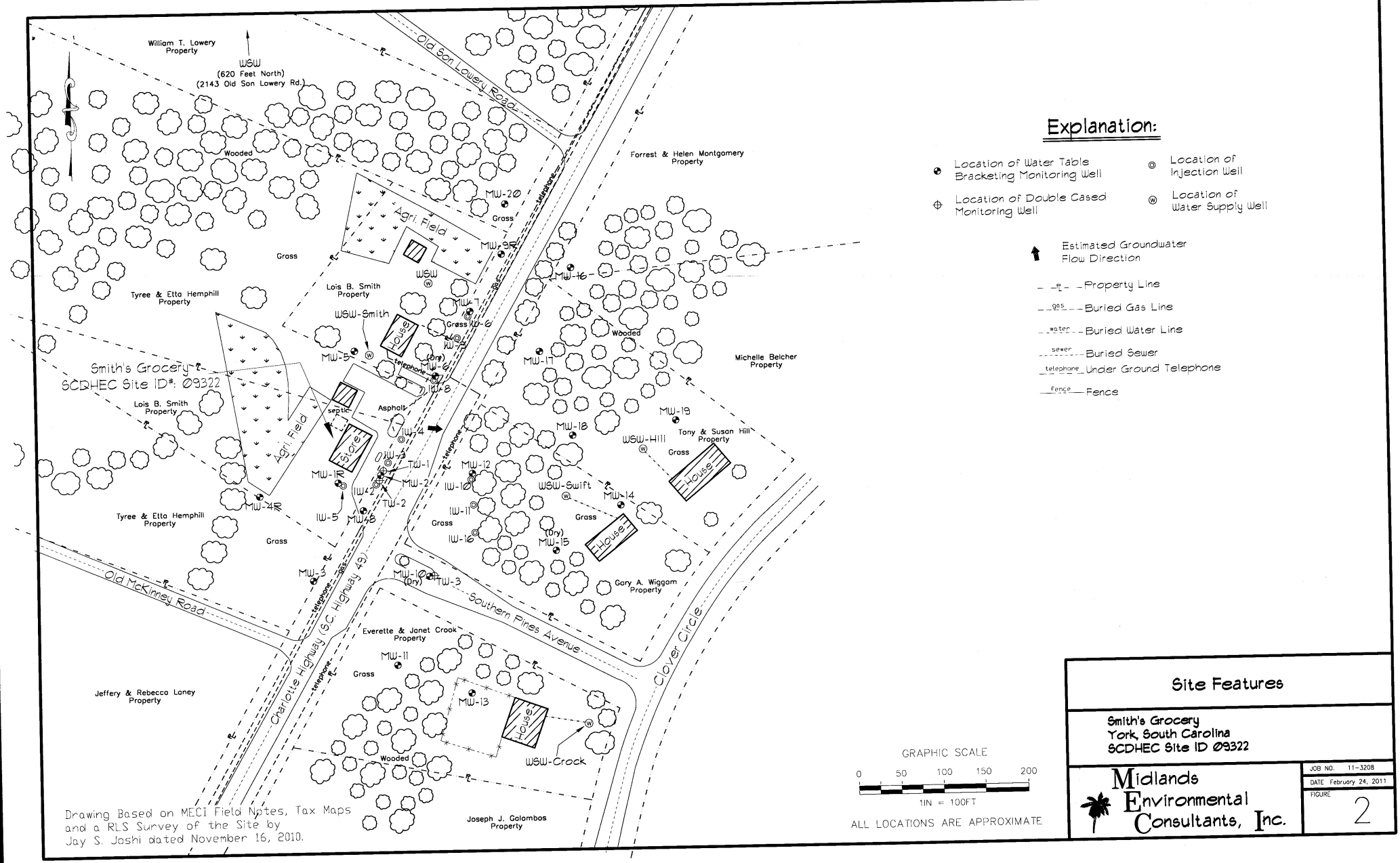
GRAPHIC SCALE

0 1000 2000 4000

1IN = 2000FT

Reference: Clover, South Carolina
USGS 7.5 Min. Quad
Countour Interval – 3 Meters

Midlands Environmental Consultants, Inc.	Site Location
Smith's Grocery South Carolina Highway 49, Clover, SC SCDHEC Site ID# 09322	
Figure 1	MECI 11-3208



Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Buried Sewer
- Under Ground Telephone
- Fence

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

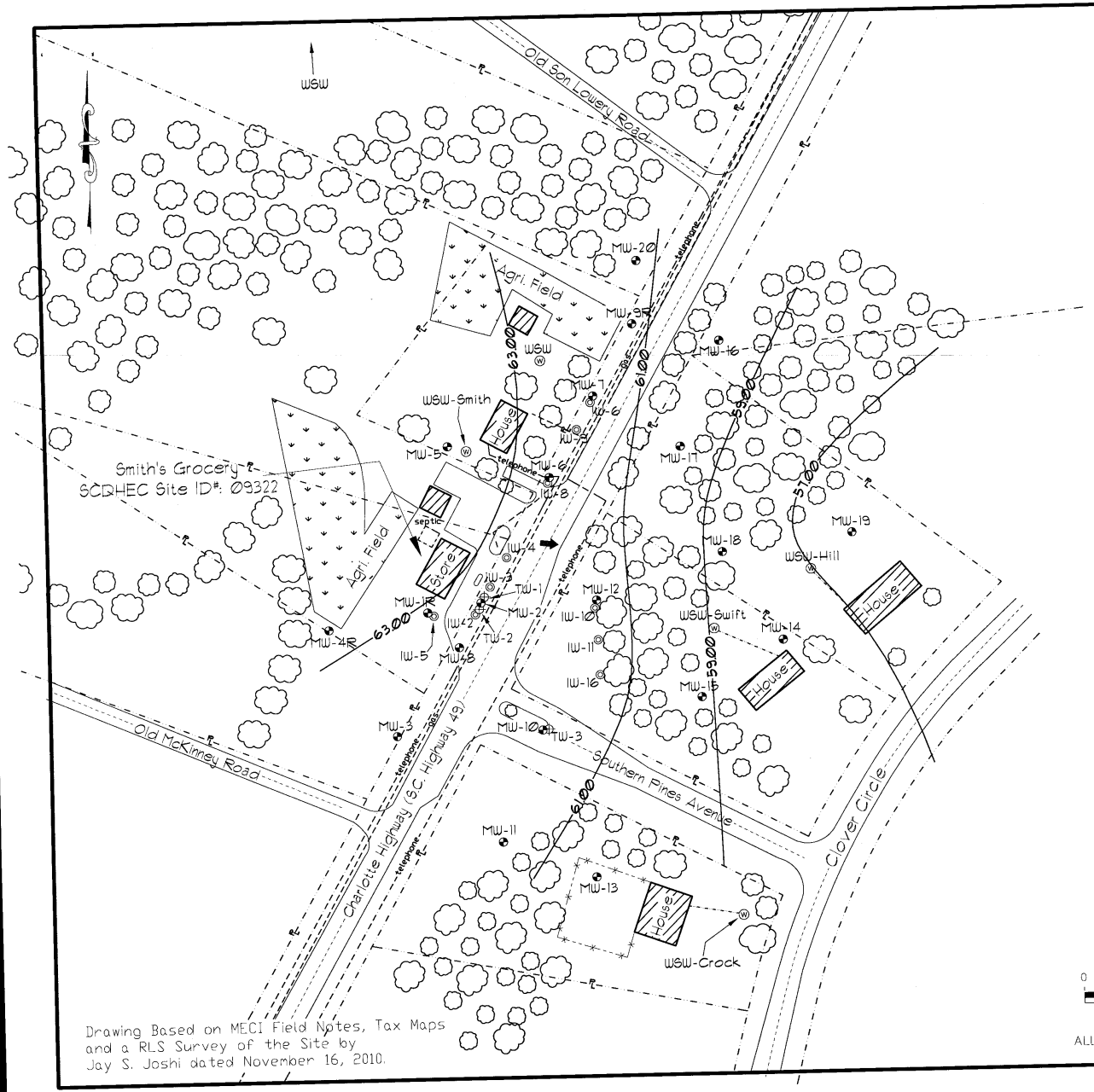
ALL LOCATIONS ARE APPROXIMATE

Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3208
DATE February 24, 2011
FIGURE 2



Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Groundwater Elevation Contour (feet)

Groundwater Elevation Data

Well #	Screened Interval (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well Head Elevation	Groundwater Elevation
MW-1R	29-39	---	33.64	---	96.56	62.92
MW-2	23-38	---	36.80	---	99.67	62.87
MW-3	25-35	---	34.67	---	97.10	62.43
MW-4R	24-34	---	29.43	---	92.55	63.12
MW-5	20-30	---	30.10	---	94.36	64.26
MW-6	27-37	---	36.95	---	98.93	61.98
MW-7	21-36	35.48	35.57	0.09	96.71	61.22
MW-8	23-38	---	37.31	---	100.14	62.83
MW-9R	28-38	---	33.77	---	94.95	61.18
MW-10	29-44	---	42.41	---	104.83	62.42
MW-11	29-44	---	43.42	---	105.51	62.09
MW-12	29-44	---	42.75	---	104.56	61.81
MW-13	32-47	---	45.85	---	105.35	59.50
MW-14	35-50	---	44.67	---	103.95	59.28
MW-15	35-50	---	DRY	---	105.28	DRY
MW-16	22-37	---	35.06	---	95.06	60.00
MW-17	25-40	---	39.60	---	99.52	59.92
MW-18	31-46	---	45.22	---	103.17	57.95
MW-19	35-50	---	47.99	---	103.32	55.33
MW-20	20-35	---	32.13	---	93.39	61.26
IW-9	TD=42.90	---	35.80	---	98.87	63.07
TW-1	56-61	---	36.92	---	99.79	62.87
TW-2	86-88	---	37.08	---	99.79	62.71
TW-3	66-71	---	41.83	---	104.17	62.34

Notes: Depth to groundwater measured on February 1, 2011.

Contour Interval = 2.00 Foot

Site Datum Based on Assumed Spot Elevation.

TW-1, TW-2, TW-3, MW-14 not used in contouring.

Groundwater Contours Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Groundwater Contour Map

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3208
DATE February 24, 2011
FIGURE 3

Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Watertable Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Total BTEX Concentration Isopleth (ug/l)

COC Concentration Data

Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
MW-1R	7,900	28,100	6,080	28,100	70,180	<250	583	<250	20.1
MW-2	2,100	2,590	174	1,750	6,614	199	<125	224	18.2
MW-3	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-4R	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-5	<5.0	4.8J	<5.0	<10.0	4.8J	<5.0	<5.0	<5.0	NT
MW-6	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
MW-8	11,400	52,000	5,360	29,900	98,660	<1,250	978J	<1,250	18.0
MW-9R	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	NT
MW-12	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	1.8J	0.057
MW-13	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-14	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-15	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	<5.0	<5.0	<5.0	2.8J	2.8J	<5.0	<5.0	<5.0	0.034
MW-17	34.5	<10.0	<10.0	21.5	56.0	<10.0	<10.0	<10.0	NT
MW-18	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.021
MW-19	<5.0	253	<5.0	<10.0	253	<5.0	<5.0	<5.0	<0.020
MW-20	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
IW-9	408	642	1,340	6,090	8,480	<5.0	389	<5.0	0.52
TW-1	1,920	106	785	4,230	7,041	<100	228	<100	4.0
TW-2	12,500	19,400	1,850	9,440	43,190	191J	296J	<500	<0.020
TW-3	242	9.0	2.1J	37.0	290.1J	<5.0	6.5	13.4	2.1
WSW-Crock	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	0.022
WSW-Hill(Pre)	27.4	<5.0	<5.0	5.9J	33.3J	<5.0	<5.0	6.0	0.33
WSW-Hill(Post)	3.7J	<5.0	<5.0	<10.0	3.7J	<5.0	<5.0	<5.0	0.062
WSW-Smith	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
WSW-Swift(Pre)	7.5	<5.0	<5.0	9.7J	17.2J	<5.0	<5.0	6.7	0.45
WSW-Swift(Post)	7.8	<5.0	<5.0	8.8J	16.6J	<5.0	<5.0	7.1	0.45

Notes:
- Groundwater samples collected on February 1, 2011.
- Concentration Isopleth Interval = 30,000 ug/l
- BDL = Below Detection Limits
- "J" Values included in Total BTEX Calculations
- Concentration Isopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

GRAPHIC SCALE
0 50 100 150 200
1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Total BTEX Isopleth Map

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3208
DATE February 24, 2011
FIGURE 4

Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Watertable Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Naphthalene Concentration Isopleth (ug/l)

COC Concentration Data

Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	12 DCA (ug/l)	EDB (ug/l)
MW-1R	7,900	28,100	6,080	28,100	70,180	<250	583	<250	20.1
MW-2	2,100	2,590	174	1,750	6,614	199	<125	224	18.2
MW-3	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-4R	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-5	<5.0	4.8J	<5.0	<10.0	4.8J	<5.0	<5.0	<5.0	NT
MW-6	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
MW-8	11,400	52,000	5,360	29,900	98,660	<1,250	978J	<1,250	18.0
MW-9R	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	NT
MW-12	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	1.8J	0.057
MW-13	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-14	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-15	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	<5.0	<5.0	<5.0	2.8J	2.8J	<5.0	<5.0	<5.0	0.034
MW-17	34.5	<10.0	<10.0	21.5	56.0	<10.0	<10.0	<10.0	NT
MW-18	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.021
MW-19	<5.0	253	<5.0	<10.0	253	<5.0	<5.0	<5.0	<0.020
MW-20	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
IW-9	408	642	1,340	6,090	8,480	<5.0	389	<5.0	0.52
TW-1	1,920	106	785	4,230	7,041	<100	228	<100	4.0
TW-2	12,500	19,400	1,850	9,440	43,190	191J	296J	<500	<0.020
TW-3	242	9.0	2.1J	37.0	290.1J	<5.0	6.5	13.4	2.1
WSW-Crock	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	0.022
WSW-Hill(Pre)	27.4	<5.0	<5.0	5.9J	33.3J	<5.0	<5.0	6.0	0.33
WSW-Hill(Post)	3.7J	<5.0	<5.0	<10.0	3.7J	<5.0	<5.0	<5.0	0.062
WSW-Smith	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
WSW-Swift(Pre)	7.5	<5.0	<5.0	9.7J	17.2J	<5.0	<5.0	6.7	0.45
WSW-Swift(Post)	7.8	<5.0	<5.0	8.8J	16.6J	<5.0	<5.0	7.1	0.45

Notes: Groundwater samples collected on February 1, 2011.

Concentration Isopleth Interval = 300 ug/l

BDL = Below Detection Limits

"J" Values included in Total BTEX Calculations

Concentration Isopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Naphthalene Isopleth Map

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3208

DATE February 24, 2011

FIGURE 5

Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Watertable Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- EDB Concentration Isopleth (ug/l)

COC Concentration Data

Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
MW-1R	7,900	28,100	6,080	28,100	70,180	<250	583	<250	20.1
MW-2	2,100	2,590	174	1,750	6,614	199	<125	224	18.2
MW-3	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-4R	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-5	<5.0	4.8J	<5.0	<10.0	4.8J	<5.0	<5.0	<5.0	NT
MW-6	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
MW-8	11,400	52,000	5,360	29,900	98,660	<1,250	978J	<1,250	18.0
MW-9R	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	NT
MW-12	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	1.8J	0.057
MW-13	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-14	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-15	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	<5.0	<5.0	<5.0	2.8J	2.8J	<5.0	<5.0	<5.0	0.034
MW-17	34.5	<10.0	<10.0	21.5	56.0	<10.0	<10.0	<10.0	NT
MW-18	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.021
MW-19	<5.0	253	<5.0	<10.0	253	<5.0	<5.0	<5.0	<0.020
MW-20	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
IW-9	408	642	1,340	6,090	8,480	<5.0	389	<5.0	0.52
TW-1	1,920	106	785	4,230	7,041	<100	228	<100	4.0
TW-2	12,500	19,400	1,850	9,440	43,190	191J	296J	<500	<0.020
TW-3	242	9.0	2.1J	37.0	290.1J	<5.0	6.5	13.4	2.1
WSW-Crock	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	0.022
WSW-Hill(Pre)	27.4	<5.0	<5.0	5.9J	33.3J	<5.0	<5.0	6.0	0.33
WSW-Hill(Post)	3.7J	<5.0	<5.0	<10.0	3.7J	<5.0	<5.0	<5.0	0.062
WSW-Smith	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
WSW-Swift(Pre)	7.5	<5.0	<5.0	9.7J	17.2J	<5.0	<5.0	6.7	0.45
WSW-Swift(Post)	7.8	<5.0	<5.0	8.8J	16.6J	<5.0	<5.0	7.1	0.45

Notes: Groundwater samples collected on February 1, 2011.

Concentration Isopleth Interval = 6 ug/l

BDL = Below Detection Limits

"J" Values included in Total BTEX Calculations

Concentration Isopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

EDB Isopleth Map

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3208
DATE February 24, 2011
FIGURE 6

ANALYTICAL RESULTS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

February 10, 2011

Mr. Bryan Shane
Midlands Environmental
PO Box 854
Lexington, SC 29071

RE: Project: SMITH'S GROCERY
Pace Project No.: 9287042

Dear Mr. Shane:
Enclosed are the analytical results for sample(s) received by the laboratory on February 02, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Godwin for
Renee Spencer
renee.spencer@pacelabs.com
Project Manager

Enclosures

cc: Mr. Jeff Coleman, Midlands Environmental

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Charlotte Certification IDs
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
Pennsylvania Certification #: 68-00784
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Virginia Certification #: 00213
Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DHH Drinking Water # LA 100031
West Virginia Certification #: 357

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9287042001	MW-1R	Water	02/01/11 13:40	02/02/11 16:30
9287042002	MW-2	Water	02/01/11 13:10	02/02/11 16:30
9287042003	MW-3	Water	02/01/11 13:55	02/02/11 16:30
9287042004	MW-4R	Water	02/01/11 14:10	02/02/11 16:30
9287042005	MW-5	Water	02/01/11 12:55	02/02/11 16:30
9287042006	MW-8	Water	02/01/11 13:28	02/02/11 16:30
9287042007	MW-9R	Water	02/01/11 12:10	02/02/11 16:30
9287042008	MW-11	Water	02/01/11 09:50	02/02/11 16:30
9287042009	MW-12	Water	02/01/11 11:30	02/02/11 16:30
9287042010	MW-13	Water	02/01/11 10:00	02/02/11 16:30
9287042011	MW-14	Water	02/01/11 10:20	02/02/11 16:30
9287042012	MW-16	Water	02/01/11 11:50	02/02/11 16:30
9287042013	MW-17	Water	02/01/11 11:40	02/02/11 16:30
9287042014	MW-18	Water	02/01/11 11:15	02/02/11 16:30
9287042015	MW-19	Water	02/01/11 11:00	02/02/11 16:30
9287042016	MW-20	Water	02/01/11 12:00	02/02/11 16:30
9287042017	IW-9	Water	02/01/11 12:35	02/02/11 16:30
9287042018	TW-1	Water	02/01/11 13:20	02/02/11 16:30
9287042019	TW-2	Water	02/01/11 13:45	02/02/11 16:30
9287042020	TW-3	Water	02/01/11 09:35	02/02/11 16:30
9287042021	WSW-SMITH	Water	02/01/11 12:51	02/02/11 16:30
9287042022	WSW-CROCK	Water	02/01/11 10:05	02/02/11 16:30
9287042023	WSW-SWIFT (PRE)	Water	02/01/11 10:45	02/02/11 16:30
9287042024	WSW-SWIFT (POST)	Water	02/01/11 10:45	02/02/11 16:30
9287042025	WSW-HILL (PRE)	Water	02/01/11 11:00	02/02/11 16:30
9287042026	WSW-HILL (POST)	Water	02/01/11 11:00	02/02/11 16:30

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH NELAC

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9287042001	MW-1R	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042002	MW-2	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042003	MW-3	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042004	MW-4R	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042005	MW-5	EPA 8260	KJM	13	PASI-C
9287042006	MW-8	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042007	MW-9R	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042008	MW-11	EPA 8260	KJM	13	PASI-C
9287042009	MW-12	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042010	MW-13	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042011	MW-14	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042012	MW-16	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042013	MW-17	EPA 8260	KJM	13	PASI-C
9287042014	MW-18	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042015	MW-19	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042016	MW-20	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042017	IW-9	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042018	TW-1	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042019	TW-2	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042020	TW-3	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9287042021	**WSW-SMITH**	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042022	**WSW-CROCK**	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042023	**WSW-SWIFT (PRE)**	EPA 8011	RES	2	PASI-C
		EPA 8260	BLC	13	PASI-C
9287042024	**WSW-SWIFT (POST)**	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042025	**WSW-HILL (PRE)**	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9287042026	**WSW-HILL (POST)**	EPA 8011	RES	2	PASI-C
		EPA 8260	KJM	13	PASI-C

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH NELAC

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: MW-1R **Lab ID: 9287042001** Collected: 02/01/11 13:40 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**20.1**	ug/L	0.48	0.48	25	02/03/11 15:06	02/04/11 12:22	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		25	02/03/11 15:06	02/04/11 12:22	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**7900**	ug/L	250	85.0	50		02/04/11 04:40	71-43-2	
1,2-Dichloroethane	ND	ug/L	250	90.0	50		02/04/11 04:40	107-06-2	
Ethylbenzene	**6080**	ug/L	250	80.0	50		02/04/11 04:40	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	250	85.0	50		02/04/11 04:40	1634-04-4	
Naphthalene	**583**	ug/L	250	100	50		02/04/11 04:40	91-20-3	
Toluene	**28100**	ug/L	1250	400	250		02/04/11 12:23	108-88-3	
Xylene (Total)	**28100**	ug/L	2500	675	250		02/04/11 12:23	1330-20-7	
m&p-Xylene	**18600**	ug/L	2500	775	250		02/04/11 12:23	179601-23-1	
o-Xylene	**9550**	ug/L	250	80.0	50		02/04/11 04:40	95-47-6	
4-Bromofluorobenzene (S)	102	%	70-130		50		02/04/11 04:40	460-00-4	
Dibromofluoromethane (S)	122	%	70-130		50		02/04/11 04:40	1868-53-7	
1,2-Dichloroethane-d4 (S)	122	%	70-130		50		02/04/11 04:40	17060-07-0	
Toluene-d8 (S)	97	%	70-130		50		02/04/11 04:40	2037-26-5	

Sample: MW-2 **Lab ID: 9287042002** Collected: 02/01/11 13:10 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**18.2**	ug/L	0.55	0.55	20	02/03/11 15:06	02/04/11 12:40	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		20	02/03/11 15:06	02/04/11 12:40	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**2100**	ug/L	125	42.5	25		02/04/11 04:59	71-43-2	
1,2-Dichloroethane	**224**	ug/L	125	45.0	25		02/04/11 04:59	107-06-2	
Ethylbenzene	**174**	ug/L	125	40.0	25		02/04/11 04:59	100-41-4	
Methyl-tert-butyl ether	**199**	ug/L	125	42.5	25		02/04/11 04:59	1634-04-4	
Naphthalene	ND	ug/L	125	50.0	25		02/04/11 04:59	91-20-3	
Toluene	**2590**	ug/L	125	40.0	25		02/04/11 04:59	108-88-3	
Xylene (Total)	**1750**	ug/L	250	67.5	25		02/04/11 04:59	1330-20-7	
m&p-Xylene	**1020**	ug/L	250	77.5	25		02/04/11 04:59	179601-23-1	
o-Xylene	**730**	ug/L	125	40.0	25		02/04/11 04:59	95-47-6	
4-Bromofluorobenzene (S)	93	%	70-130		25		02/04/11 04:59	460-00-4	
Dibromofluoromethane (S)	115	%	70-130		25		02/04/11 04:59	1868-53-7	
1,2-Dichloroethane-d4 (S)	117	%	70-130		25		02/04/11 04:59	17060-07-0	
Toluene-d8 (S)	97	%	70-130		25		02/04/11 04:59	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: MW-3 **Lab ID: 9287042003** Collected: 02/01/11 13:55 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	02/03/11 15:06	02/04/11 04:10	106-93-4	
1-Chloro-2-bromopropane (S)	96	%	60-140		1	02/03/11 15:06	02/04/11 04:10	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/03/11 23:31	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/03/11 23:31	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/03/11 23:31	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/03/11 23:31	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/03/11 23:31	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/03/11 23:31	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/03/11 23:31	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/03/11 23:31	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/03/11 23:31	95-47-6	
4-Bromofluorobenzene (S)	92	%	70-130		1		02/03/11 23:31	460-00-4	
Dibromofluoromethane (S)	119	%	70-130		1		02/03/11 23:31	1868-53-7	
1,2-Dichloroethane-d4 (S)	118	%	70-130		1		02/03/11 23:31	17060-07-0	
Toluene-d8 (S)	97	%	70-130		1		02/03/11 23:31	2037-26-5	

Sample: MW-4R **Lab ID: 9287042004** Collected: 02/01/11 14:10 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	02/03/11 15:06	02/04/11 04:28	106-93-4	
1-Chloro-2-bromopropane (S)	97	%	60-140		1	02/03/11 15:06	02/04/11 04:28	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/03/11 23:50	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/03/11 23:50	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/03/11 23:50	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/03/11 23:50	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/03/11 23:50	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/03/11 23:50	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/03/11 23:50	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/03/11 23:50	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/03/11 23:50	95-47-6	
4-Bromofluorobenzene (S)	98	%	70-130		1		02/03/11 23:50	460-00-4	
Dibromofluoromethane (S)	121	%	70-130		1		02/03/11 23:50	1868-53-7	
1,2-Dichloroethane-d4 (S)	116	%	70-130		1		02/03/11 23:50	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		02/03/11 23:50	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: MW-5 **Lab ID: 9287042005** Collected: 02/01/11 12:55 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/04/11 00:08	71-43-2	HS
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/04/11 00:08	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/04/11 00:08	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/04/11 00:08	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/04/11 00:08	91-20-3	
Toluene	**4.8J**	ug/L	5.0	1.6	1		02/04/11 00:08	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/04/11 00:08	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/04/11 00:08	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/04/11 00:08	95-47-6	
4-Bromofluorobenzene (S)	99	%	70-130		1		02/04/11 00:08	460-00-4	
Dibromofluoromethane (S)	113	%	70-130		1		02/04/11 00:08	1868-53-7	
1,2-Dichloroethane-d4 (S)	115	%	70-130		1		02/04/11 00:08	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		02/04/11 00:08	2037-26-5	

Sample: MW-8 **Lab ID: 9287042006** Collected: 02/01/11 13:28 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**18.0**	ug/L	0.40	0.40	20	02/03/11 15:06	02/04/11 12:58	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		20	02/03/11 15:06	02/04/11 12:58	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**11400**	ug/L	1250	425	250		02/04/11 07:06	71-43-2	
1,2-Dichloroethane	ND	ug/L	1250	450	250		02/04/11 07:06	107-06-2	
Ethylbenzene	**5360**	ug/L	1250	400	250		02/04/11 07:06	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1250	425	250		02/04/11 07:06	1634-04-4	
Naphthalene	**978J**	ug/L	2000	800	400		02/07/11 14:00	91-20-3	
Toluene	**52000**	ug/L	2000	640	400		02/07/11 14:00	108-88-3	
Xylene (Total)	**29900**	ug/L	2500	675	250		02/04/11 07:06	1330-20-7	
m&p-Xylene	**20400**	ug/L	2500	775	250		02/04/11 07:06	179601-23-1	
o-Xylene	**9530**	ug/L	1250	400	250		02/04/11 07:06	95-47-6	
4-Bromofluorobenzene (S)	96	%	70-130		250		02/04/11 07:06	460-00-4	
Dibromofluoromethane (S)	113	%	70-130		250		02/04/11 07:06	1868-53-7	
1,2-Dichloroethane-d4 (S)	113	%	70-130		250		02/04/11 07:06	17060-07-0	
Toluene-d8 (S)	99	%	70-130		250		02/04/11 07:06	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: MW-9R **Lab ID: 9287042007** Collected: 02/01/11 12:10 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	02/03/11 15:06	02/04/11 05:04	106-93-4	
1-Chloro-2-bromopropane (S)	94	%	60-140		1	02/03/11 15:06	02/04/11 05:04	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/04/11 01:20	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/04/11 01:20	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/04/11 01:20	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/04/11 01:20	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/04/11 01:20	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/04/11 01:20	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/04/11 01:20	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/04/11 01:20	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/04/11 01:20	95-47-6	
4-Bromofluorobenzene (S)	94	%	70-130		1		02/04/11 01:20	460-00-4	
Dibromofluoromethane (S)	110	%	70-130		1		02/04/11 01:20	1868-53-7	
1,2-Dichloroethane-d4 (S)	116	%	70-130		1		02/04/11 01:20	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		02/04/11 01:20	2037-26-5	

Sample: MW-11 **Lab ID: 9287042008** Collected: 02/01/11 09:50 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/04/11 00:26	71-43-2	HS
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/04/11 00:26	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/04/11 00:26	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/04/11 00:26	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/04/11 00:26	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/04/11 00:26	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/04/11 00:26	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/04/11 00:26	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/04/11 00:26	95-47-6	
4-Bromofluorobenzene (S)	101	%	70-130		1		02/04/11 00:26	460-00-4	
Dibromofluoromethane (S)	121	%	70-130		1		02/04/11 00:26	1868-53-7	
1,2-Dichloroethane-d4 (S)	120	%	70-130		1		02/04/11 00:26	17060-07-0	
Toluene-d8 (S)	98	%	70-130		1		02/04/11 00:26	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: MW-12 **Lab ID: 9287042009** Collected: 02/01/11 11:30 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.057**	ug/L	0.020	0.020	1	02/03/11 15:06	02/04/11 05:22	106-93-4	
1-Chloro-2-bromopropane (S)	101	%	60-140		1	02/03/11 15:06	02/04/11 05:22	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/07/11 14:19	71-43-2	
1,2-Dichloroethane	**1.8J**	ug/L	5.0	1.8	1		02/07/11 14:19	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/07/11 14:19	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/07/11 14:19	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/07/11 14:19	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/07/11 14:19	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/07/11 14:19	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/07/11 14:19	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/07/11 14:19	95-47-6	
4-Bromofluorobenzene (S)	103	%	70-130		1		02/07/11 14:19	460-00-4	
Dibromofluoromethane (S)	116	%	70-130		1		02/07/11 14:19	1868-53-7	
1,2-Dichloroethane-d4 (S)	118	%	70-130		1		02/07/11 14:19	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		02/07/11 14:19	2037-26-5	

Sample: MW-13 **Lab ID: 9287042010** Collected: 02/01/11 10:00 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	02/03/11 15:07	02/04/11 05:40	106-93-4	
1-Chloro-2-bromopropane (S)	96	%	60-140		1	02/03/11 15:07	02/04/11 05:40	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/04/11 01:39	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/04/11 01:39	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/04/11 01:39	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/04/11 01:39	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/04/11 01:39	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/04/11 01:39	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/04/11 01:39	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/04/11 01:39	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/04/11 01:39	95-47-6	
4-Bromofluorobenzene (S)	92	%	70-130		1		02/04/11 01:39	460-00-4	
Dibromofluoromethane (S)	118	%	70-130		1		02/04/11 01:39	1868-53-7	
1,2-Dichloroethane-d4 (S)	126	%	70-130		1		02/04/11 01:39	17060-07-0	
Toluene-d8 (S)	104	%	70-130		1		02/04/11 01:39	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: MW-14 **Lab ID: 9287042011** Collected: 02/01/11 10:20 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	02/03/11 15:07	02/04/11 05:58	106-93-4	
1-Chloro-2-bromopropane (S)	94	%	60-140		1	02/03/11 15:07	02/04/11 05:58	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/04/11 01:57	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/04/11 01:57	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/04/11 01:57	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/04/11 01:57	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/04/11 01:57	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/04/11 01:57	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/04/11 01:57	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/04/11 01:57	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/04/11 01:57	95-47-6	
4-Bromofluorobenzene (S)	95	%	70-130		1		02/04/11 01:57	460-00-4	
Dibromofluoromethane (S)	118	%	70-130		1		02/04/11 01:57	1868-53-7	
1,2-Dichloroethane-d4 (S)	113	%	70-130		1		02/04/11 01:57	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		02/04/11 01:57	2037-26-5	

Sample: MW-16 **Lab ID: 9287042012** Collected: 02/01/11 11:50 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.034**	ug/L	0.020	0.020	1	02/03/11 15:07	02/04/11 06:16	106-93-4	
1-Chloro-2-bromopropane (S)	95	%	60-140		1	02/03/11 15:07	02/04/11 06:16	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/04/11 02:15	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/04/11 02:15	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/04/11 02:15	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/04/11 02:15	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/04/11 02:15	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/04/11 02:15	108-88-3	
Xylene (Total)	**2.8J**	ug/L	10.0	2.7	1		02/04/11 02:15	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/04/11 02:15	179601-23-1	
o-Xylene	**1.7J**	ug/L	5.0	1.6	1		02/04/11 02:15	95-47-6	
4-Bromofluorobenzene (S)	101	%	70-130		1		02/04/11 02:15	460-00-4	
Dibromofluoromethane (S)	120	%	70-130		1		02/04/11 02:15	1868-53-7	
1,2-Dichloroethane-d4 (S)	121	%	70-130		1		02/04/11 02:15	17060-07-0	
Toluene-d8 (S)	105	%	70-130		1		02/04/11 02:15	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: MW-17 **Lab ID: 9287042013** Collected: 02/01/11 11:40 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**34.5**	ug/L	10.0	3.4	2		02/04/11 05:35	71-43-2	T3
1,2-Dichloroethane	ND	ug/L	10.0	3.6	2		02/04/11 05:35	107-06-2	
Ethylbenzene	ND	ug/L	10.0	3.2	2		02/04/11 05:35	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	10.0	3.4	2		02/04/11 05:35	1634-04-4	
Naphthalene	ND	ug/L	10.0	4.0	2		02/04/11 05:35	91-20-3	
Toluene	ND	ug/L	10.0	3.2	2		02/04/11 05:35	108-88-3	
Xylene (Total)	**21.5**	ug/L	20.0	5.4	2		02/04/11 05:35	1330-20-7	
m&p-Xylene	**14.6J**	ug/L	20.0	6.2	2		02/04/11 05:35	179601-23-1	
o-Xylene	**6.9J**	ug/L	10.0	3.2	2		02/04/11 05:35	95-47-6	
4-Bromofluorobenzene (S)	94	%	70-130		2		02/04/11 05:35	460-00-4	
Dibromofluoromethane (S)	120	%	70-130		2		02/04/11 05:35	1868-53-7	
1,2-Dichloroethane-d4 (S)	128	%	70-130		2		02/04/11 05:35	17060-07-0	
Toluene-d8 (S)	98	%	70-130		2		02/04/11 05:35	2037-26-5	

Sample: MW-18 **Lab ID: 9287042014** Collected: 02/01/11 11:15 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.021	0.021	1	02/03/11 15:07	02/04/11 06:34	106-93-4	
1-Chloro-2-bromopropane (S)	94	%	60-140		1	02/03/11 15:07	02/04/11 06:34	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/04/11 02:33	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/04/11 02:33	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/04/11 02:33	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/04/11 02:33	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/04/11 02:33	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/04/11 02:33	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/04/11 02:33	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/04/11 02:33	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/04/11 02:33	95-47-6	
4-Bromofluorobenzene (S)	90	%	70-130		1		02/04/11 02:33	460-00-4	
Dibromofluoromethane (S)	116	%	70-130		1		02/04/11 02:33	1868-53-7	
1,2-Dichloroethane-d4 (S)	121	%	70-130		1		02/04/11 02:33	17060-07-0	
Toluene-d8 (S)	96	%	70-130		1		02/04/11 02:33	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: MW-19 **Lab ID: 9287042015** Collected: 02/01/11 11:00 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	02/03/11 15:07	02/04/11 06:52	106-93-4	
1-Chloro-2-bromopropane (S)	96	%	60-140		1	02/03/11 15:07	02/04/11 06:52	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/04/11 02:52	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/04/11 02:52	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/04/11 02:52	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/04/11 02:52	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/04/11 02:52	91-20-3	
Toluene	**253**	ug/L	10.0	3.2	2		02/04/11 11:46	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/04/11 02:52	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/04/11 02:52	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/04/11 02:52	95-47-6	
4-Bromofluorobenzene (S)	101	%	70-130		1		02/04/11 02:52	460-00-4	
Dibromofluoromethane (S)	117	%	70-130		1		02/04/11 02:52	1868-53-7	
1,2-Dichloroethane-d4 (S)	121	%	70-130		1		02/04/11 02:52	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		02/04/11 02:52	2037-26-5	

Sample: MW-20 **Lab ID: 9287042016** Collected: 02/01/11 12:00 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	02/03/11 15:07	02/04/11 07:10	106-93-4	
1-Chloro-2-bromopropane (S)	89	%	60-140		1	02/03/11 15:07	02/04/11 07:10	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/04/11 03:10	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/04/11 03:10	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/04/11 03:10	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/04/11 03:10	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/04/11 03:10	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/04/11 03:10	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/04/11 03:10	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/04/11 03:10	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/04/11 03:10	95-47-6	
4-Bromofluorobenzene (S)	92	%	70-130		1		02/04/11 03:10	460-00-4	
Dibromofluoromethane (S)	116	%	70-130		1		02/04/11 03:10	1868-53-7	
1,2-Dichloroethane-d4 (S)	124	%	70-130		1		02/04/11 03:10	17060-07-0	
Toluene-d8 (S)	91	%	70-130		1		02/04/11 03:10	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: IW-9 **Lab ID: 9287042017** Collected: 02/01/11 12:35 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.52**	ug/L	0.020	0.020	1	02/03/11 15:07	02/04/11 07:29	106-93-4	
1-Chloro-2-bromopropane (S)	106	%	60-140		1	02/03/11 15:07	02/04/11 07:29	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**408**	ug/L	100	34.0	20		02/04/11 13:18	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/04/11 06:48	107-06-2	
Ethylbenzene	**1340**	ug/L	100	32.0	20		02/04/11 13:18	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/04/11 06:48	1634-04-4	
Naphthalene	**389**	ug/L	100	40.0	20		02/04/11 13:18	91-20-3	
Toluene	**642**	ug/L	100	32.0	20		02/04/11 13:18	108-88-3	
Xylene (Total)	**6090**	ug/L	200	54.0	20		02/04/11 13:18	1330-20-7	
m&p-Xylene	**4120**	ug/L	200	62.0	20		02/04/11 13:18	179601-23-1	
o-Xylene	**1980**	ug/L	100	32.0	20		02/04/11 13:18	95-47-6	
4-Bromofluorobenzene (S)	92	%	70-130		1		02/04/11 06:48	460-00-4	
Dibromofluoromethane (S)	108	%	70-130		1		02/04/11 06:48	1868-53-7	
1,2-Dichloroethane-d4 (S)	108	%	70-130		1		02/04/11 06:48	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		02/04/11 06:48	2037-26-5	

Sample: TW-1 **Lab ID: 9287042018** Collected: 02/01/11 13:20 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**4.0**	ug/L	0.099	0.099	5	02/03/11 15:08	02/04/11 13:16	106-93-4	
1-Chloro-2-bromopropane (S)	0	%	60-140		5	02/03/11 15:08	02/04/11 13:16	301-79-56	S4
8260 MSV	Analytical Method: EPA 8260								
Benzene	**1920**	ug/L	100	34.0	20		02/07/11 13:42	71-43-2	
1,2-Dichloroethane	ND	ug/L	100	36.0	20		02/07/11 13:42	107-06-2	
Ethylbenzene	**785**	ug/L	100	32.0	20		02/07/11 13:42	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	100	34.0	20		02/07/11 13:42	1634-04-4	
Naphthalene	**228**	ug/L	100	40.0	20		02/07/11 13:42	91-20-3	
Toluene	**106**	ug/L	100	32.0	20		02/07/11 13:42	108-88-3	
Xylene (Total)	**4230**	ug/L	200	54.0	20		02/07/11 13:42	1330-20-7	
m&p-Xylene	**3470**	ug/L	200	62.0	20		02/07/11 13:42	179601-23-1	
o-Xylene	**755**	ug/L	100	32.0	20		02/07/11 13:42	95-47-6	
4-Bromofluorobenzene (S)	99	%	70-130		20		02/07/11 13:42	460-00-4	
Dibromofluoromethane (S)	115	%	70-130		20		02/07/11 13:42	1868-53-7	
1,2-Dichloroethane-d4 (S)	117	%	70-130		20		02/07/11 13:42	17060-07-0	
Toluene-d8 (S)	93	%	70-130		20		02/07/11 13:42	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH NELAC
nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: TW-2 **Lab ID: 9287042019** Collected: 02/01/11 13:45 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	02/03/11 15:08	02/04/11 08:05	106-93-4	
1-Chloro-2-bromopropane (S)	105	%	60-140		1	02/03/11 15:08	02/04/11 08:05	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**12500**	ug/L	500	170	100		02/04/11 06:11	71-43-2	
1,2-Dichloroethane	ND	ug/L	500	180	100		02/04/11 06:11	107-06-2	
Ethylbenzene	**1850**	ug/L	500	160	100		02/04/11 06:11	100-41-4	
Methyl-tert-butyl ether	**191J**	ug/L	500	170	100		02/04/11 06:11	1634-04-4	
Naphthalene	**296J**	ug/L	500	200	100		02/04/11 06:11	91-20-3	
Toluene	**19400**	ug/L	1250	400	250		02/04/11 12:41	108-88-3	
Xylene (Total)	**9440**	ug/L	1000	270	100		02/04/11 06:11	1330-20-7	
m&p-Xylene	**6260**	ug/L	1000	310	100		02/04/11 06:11	179601-23-1	
o-Xylene	**3190**	ug/L	500	160	100		02/04/11 06:11	95-47-6	
4-Bromofluorobenzene (S)	92	%	70-130		100		02/04/11 06:11	460-00-4	
Dibromofluoromethane (S)	121	%	70-130		100		02/04/11 06:11	1868-53-7	
1,2-Dichloroethane-d4 (S)	120	%	70-130		100		02/04/11 06:11	17060-07-0	
Toluene-d8 (S)	101	%	70-130		100		02/04/11 06:11	2037-26-5	

Sample: TW-3 **Lab ID: 9287042020** Collected: 02/01/11 09:35 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**2.1**	ug/L	0.080	0.080	4	02/04/11 15:58	02/05/11 11:28	106-93-4	
1-Chloro-2-bromopropane (S)	76	%	60-140		4	02/04/11 15:58	02/05/11 11:28	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**242**	ug/L	12.5	4.2	2.5		02/04/11 12:04	71-43-2	
1,2-Dichloroethane	**13.4**	ug/L	5.0	1.8	1		02/04/11 03:28	107-06-2	
Ethylbenzene	**2.1J**	ug/L	5.0	1.6	1		02/04/11 03:28	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/04/11 03:28	1634-04-4	
Naphthalene	**6.5**	ug/L	5.0	2.0	1		02/04/11 03:28	91-20-3	
Toluene	**9.0**	ug/L	5.0	1.6	1		02/04/11 03:28	108-88-3	
Xylene (Total)	**37.0**	ug/L	10.0	2.7	1		02/04/11 03:28	1330-20-7	
m&p-Xylene	**8.4J**	ug/L	10.0	3.1	1		02/04/11 03:28	179601-23-1	
o-Xylene	**28.6**	ug/L	5.0	1.6	1		02/04/11 03:28	95-47-6	
4-Bromofluorobenzene (S)	103	%	70-130		1		02/04/11 03:28	460-00-4	
Dibromofluoromethane (S)	118	%	70-130		1		02/04/11 03:28	1868-53-7	
1,2-Dichloroethane-d4 (S)	121	%	70-130		1		02/04/11 03:28	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		02/04/11 03:28	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: WSW-SMITH **Lab ID: 9287042021** Collected: 02/01/11 12:51 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	02/04/11 15:58	02/05/11 02:19	106-93-4	
1-Chloro-2-bromopropane (S)	102	%	60-140		1	02/04/11 15:58	02/05/11 02:19	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/04/11 03:46	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/04/11 03:46	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/04/11 03:46	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/04/11 03:46	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/04/11 03:46	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/04/11 03:46	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/04/11 03:46	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/04/11 03:46	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/04/11 03:46	95-47-6	
4-Bromofluorobenzene (S)	95	%	70-130		1		02/04/11 03:46	460-00-4	
Dibromofluoromethane (S)	122	%	70-130		1		02/04/11 03:46	1868-53-7	
1,2-Dichloroethane-d4 (S)	123	%	70-130		1		02/04/11 03:46	17060-07-0	
Toluene-d8 (S)	104	%	70-130		1		02/04/11 03:46	2037-26-5	

Sample: WSW-CROCK **Lab ID: 9287042022** Collected: 02/01/11 10:05 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.022**	ug/L	0.020	0.020	1	02/04/11 15:58	02/05/11 02:37	106-93-4	
1-Chloro-2-bromopropane (S)	102	%	60-140		1	02/04/11 15:58	02/05/11 02:37	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		02/07/11 16:45	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/07/11 16:45	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/07/11 16:45	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/07/11 16:45	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/07/11 16:45	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/07/11 16:45	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/07/11 16:45	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/07/11 16:45	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/07/11 16:45	95-47-6	
4-Bromofluorobenzene (S)	97	%	70-130		1		02/07/11 16:45	460-00-4	
Dibromofluoromethane (S)	111	%	70-130		1		02/07/11 16:45	1868-53-7	
1,2-Dichloroethane-d4 (S)	119	%	70-130		1		02/07/11 16:45	17060-07-0	
Toluene-d8 (S)	105	%	70-130		1		02/07/11 16:45	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: WSW-SWIFT (PRE) **Lab ID: 9287042023** Collected: 02/01/11 10:45 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.45**	ug/L	0.020	0.020	1	02/04/11 15:58	02/05/11 02:55	106-93-4	
1-Chloro-2-bromopropane (S)	115	%	60-140		1	02/04/11 15:58	02/05/11 02:55	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**7.5**	ug/L	5.0	1.7	1		02/10/11 14:36	71-43-2	
1,2-Dichloroethane	**6.7**	ug/L	5.0	1.8	1		02/10/11 14:36	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/10/11 14:36	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/10/11 14:36	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/10/11 14:36	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/10/11 14:36	108-88-3	
Xylene (Total)	**9.7J**	ug/L	10.0	2.7	1		02/10/11 14:36	1330-20-7	
m&p-Xylene	**5.6J**	ug/L	10.0	3.1	1		02/10/11 14:36	179601-23-1	
o-Xylene	**4.1J**	ug/L	5.0	1.6	1		02/10/11 14:36	95-47-6	
4-Bromofluorobenzene (S)	102	%	70-130		1		02/10/11 14:36	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		02/10/11 14:36	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	70-130		1		02/10/11 14:36	17060-07-0	
Toluene-d8 (S)	98	%	70-130		1		02/10/11 14:36	2037-26-5	

Sample: WSW-SWIFT (POST) **Lab ID: 9287042024** Collected: 02/01/11 10:45 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.45**	ug/L	0.020	0.020	1	02/04/11 15:58	02/05/11 03:13	106-93-4	
1-Chloro-2-bromopropane (S)	98	%	60-140		1	02/04/11 15:58	02/05/11 03:13	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**7.8**	ug/L	5.0	1.7	1		02/07/11 17:03	71-43-2	
1,2-Dichloroethane	**7.1**	ug/L	5.0	1.8	1		02/07/11 17:03	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/07/11 17:03	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/07/11 17:03	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/07/11 17:03	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/07/11 17:03	108-88-3	
Xylene (Total)	**8.8J**	ug/L	10.0	2.7	1		02/07/11 17:03	1330-20-7	
m&p-Xylene	**5.1J**	ug/L	10.0	3.1	1		02/07/11 17:03	179601-23-1	
o-Xylene	**3.7J**	ug/L	5.0	1.6	1		02/07/11 17:03	95-47-6	
4-Bromofluorobenzene (S)	98	%	70-130		1		02/07/11 17:03	460-00-4	
Dibromofluoromethane (S)	115	%	70-130		1		02/07/11 17:03	1868-53-7	
1,2-Dichloroethane-d4 (S)	114	%	70-130		1		02/07/11 17:03	17060-07-0	
Toluene-d8 (S)	98	%	70-130		1		02/07/11 17:03	2037-26-5	

Date: 02/10/2011 05:20 PM

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

Sample: WSW-HILL (PRE) **Lab ID: 9287042025** Collected: 02/01/11 11:00 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.33**	ug/L	0.019	0.019	1	02/04/11 15:58	02/05/11 03:31	106-93-4	
1-Chloro-2-bromopropane (S)	96	%	60-140		1	02/04/11 15:58	02/05/11 03:31	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**27.4**	ug/L	5.0	1.7	1		02/07/11 17:22	71-43-2	
1,2-Dichloroethane	**6.0**	ug/L	5.0	1.8	1		02/07/11 17:22	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/07/11 17:22	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/07/11 17:22	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/07/11 17:22	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/07/11 17:22	108-88-3	
Xylene (Total)	**5.9J**	ug/L	10.0	2.7	1		02/07/11 17:22	1330-20-7	
m&p-Xylene	**4.0J**	ug/L	10.0	3.1	1		02/07/11 17:22	179601-23-1	
o-Xylene	**1.9J**	ug/L	5.0	1.6	1		02/07/11 17:22	95-47-6	
4-Bromofluorobenzene (S)	101	%	70-130		1		02/07/11 17:22	460-00-4	
Dibromofluoromethane (S)	121	%	70-130		1		02/07/11 17:22	1868-53-7	
1,2-Dichloroethane-d4 (S)	117	%	70-130		1		02/07/11 17:22	17060-07-0	
Toluene-d8 (S)	97	%	70-130		1		02/07/11 17:22	2037-26-5	

Sample: WSW-HILL (POST) **Lab ID: 9287042026** Collected: 02/01/11 11:00 Received: 02/02/11 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.062**	ug/L	0.020	0.020	1	02/04/11 15:59	02/05/11 03:50	106-93-4	
1-Chloro-2-bromopropane (S)	106	%	60-140		1	02/04/11 15:59	02/05/11 03:50	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**3.7J**	ug/L	5.0	1.7	1		02/07/11 17:40	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		02/07/11 17:40	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		02/07/11 17:40	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		02/07/11 17:40	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		02/07/11 17:40	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		02/07/11 17:40	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		02/07/11 17:40	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		02/07/11 17:40	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		02/07/11 17:40	95-47-6	
4-Bromofluorobenzene (S)	92	%	70-130		1		02/07/11 17:40	460-00-4	
Dibromofluoromethane (S)	126	%	70-130		1		02/07/11 17:40	1868-53-7	
1,2-Dichloroethane-d4 (S)	127	%	70-130		1		02/07/11 17:40	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		02/07/11 17:40	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY
Pace Project No.: 9287042

QC Batch: OEXT/12568 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9287042001, 9287042002, 9287042003, 9287042004, 9287042006, 9287042007, 9287042009, 9287042010, 9287042011, 9287042012, 9287042014, 9287042015, 9287042016, 9287042017, 9287042018, 9287042019

METHOD BLANK: 559486 Matrix: Water
Associated Lab Samples: 9287042001, 9287042002, 9287042003, 9287042004, 9287042006, 9287042007, 9287042009, 9287042010, 9287042011, 9287042012, 9287042014, 9287042015, 9287042016, 9287042017, 9287042018, 9287042019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	02/04/11 00:33	
1-Chloro-2-bromopropane (S)	%	94	60-140	02/04/11 00:33	

LABORATORY CONTROL SAMPLE & LCSD: 559487 559488

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.29	0.29	0.29	102	102	60-140	3	20	
1-Chloro-2-bromopropane (S)	%				96	96	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 559489 559490

Parameter	Units	9287029005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	.28	.28	0.28	0.28	100	100	60-140	0	20	
1-Chloro-2-bromopropane (S)	%						96	94	60-140			

SAMPLE DUPLICATE: 559491

Parameter	Units	9287029006 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	93	93	2		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY
Pace Project No.: 9287042

QC Batch: OEXT/12578 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9287042020, 9287042021, 9287042022, 9287042023, 9287042024, 9287042025, 9287042026

METHOD BLANK: 560159 Matrix: Water
Associated Lab Samples: 9287042020, 9287042021, 9287042022, 9287042023, 9287042024, 9287042025, 9287042026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	02/05/11 01:06	
1-Chloro-2-bromopropane (S)	%	97	60-140	02/05/11 01:06	

LABORATORY CONTROL SAMPLE & LCSD: 560160 560161

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.28	0.30	0.31	106	106	60-140	1	20	
1-Chloro-2-bromopropane (S)	%				102	102	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 560162 560163

Parameter	Units	9286657013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	.28	.28	0.30	0.30	108	108	60-140	0	20	
1-Chloro-2-bromopropane (S)	%						102	103	60-140			

SAMPLE DUPLICATE: 560164

Parameter	Units	9286657014 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	104	100	7		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY
Pace Project No.: 9287042

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 559531 559532

Parameter	Units	9287037001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Naphthalene	ug/L	ND	50	50	47.5	42.4	95	85	70-130	11	30	
o-Xylene	ug/L	ND	50	50	49.2	48.0	98	96	70-130	2	30	
Toluene	ug/L	ND	50	50	54.7	51.2	109	102	70-130	7	30	
1,2-Dichloroethane-d4 (S)	%						115	117	70-130			
4-Bromofluorobenzene (S)	%						92	95	70-130			
Dibromofluoromethane (S)	%						115	115	70-130			
Toluene-d8 (S)	%						100	100	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY
Pace Project No.: 9287042

QC Batch: MSV/13938 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV SC
Associated Lab Samples: 9287042001, 9287042002, 9287042011, 9287042012, 9287042013, 9287042014, 9287042015, 9287042016, 9287042017, 9287042019, 9287042020, 9287042021

METHOD BLANK: 559549 Matrix: Water
Associated Lab Samples: 9287042001, 9287042002, 9287042011, 9287042012, 9287042013, 9287042014, 9287042015, 9287042016, 9287042017, 9287042019, 9287042020, 9287042021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	02/03/11 22:37	
Benzene	ug/L	ND	5.0	02/03/11 22:37	
Ethylbenzene	ug/L	ND	5.0	02/03/11 22:37	
m&p-Xylene	ug/L	ND	10.0	02/03/11 22:37	
Methyl-tert-butyl ether	ug/L	ND	5.0	02/03/11 22:37	
Naphthalene	ug/L	ND	5.0	02/03/11 22:37	
o-Xylene	ug/L	ND	5.0	02/03/11 22:37	
Toluene	ug/L	ND	5.0	02/03/11 22:37	
Xylene (Total)	ug/L	ND	10.0	02/03/11 22:37	
1,2-Dichloroethane-d4 (S)	%	112	70-130	02/03/11 22:37	
4-Bromofluorobenzene (S)	%	86	70-130	02/03/11 22:37	
Dibromofluoromethane (S)	%	112	70-130	02/03/11 22:37	
Toluene-d8 (S)	%	98	70-130	02/03/11 22:37	

LABORATORY CONTROL SAMPLE: 559550

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	53.9	108	70-130	
Benzene	ug/L	50	46.2	92	70-130	
Ethylbenzene	ug/L	50	48.6	97	70-130	
m&p-Xylene	ug/L	100	101	101	70-130	
Methyl-tert-butyl ether	ug/L	50	44.7	89	70-130	
Naphthalene	ug/L	50	49.0	98	70-130	
o-Xylene	ug/L	50	51.8	104	70-130	
Toluene	ug/L	50	48.7	97	70-130	
Xylene (Total)	ug/L	150	153	102	70-130	
1,2-Dichloroethane-d4 (S)	%			108	70-130	
4-Bromofluorobenzene (S)	%			96	70-130	
Dibromofluoromethane (S)	%			104	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 559551 559552

Parameter	Units	9287042012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	55.0	55.2	110	110	70-130	0	30	
Benzene	ug/L	ND	50	50	54.4	53.9	106	105	70-130	1	30	
Ethylbenzene	ug/L	ND	50	50	53.6	50.1	107	100	70-130	7	30	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY
Pace Project No.: 9287042

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 559551 559552

Parameter	Units	9287042012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
m&p-Xylene	ug/L	ND	100	100	105	107	104	106	70-130	1	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	51.7	52.2	103	104	70-130	1	30	
Naphthalene	ug/L	ND	50	50	53.5	51.9	107	104	70-130	3	30	
o-Xylene	ug/L	1.7J	50	50	52.5	53.4	102	103	70-130	2	30	
Toluene	ug/L	ND	50	50	53.2	50.6	106	101	70-130	5	30	
1,2-Dichloroethane-d4 (S)	%						110	114	70-130			
4-Bromofluorobenzene (S)	%						89	92	70-130			
Dibromofluoromethane (S)	%						113	110	70-130			
Toluene-d8 (S)	%						97	99	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH NELAC
nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY
Pace Project No.: 9287042

QC Batch: MSV/13953 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV SC
Associated Lab Samples: 9287042009, 9287042018, 9287042022, 9287042024, 9287042025, 9287042026

METHOD BLANK: 560668 Matrix: Water
Associated Lab Samples: 9287042009, 9287042018, 9287042022, 9287042024, 9287042025, 9287042026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	02/07/11 13:25	
Benzene	ug/L	ND	5.0	02/07/11 13:25	
Ethylbenzene	ug/L	ND	5.0	02/07/11 13:25	
m&p-Xylene	ug/L	ND	10.0	02/07/11 13:25	
Methyl-tert-butyl ether	ug/L	ND	5.0	02/07/11 13:25	
Naphthalene	ug/L	ND	5.0	02/07/11 13:25	
o-Xylene	ug/L	ND	5.0	02/07/11 13:25	
Toluene	ug/L	ND	5.0	02/07/11 13:25	
Xylene (Total)	ug/L	ND	10.0	02/07/11 13:25	
1,2-Dichloroethane-d4 (S)	%	112	70-130	02/07/11 13:25	
4-Bromofluorobenzene (S)	%	97	70-130	02/07/11 13:25	
Dibromofluoromethane (S)	%	112	70-130	02/07/11 13:25	
Toluene-d8 (S)	%	96	70-130	02/07/11 13:25	

LABORATORY CONTROL SAMPLE: 560669

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	51.4	103	70-130	
Benzene	ug/L	50	47.9	96	70-130	
Ethylbenzene	ug/L	50	51.9	104	70-130	
m&p-Xylene	ug/L	100	102	102	70-130	
Methyl-tert-butyl ether	ug/L	50	48.8	98	70-130	
Naphthalene	ug/L	50	47.4	95	70-130	
o-Xylene	ug/L	50	52.5	105	70-130	
Toluene	ug/L	50	50.4	101	70-130	
Xylene (Total)	ug/L	150	155	103	70-130	
1,2-Dichloroethane-d4 (S)	%			110	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Dibromofluoromethane (S)	%			106	70-130	
Toluene-d8 (S)	%			103	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 560670 560671

Parameter	Units	9287171005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	52.9	53.1	106	106	70-130	0	30	
Benzene	ug/L	ND	50	50	49.6	49.9	99	100	70-130	1	30	
Ethylbenzene	ug/L	ND	50	50	48.3	48.5	97	97	70-130	0	30	
m&p-Xylene	ug/L	ND	100	100	96.8	94.9	97	95	70-130	2	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	53.3	52.4	107	105	70-130	2	30	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY
Pace Project No.: 9287042

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 560670 560671

Parameter	Units	9287171005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Naphthalene	ug/L	ND	50	50	44.9	45.2	90	90	70-130	1	30	
o-Xylene	ug/L	ND	50	50	46.3	46.8	93	94	70-130	1	30	
Toluene	ug/L	ND	50	50	48.7	47.7	97	95	70-130	2	30	
1,2-Dichloroethane-d4 (S)	%						122	121	70-130			
4-Bromofluorobenzene (S)	%						98	93	70-130			
Dibromofluoromethane (S)	%						119	121	70-130			
Toluene-d8 (S)	%						99	100	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY
Pace Project No.: 9287042

QC Batch: MSV/13994
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV SC
Associated Lab Samples: 9287042023

METHOD BLANK: 562268
Matrix: Water
Associated Lab Samples: 9287042023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	02/10/11 12:09	
Benzene	ug/L	ND	5.0	02/10/11 12:09	
Ethylbenzene	ug/L	ND	5.0	02/10/11 12:09	
m&p-Xylene	ug/L	ND	10.0	02/10/11 12:09	
Methyl-tert-butyl ether	ug/L	ND	5.0	02/10/11 12:09	
Naphthalene	ug/L	ND	5.0	02/10/11 12:09	
o-Xylene	ug/L	ND	5.0	02/10/11 12:09	
Toluene	ug/L	ND	5.0	02/10/11 12:09	
Xylene (Total)	ug/L	ND	10.0	02/10/11 12:09	
1,2-Dichloroethane-d4 (S)	%	104	70-130	02/10/11 12:09	
4-Bromofluorobenzene (S)	%	102	70-130	02/10/11 12:09	
Dibromofluoromethane (S)	%	101	70-130	02/10/11 12:09	
Toluene-d8 (S)	%	97	70-130	02/10/11 12:09	

LABORATORY CONTROL SAMPLE: 562269

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	51.0	102	70-130	
Benzene	ug/L	50	46.9	94	70-130	
Ethylbenzene	ug/L	50	50.4	101	70-130	
m&p-Xylene	ug/L	100	105	105	70-130	
Methyl-tert-butyl ether	ug/L	50	45.6	91	70-130	
Naphthalene	ug/L	50	55.6	111	70-130	
o-Xylene	ug/L	50	53.1	106	70-130	
Toluene	ug/L	50	49.7	99	70-130	
Xylene (Total)	ug/L	150	158	105	70-130	
1,2-Dichloroethane-d4 (S)	%			102	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Dibromofluoromethane (S)	%			105	70-130	
Toluene-d8 (S)	%			102	70-130	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: SMITH'S GROCERY
Pace Project No.: 9287042

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
S - Surrogate
1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

HS	Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
T3	Insufficient sample received from client to perform the analysis per EPA method requirements.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 3

1408563

Section A Required Client Information:

Company: MECI
Address: 235-B Dooley Rd. Lexington, SC 29073
Email To: JLC@meci.net
Phone: 803-808-2043 Fax: 803-808-2048
Requested Due Date/TAT:

Section B Required Project Information:

Report To: B. Shane
Copy To:
Purchase Order No.:
Project Name: Smith's Grocery
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: R. Spencer
Pace Profile #: 836-4

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: BTEX, Naph, MTBE (8260B)	EDB (8011)	1,2 DCA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-1R	WT	G			2/1	1:40		6			6						X	X	X			9287042
2	MW-2						1:10		6			6						X	X	X			01
3	MW-3						1:55		6			6						X	X	X			02
4	MW-4R						2:10		6			6						X	X	X			03
5	MW-5						12:55		1			1						X					04
6	MW-8						1:28		6			6						X	X	X			05
7	MW-9R						12:10		6			6						X	X	X			06
8	MW-11						9:50		1			1						X					07
9	MW-12						11:30		6			6						X	X	X			08
10	MW-13						10:00		6			6						X	X	X			09
11	MW-14						10:20		2			2						X	X	X			10
12	MW-16	WT	G			2/1	11:50		6			6						X	X	X			11

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Report J values		2-2-11	1020	B Moody - Pace	2-2-11	1020	
-MW-5 is half VOA.	B Moody	2-2-11	16:30	UPS - Pace	2/2/11	16:30	2.9 4C -e >6
Please try to run for							
BTEX, Naph, MTBE (8260B)							

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kyle Pudney

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 2/1/2011

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1447919

Section A Required Client Information:

Company:	MECI
Address:	235-B Dooley Rd. Lexington, SC 29073
Email To:	JLC@meci.net
Phone:	803-808-2043
Fax:	803-808-2048
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	B. Shane
Copy To:	
Purchase Order No.:	
Project Name:	Smiths Grocery
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	R. Spencer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: BTEX, MTBE (8260B)	FDB (8011)	1,2 DCA	Residual Chlorine (Y/N)
1	MW-17	WT	G			2/1	11:40		1				1					X			
2	MW-18						11:15		5				5					X	X	X	
3	MW-19						11:00		6				6								
4	MW-20						12:00		6				6								
5	IW-9						12:35														
6	TW-1						1:20														
7	TW-2						1:45														
8	TW-3						9:35														
9	WSW-Smith						12:51														
10	WSW-Crock						10:05														
11	WSW-Swift (Pre)						10:45														
12	WSW-Swift (Post)	WT	G			2/1	10:45		6				6					X	X	X	

Residual Chlorine (Y/N)

Pace Project No./ Lab I.D. 9287042

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Report J values		2-2-11	1020	B Moody-Pace	2-2-11	1020	
	B Moody	2-2-11	16:30	UPS-Pace	2/2/11	16:30	1.5 4°C ice

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kyle Pudney

SIGNATURE of SAMPLER: Kyle V. Pudney

DATE Signed (MM/DD/YY): 2/1/2011

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 3

1447920

Section A Required Client Information:

Company:	MECI
Address:	235-B Dooley Rd. Lexington SC 29073
Email To:	JLC@meci.net
Phone:	803-808-2043
Fax:	803-808-2048
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	B. Shaw
Copy To:	
Purchase Order No.:	
Project Name:	Smith's Grocery
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	R. Spencer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☑ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: BTEX, MTBE (8260B)	EDB (8011)	1,2 DCA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WSW-Hill (Pre)	WT	G			[illegible]	11:00		6				6					X	X	X		92802
2	WSW-Hill (Post)	WT	G			[illegible]	11:00		6				6					X	X	X		025
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Report J Values	[signature]	2-2-11	1020	B Moody - Pace	2-2-11	1020				
	B Moody	2-2-11	16:30	[signature]	2/2/11	16:30	2.5	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kyle Pudney

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 2/1/2011

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

WASTE DISPOSAL MANIFESTS

Midlands Environmental Consultants, Inc.

February 24, 2011

Re: Treatment of Purge Water
Smith's Grocery
York, South Carolina
SCDHEC Site ID Number 09322
MECI Project Number 11-3208

To Whom it May Concern;

Midlands Environmental Consultants, Inc. is providing the following letter as certification that treatment of the referenced purge water complied with the conditions of "Proposed Conditions for Use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater", as described in the following:

Applicability:

Groundwater treated was obtained as a result development of wells and sampling.

Conditions:

1. The purge/bail water from all wells is mixed before usage of the Activated Carbon Unit.
2. No free-product was detected in any of the purge water drums.
3. Analytical results of from well sampling show average concentrations of petroleum hydrocarbon constituents less than 5000 parts per billion (ppb) Benzene and less than 20,000 ppb total BTEX.
4. The existing carbon pack will be replaced/reactivated every 5,000 gallons.
5. Record of usage is maintained by Contractor.
6. Any and all recommendations and conditions issued by the Manufacturer have been adhered to.
7. Any and all recommendations and conditions (even on a site by site basis) issued by the SCDHEC must be adhered to.

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

All purge waters were treated on-site using an up-flow treatment drum loaded with 30 pounds of activated carbon. Carbon will be loaded to a maximum of 3 pounds of total organic compounds or 5,000 gallons of development/purge water, whichever occurs first.

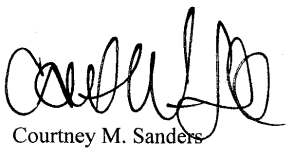
One 55-gallon drum was treated on February 1, 2011 at the referenced site.

A total of one (1) 55-gallon drum was treated at the referenced site.

Midlands Environmental also tracks cumulative organic compounds adsorbed on the activated carbon to ensure the capacity of carbon mass is not over-charged. This data is available upon request.

Should you have any questions or comments, please contact the undersigned.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist

FIELD DATA INFORMATION SHEETS

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 2/1/2011

Field Personnel: John Bryant, Kyle Pudney

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-1

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	36.92			feet
Total Well Depth (TWD)	61			feet
Length of the water column (LWC=TWD-DGW)			24.08	feet
1 casing volume (CV=LWC X C)=	____ X	0.163	3.93	gallons
3 casing volume (3 X CV)=		3	11.78	gallons

Total Volume of Water Purged Before Sampling 12 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:00	13:08	13:15	13:20				
pH (s.u.)	5.10	5.32	5.34	5.28				
Specific Conductivity (µmhos/cm)	160.6	282.5	287.6	276.7				
Water Temperature (°C)	18.0	17.2	17.2	18.3				
Dissolved Oxygen	1.69	2.10	2.15	1.18				
PID readings, if required								

Remarks: Sample Time: 13:20

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 2/1/2011
Field Personnel: John Bryant, Kyle Pudney
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-2
Water Supply Well **Public** **Private**

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	37.08			feet
Total Well Depth (TWD)	88			feet
Length of the water column (LWC=TWD-DGW)			50.92	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	8.30	gallons
3 casing volume (3 X CV)=		3	24.90	gallons

Total Volume of Water Purged Before Sampling 26 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:25	13:33	13:38	13:45				
pH (s.u.)	5.63	5.44	4.95	5.07				
Specific Conductivity (µmhos/cm)	270.1	290.2	280.7	302.3				
Water Temperature (°C)	17.5	17.5	17.0	17.4				
Dissolved Oxygen	1.81	2.10	2.64	1.10				
PID readings, if required								

Remarks: Sample Time: 13:45

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 2/1/2011
Field Personnel: John Bryant, Kyle Pudney
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-3
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Free Product (DFP)			feet
Depth to Ground Water (DGW)	41.83		feet
Total Well Depth (TWD)	71		feet
Length of the water column (LWC=TWD-DGW)		29.17	feet
1 casing volume (CV=LWC X C)= ____ X	0.163	4.75	gallons
3 casing volume (3 X CV)=	3	14.26	gallons

Total Volume of Water Purged Before Sampling 15 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	9:20	9:25	9:30	9:35				
pH (s.u.)	5.82	4.31	4.20	4.22				
Specific Conductivity (µmhos/cm)	54.3	59.8	59.9	60.2				
Water Temperature (°C)	16.9	17.7	17.7	17.5				
Dissolved Oxygen	6.84	4.29	3.16	3.11				
PID readings, if required								

Remarks: Sample Time: 9:35

Midlands
Environmental
Consultants, Inc.

February 24, 2011

RECEIVED
APR 01 2011
UNDERGROUND STORAGE
TANK PROGRAM

Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Report of Granular Activation Carbon (GAC) Unit Filter Change and Repair
Smith's Grocery
S.C. Highway 49
York, South Carolina
SCDHEC Site ID# 09322, CA # 41174
MECI Project Number 11-3264
Certified Site Rehabilitation Contractor UCC-0009

44tech
UST
DOCKET
SCANNED

Dear Ms. Thoma,

On behalf of Ms. Lois Smith, Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached Report of Well Installation, Groundwater Sampling, and Chemical Analyses of Groundwater Samples for the referenced site. This report describes assessment activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

PROJECT INFORMATION

The subject site (Smith's Grocery) is located near the intersection of S.C. Highway 49 and Southern Pines Road, York, York County, South Carolina (see Figure 1). The site consists of an approximately 2.00 acre parcel of land (see Figure 2), and currently occupied by a convenience store. The site formerly maintained one 6,000 gallon gasoline UST and one 8,000 gallon gasoline UST. The South Carolina Department of Health and Environmental Control (SCDHEC) reported release of petroleum product from two single walled underground storage tanks (UST) at the subject site in June of 1993, which was confirmed in September of 1996.

The above project information is based on SCDHEC files.

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

FIELD EXPLORATION

Field exploration conducted at the site include:

- Granular Activated Carbon (GAC) Unit Filter Change and Repair; and
- water supply well sampling and chemical analyses.

GRANULAR ACTIVATED CARBON (GAC) UNIT FILTER CHANGE AND REPAIR

On March 15, 2011, MECI personnel and Mr. James Barker of Barker Filtration, Inc. mobilized to the subject site to change the GAC filters and repair any problems on two water supply wells (WSW-Swift and WSW-Hill).

Upon initial investigation of the GAC units associated with WSW-Swift and WSW-Hill, several problems were noted and repaired. Problems with the GAC unit associated with WSW-Swift include: the electronic component of the GAC read "Error 1", there was no Riser Tube O-Ring, and there was no gravel placed in the bottom of the carbon vessel. Problems with the GAC unit associated with WSW-Hill include: the top distributor basket was broken, there was no Riser Tube O-Ring, there was no flow washer, and there was no gravel in the bottom of the carbon vessel. Mr. Barker repaired all problems associated with both GAC units and changed the carbon/gravel media in both units. Please see the attached paperwork obtained from Barker Filtration, Inc. documenting the discussed problems and repair.

WATER SUPPLY WELL SAMPLING AND CHEMICAL ANALYSES

After the GAC units were properly repaired and the carbon/gravel media was replaced, MECI collected Pre-GAC and Post-GAC samples from both WSW-Swift and WSW-Hill. The following matrix contains well status, owner(s), and tax map identification numbers:

Water Supply Well Number	Well Owner	York County Tax Map Number:	Notes:	Well Status
WSW-Hill	Tony H. Hill	4890401023	3049 Clover Circle	Currently in Use
WSW-Swift	Gary A. Wiggam	4890401024	3043 Clover Circle	Currently in Use

The samples collected from WSW-Hill and WSW-Swift were sent to Pace Analytical of Huntersville, North Carolina (SCDHEC Laboratory Certification #99006) for analysis. The samples collected were analyzed for BTEX, Naphthalene, MTBE, 1,2 DCA (EPA Method 8260B), and EDB (EPA Method 8011). The results of the laboratory analyses are summarized in Table 1 (See Page 3 of 3), and presented in the attached laboratory reports.

WATER SUPPLY WELL ANALYTICAL RESULTS

As discussed above, Pre-GAC and Post-GAC samples were obtained from WSW-Swift and WSW-Hill following the GAC unit repair and media change. Analytical results indicate Benzene concentrations at 22.7 micrograms per liter, Total Xylene concentrations at 17.0 micrograms per liter, Naphthalene concentrations at 3.5J micrograms per liter, 1,2 DCA concentrations at 8.0 micrograms

per liter, and EDB concentration at 0.57 micrograms per liter in the Pre-GAC sample obtained from WSW-Swift. Analytical results indicate Benzene concentrations at 63.2 micrograms per liter, Total Xylene concentrations at 12.5 micrograms per liter, 1,2 DCA concentrations at 6.8 micrograms per liter, and EDB concentration at 0.60 micrograms per liter in the Pre-GAC sample obtained from WSW-Hill. Additionally, analytical results indicate samples obtained from the Post-GAC samples from both WSW-Swift and WSW-Hill are below detection limits. The results of the analyses are presented on Table 1 (See Page 3 of 3) and in the attached laboratory reports.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assessment are consistent with those normally employed in hydrogeological assessment and waste management projects of this type. Our evaluation of site conditions has been based on our understanding of the site, project information provided to us, and data obtained in our exploration. Contents of this report are intended for the sole use by Ms. Lois Smith and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.

Courtney M. Sanders
Staff Biologist

Jeff L. Coleman
Senior Scientist

Attachments

TABLES

TABLE 1
PAGE 1 OF 3
GROUNDWATER ANALYTICAL RESULTS
MARCH 15, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3264
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-1R	10/26/10	**7,360**	**30,200**	**5,060**	**28,800**	**71,420**	**4.3J**	**1,190J**	**26.3**	**18.3**
	02/01/11	**7,900**	**28,100**	**6,080**	**28,100**	**70,180**	<250	**583**	<250	**20.1**
MW-2	10/26/10	**2,860**	**3,630**	**390**	**3,710**	**10,590**	**79.5J**	**110**	**112**	**15.1**
	02/01/11	**2,100**	**2,590**	**174**	**1,750**	**6,614**	**199**	<125	**224**	**18.2**
MW-3	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-4R	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-5	10/26/10	<5.0	**101**	**1.9J**	**11.5**	**114.4J**	<5.0	**3.5J**	<5.0	<0.020
	02/01/11	<5.0	**4.8J**	<5.0	<10.0	**4.8J**	<5.0	<5.0	<5.0	NT
MW-6	10/26/10	**18.2**	**2.2J**	**14.8**	**74.4**	**109.6J**	<5.0	**5.6**	<5.0	**0.13**
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	10/26/10	<250	**875**	**2,120**	**21,500**	**24,495**	<250	**1,150**	<250	**1.1**
	02/01/11	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
MW-8	10/26/10	**10,100**	**37,700**	**4,420**	**26,100**	**78,320**	<500	**866**	<500	**29.2**
	02/01/11	**11,400**	**52,000**	**5,360**	**29,900**	**98,660**	<1,250	**978J**	<1,250	**18.0**
MW-9R	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-10	10/27/10	**6,280**	**17,700**	**5,220**	**26,000**	**55,200**	<250	**813**	**112J**	**48.9**
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method

TABLE 1
PAGE 2 OF 3
GROUNDWATER ANALYTICAL RESULTS
MARCH 15, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3264
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-11	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	NT
MW-12	10/26/10	**1,870**	**24.0**	**479**	**838**	**3,211.0**	<5.0	**112**	**38.8**	**0.95**
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	**1.8J**	**0.057**
MW-13	10/26/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-14	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-15	10/26/10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	10/26/10	**4.1J**	<5.0	<5.0	<10.0	**4.1J**	<5.0	**3.2J**	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	**2.8J**	**2.8J**	<5.0	<5.0	<5.0	**0.034**
MW-17	10/26/10	**250**	<5.0	<5.0	**45.5**	**295.5**	**2.1J**	**8.7**	<5.0	**0.046**
	02/01/11	**34.5**	<10.0	<10.0	**21.5**	**56.0**	<10.0	<10.0	<10.0	NT
MW-18	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.021
MW-19	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	**253**	<5.0	<10.0	**253**	<5.0	<5.0	<5.0	<0.020
MW-20	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method

TABLE 1
PAGE 3 OF 3
GROUNDWATER ANALYTICAL RESULTS
MARCH 15, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3264
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
IW-9	10/26/10	**505**	**562**	**1,250**	**5,110**	**7,427**	**5.8J**	**335**	<10.0	**0.39**
	02/01/11	**408**	**642**	**1,340**	**6,090**	**8,480**	<5.0	**389**	<5.0	**0.52**
TW-1	10/26/10	**8,720**	**293**	**2,370**	**11,900**	**23,283**	<250	**559**	<250	**20.6**
	02/01/11	**1,920**	**106**	**785**	**4,230**	**7,041**	<100	**228**	<100	**4.0**
TW-2	10/26/10	**12,900**	**17,400**	**1,930**	**9,830**	**42,060**	**217J**	**624**	<500	**0.062**
	02/01/11	**12,500**	**19,400**	**1,850**	**9,440**	**43,190**	**191J**	**296J**	<500	<0.020
TW-3	10/26/10	**152**	**12.9**	<5.0	**20.5**	**185.4**	<5.0	**5.2**	**3.6J**	**1.4**
	02/01/11	**242**	**9.0**	**2.1J**	**37.0**	**290.1J**	<5.0	**6.5**	**13.4**	**2.1**
WSW-Crock	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	**0.039**
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	**0.022**
WSW-Hill (Pre)	10/26/10	**14.0**	<5.0	<5.0	<10.0	**14.0**	<5.0	<5.0	**1.6J**	**0.33**
	02/01/11	**27.4**	<5.0	<5.0	**5.9J**	**33.3J**	<5.0	<5.0	**6.0**	**0.33**
	03/15/11	**63.2**	<5.0	<5.0	**12.5**	**75.7**	<5.0	<5.0	**6.8**	**0.60**
WSW-Hill (Post)	10/26/10	**2.4J**	<5.0	<5.0	<10.0	**2.4J**	<5.0	<5.0	**1.3J**	**0.034**
	02/01/11	**3.7J**	<5.0	<5.0	<10.0	**3.7J**	<5.0	<5.0	<5.0	**0.062**
	03/15/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
WSW-Smith	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
WSW-Swift (Pre)	10/26/10	**288**	<5.0	<5.0	**67.6**	**355.6**	<5.0	**11.8**	**23.5**	**1.3**
	02/01/11	**7.5**	<5.0	<5.0	**9.7J**	**17.2J**	<5.0	<5.0	**6.7**	**0.45**
	03/15/11	**22.7**	<5.0	<5.0	**17.0**	**39.7**	<5.0	**3.5J**	**8.0**	**0.57**
WSW-Swift (Post)	10/26/10	**157**	<5.0	**1.6J**	**46.7**	**205.3J**	**3.0J**	**13.6**	**12.5**	**0.60**
	02/01/11	**7.8**	<5.0	<5.0	**8.8J**	**16.6J**	<5.0	<5.0	**7.1**	**0.45**
	03/15/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method

ANALYTICAL RESULTS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 23, 2011

Mr. Bryan Shane
Midlands Environmental
PO Box 854
Lexington, SC 29071

RE: Project: SMITH'S GROCERY 11-3264
Pace Project No.: 9289987

Dear Mr. Shane:
Enclosed are the analytical results for sample(s) received by the laboratory on March 16, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brandon Helton

Brandon Helton for
Renee Spencer
renee.spencer@pacelabs.com
Project Manager

Enclosures

cc: Mr. Jeff Coleman, Midlands Environmental

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: SMITH'S GROCERY 11-3264
Pace Project No.: 9289987

Charlotte Certification IDs
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
Pennsylvania Certification #: 68-00784
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Virginia Certification #: 00213
Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DHH Drinking Water # LA 100031
West Virginia Certification #: 357

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

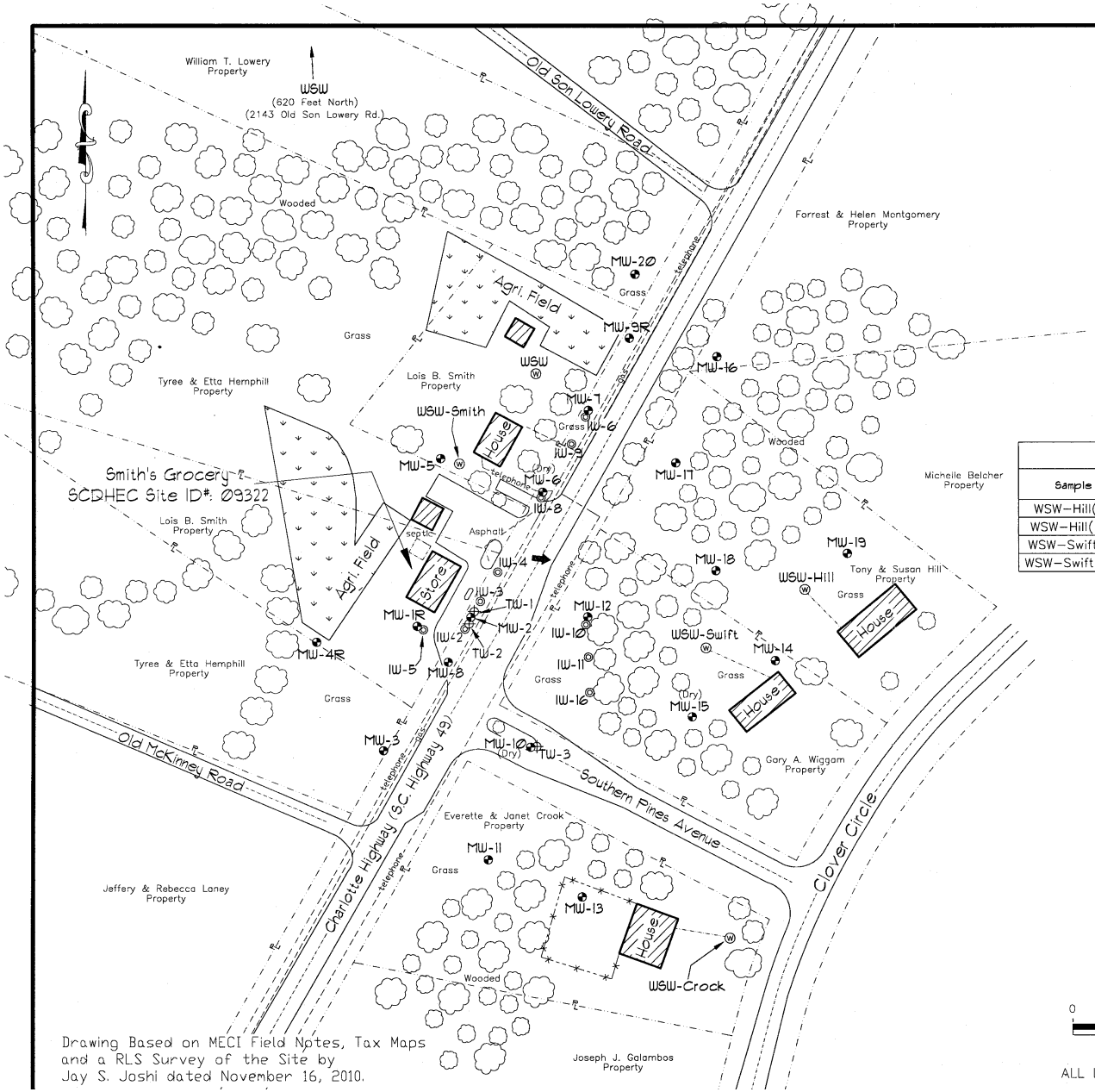
Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: SMITH'S GROCERY 11-3264
Pace Project No.: 9289987

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9289987001	**WSW-SWIFT PRE**	Water	03/15/11 15:05	03/16/11 15:11
9289987002	**WSW-SWIFT POST**	Water	03/15/11 15:15	03/16/11 15:11
9289987003	**WSW-HILL PRE**	Water	03/15/11 15:30	03/16/11 15:11
9289987004	**WSW-HILL POST**	Water	03/15/11 15:37	03/16/11 15:11

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Buried Sewer
- Under Ground Telephone
- Fence

COC Concentration Data

Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
WSW-Hill(Pre)	63.2	<5.0	<5.0	12.5	75.7	<5.0	<5.0	6.8	0.60
WSW-Hill(Post)	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
WSW-Swift(Pre)	22.7	<5.0	<5.0	17.0	39.7	<5.0	3.5J	8.0	0.57
WSW-Swift(Post)	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020

Notes: Samples collected on March 15, 2011.
BDL = Below Detection Limits

GRAPHIC SCALE
0 50 100 150 200
1IN = 100FT

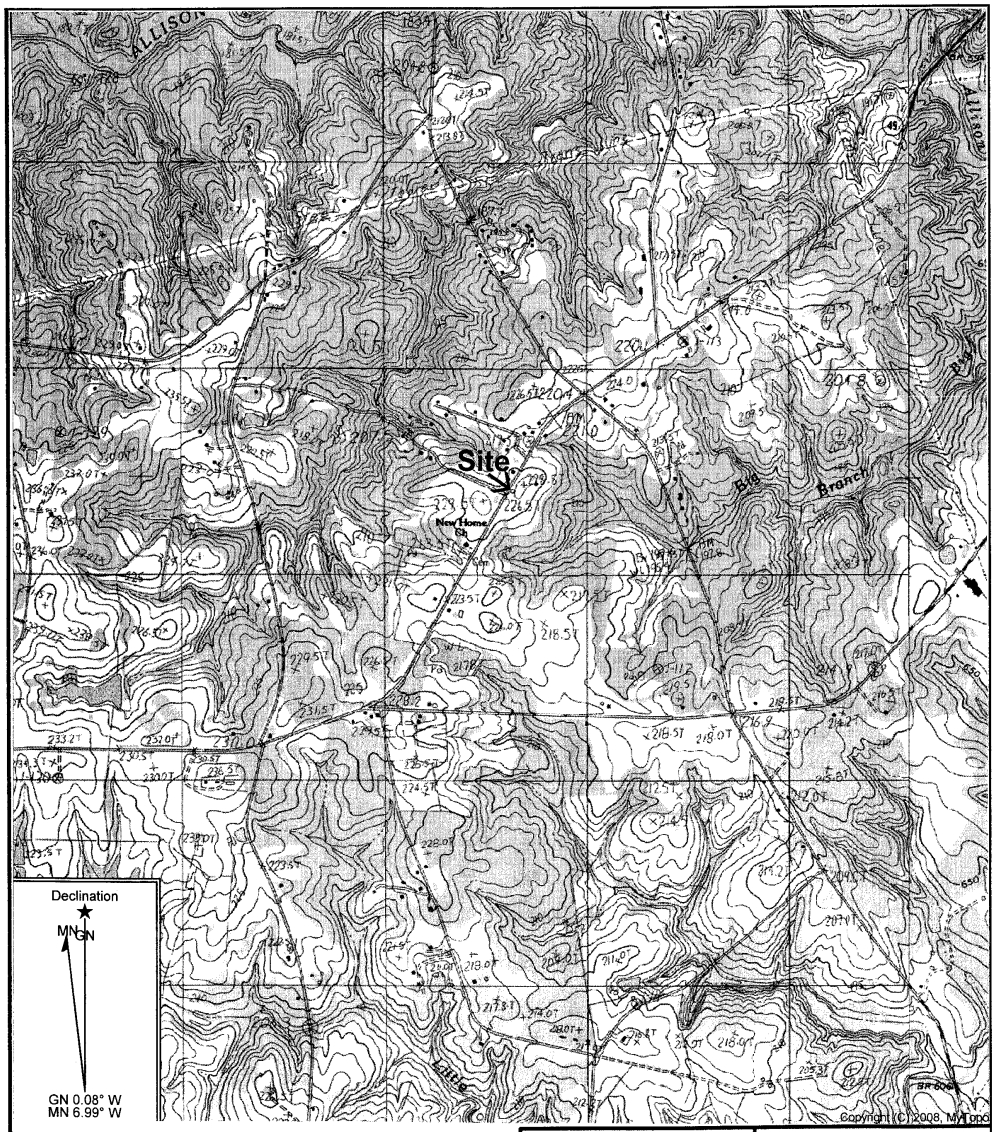
ALL LOCATIONS ARE APPROXIMATE

Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3264
DATE March 24, 2011
FIGURE 2



GRAPHIC SCALE

0 1000 2000 4000

1IN = 2000FT

Reference: Clover, South Carolina
USGS 7.5 Min. Quad
Countour Interval – 3 Meters

Midlands Environmental Consultants, Inc.	Site Location
Smith's Grocery S.C. Highway 49, Clover, SC SCDHEC Site ID# 09322	
Figure 1	MECI 11-3264

FIGURES

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: SMITH'S GROCERY 11-3264
Pace Project No.: 9289987

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9289987001	**WSW-SWIFT PRE**	EPA 8011	CAH	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9289987002	**WSW-SWIFT POST**	EPA 8011	CAH	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9289987003	**WSW-HILL PRE**	EPA 8011	CAH	2	PASI-C
		EPA 8260	KJM	13	PASI-C
9289987004	**WSW-HILL POST**	EPA 8011	CAH	2	PASI-C
		EPA 8260	KJM	13	PASI-C

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY 11-3264
Pace Project No.: 9289987

Sample: WSW-SWIFT PRE **Lab ID: 9289987001** Collected: 03/15/11 15:05 Received: 03/16/11 15:11 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.57**	ug/L	0.020	0.020	1	03/22/11 14:31	03/22/11 18:06	106-93-4	
1-Chloro-2-bromopropane (S)	103	%	60-140		1	03/22/11 14:31	03/22/11 18:06	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**22.7**	ug/L	5.0	1.7	1		03/18/11 02:12	71-43-2	
1,2-Dichloroethane	**8.0**	ug/L	5.0	1.8	1		03/18/11 02:12	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		03/18/11 02:12	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		03/18/11 02:12	1634-04-4	
Naphthalene	**3.5J**	ug/L	5.0	2.0	1		03/18/11 02:12	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		03/18/11 02:12	108-88-3	
Xylene (Total)	**17.0**	ug/L	10.0	2.7	1		03/18/11 02:12	1330-20-7	
m&p-Xylene	**10.5**	ug/L	10.0	3.1	1		03/18/11 02:12	179601-23-1	
o-Xylene	**6.5**	ug/L	5.0	1.6	1		03/18/11 02:12	95-47-6	
4-Bromofluorobenzene (S)	107	%	70-130		1		03/18/11 02:12	460-00-4	
Dibromofluoromethane (S)	98	%	70-130		1		03/18/11 02:12	1868-53-7	
1,2-Dichloroethane-d4 (S)	98	%	70-130		1		03/18/11 02:12	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		03/18/11 02:12	2037-26-5	

Sample: WSW-SWIFT POST **Lab ID: 9289987002** Collected: 03/15/11 15:15 Received: 03/16/11 15:11 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.019	1	03/22/11 14:31	03/22/11 19:06	106-93-4	
1-Chloro-2-bromopropane (S)	102	%	60-140		1	03/22/11 14:31	03/22/11 19:06	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		03/18/11 02:30	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		03/18/11 02:30	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		03/18/11 02:30	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		03/18/11 02:30	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		03/18/11 02:30	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		03/18/11 02:30	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		03/18/11 02:30	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		03/18/11 02:30	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		03/18/11 02:30	95-47-6	
4-Bromofluorobenzene (S)	98	%	70-130		1		03/18/11 02:30	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		03/18/11 02:30	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	70-130		1		03/18/11 02:30	17060-07-0	
Toluene-d8 (S)	95	%	70-130		1		03/18/11 02:30	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: SMITH'S GROCERY 11-3264
Pace Project No.: 9289987

Sample: WSW-HILL PRE **Lab ID: 9289987003** Collected: 03/15/11 15:30 Received: 03/16/11 15:11 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	**0.60**	ug/L	0.020	0.020	1	03/22/11 14:32	03/22/11 19:47	106-93-4	
1-Chloro-2-bromopropane (S)	109	%	60-140		1	03/22/11 14:32	03/22/11 19:47	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**63.2**	ug/L	5.0	1.7	1		03/18/11 02:49	71-43-2	
1,2-Dichloroethane	**6.8**	ug/L	5.0	1.8	1		03/18/11 02:49	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		03/18/11 02:49	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		03/18/11 02:49	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		03/18/11 02:49	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		03/18/11 02:49	108-88-3	
Xylene (Total)	**12.5**	ug/L	10.0	2.7	1		03/18/11 02:49	1330-20-7	
m&p-Xylene	**8.2J**	ug/L	10.0	3.1	1		03/18/11 02:49	179601-23-1	
o-Xylene	**4.4J**	ug/L	5.0	1.6	1		03/18/11 02:49	95-47-6	
4-Bromofluorobenzene (S)	100	%	70-130		1		03/18/11 02:49	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		03/18/11 02:49	1868-53-7	
1,2-Dichloroethane-d4 (S)	93	%	70-130		1		03/18/11 02:49	17060-07-0	
Toluene-d8 (S)	97	%	70-130		1		03/18/11 02:49	2037-26-5	

Sample: WSW-HILL POST **Lab ID: 9289987004** Collected: 03/15/11 15:37 Received: 03/16/11 15:11 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	03/22/11 14:32	03/22/11 20:07	106-93-4	
1-Chloro-2-bromopropane (S)	100	%	60-140		1	03/22/11 14:32	03/22/11 20:07	301-79-56	
8260 MSV	Analytical Method: EPA 8260								
Benzene	ND	ug/L	5.0	1.7	1		03/18/11 03:07	71-43-2	
1,2-Dichloroethane	ND	ug/L	5.0	1.8	1		03/18/11 03:07	107-06-2	
Ethylbenzene	ND	ug/L	5.0	1.6	1		03/18/11 03:07	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	5.0	1.7	1		03/18/11 03:07	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.0	1		03/18/11 03:07	91-20-3	
Toluene	ND	ug/L	5.0	1.6	1		03/18/11 03:07	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		03/18/11 03:07	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	3.1	1		03/18/11 03:07	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.6	1		03/18/11 03:07	95-47-6	
4-Bromofluorobenzene (S)	100	%	70-130		1		03/18/11 03:07	460-00-4	
Dibromofluoromethane (S)	96	%	70-130		1		03/18/11 03:07	1868-53-7	
1,2-Dichloroethane-d4 (S)	95	%	70-130		1		03/18/11 03:07	17060-07-0	
Toluene-d8 (S)	94	%	70-130		1		03/18/11 03:07	2037-26-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY 11-3264
Pace Project No.: 9289987

QC Batch: OEXT/13032 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 9289987001, 9289987002, 9289987003, 9289987004

METHOD BLANK: 580867 Matrix: Water
Associated Lab Samples: 9289987001, 9289987002, 9289987003, 9289987004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.019	03/22/11 17:05	
1-Chloro-2-bromopropane (S)	%	103	60-140	03/22/11 17:05	

LABORATORY CONTROL SAMPLE & LCSD: 580868 580869

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.28	0.33	0.32	116	116	60-140	2	20	
1-Chloro-2-bromopropane (S)	%				103	105	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 580870 580871

Parameter	Units	9289987001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	0.57	.28	.28	0.87	0.96	106	138	60-140	10	20	
1-Chloro-2-bromopropane (S)	%						85	119	60-140			

SAMPLE DUPLICATE: 580872

Parameter	Units	9289987002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	102	103	3		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY 11-3264
Pace Project No.: 9289987

QC Batch: MSV/14481 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV SC
Associated Lab Samples: 9289987001, 9289987002, 9289987003, 9289987004

METHOD BLANK: 579417 Matrix: Water
Associated Lab Samples: 9289987001, 9289987002, 9289987003, 9289987004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	03/18/11 01:36	
Benzene	ug/L	ND	5.0	03/18/11 01:36	
Ethylbenzene	ug/L	ND	5.0	03/18/11 01:36	
m&p-Xylene	ug/L	ND	10.0	03/18/11 01:36	
Methyl-tert-butyl ether	ug/L	ND	5.0	03/18/11 01:36	
Naphthalene	ug/L	ND	5.0	03/18/11 01:36	
o-Xylene	ug/L	ND	5.0	03/18/11 01:36	
Toluene	ug/L	ND	5.0	03/18/11 01:36	
Xylene (Total)	ug/L	ND	10.0	03/18/11 01:36	
1,2-Dichloroethane-d4 (S)	%	94	70-130	03/18/11 01:36	
4-Bromofluorobenzene (S)	%	98	70-130	03/18/11 01:36	
Dibromofluoromethane (S)	%	98	70-130	03/18/11 01:36	
Toluene-d8 (S)	%	95	70-130	03/18/11 01:36	

LABORATORY CONTROL SAMPLE: 579418

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	51.9	104	70-130	
Benzene	ug/L	50	50.2	100	70-130	
Ethylbenzene	ug/L	50	50.6	101	70-130	
m&p-Xylene	ug/L	100	98.5	98	70-130	
Methyl-tert-butyl ether	ug/L	50	54.9	110	70-130	
Naphthalene	ug/L	50	57.2	114	70-130	
o-Xylene	ug/L	50	51.3	103	70-130	
Toluene	ug/L	50	51.9	104	70-130	
Xylene (Total)	ug/L	150	150	100	70-130	
1,2-Dichloroethane-d4 (S)	%			94	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			94	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 579419 579420

Parameter	Units	9289992002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	48.9	49.9	98	100	70-130	2	30	
Benzene	ug/L	ND	50	50	42.6	43.2	85	86	70-130	1	30	
Ethylbenzene	ug/L	ND	50	50	44.7	42.9	89	86	70-130	4	30	
m&p-Xylene	ug/L	ND	100	100	92.0	88.5	92	88	70-130	4	30	
Methyl-tert-butyl ether	ug/L	33.7	50	50	80.2	80.8	93	94	70-130	1	30	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SMITH'S GROCERY 11-3264
Pace Project No.: 9289987

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 579419 579420

Parameter	Units	9289992002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Naphthalene	ug/L	ND	50	50	44.3	41.2	89	82	70-130	7	30	
o-Xylene	ug/L	ND	50	50	44.5	41.5	89	83	70-130	7	30	
Toluene	ug/L	ND	50	50	41.9	42.3	84	85	70-130	1	30	
1,2-Dichloroethane-d4 (S)	%						108	113	70-130			
4-Bromofluorobenzene (S)	%						106	101	70-130			
Dibromofluoromethane (S)	%						103	107	70-130			
Toluene-d8 (S)	%						97	94	70-130			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

COMPLIED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: SMITH'S GROCERY 11-3264
Pace Project No.: 9289987

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
S - Surrogate
1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-C Pace Analytical Services - Charlotte

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1451908

Section A Required Client Information:

Company: Midlands Environmental
Address: 235-B Dooley Rd
Lexington, SC 29073
Email To: JLC@mei.net
Phone: 803-808-2043 Fax: 803-808-2048
Requested Due Date/TAT:

Section B Required Project Information:

Report To: B. Shane
Copy To:
Purchase Order No.:
Project Name: Smith's Grocery
Project Number: 11-3264

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: R. Spencer
Pace Profile #: 836-4

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW	
Water	WT	
Waste Water	WW	
Product	P	
Soil/Solid	SL	
Oil	OL	
Wipe	WP	
Air	AR	
Tissue	TS	
Other	OT	

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: Bkg Meth, Ether	1,2 DCA	EDB 8011	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	NSW-Swift Pre	WT	G			3/15/11	1505		6				6					X	X	X		9289987
2	NSW-Swift Post						1515		6				6									
3	NSW-Hill Pre						1530		6				6									
4	NSW-Hill Post	WT	G			3/15/11	1537		6				6					X	X	X		
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		3.16.11	1245	Jan Dias Pace	3/16/11	1245				
	Pace	3/16/11	15:11	Jamell Cloud Pace	3/16/11	1511	2.1	4	N	4

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jeff Coleman
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 3/15/11

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

GAC REPAIR/CARBON FILTER CHANGE DOCUMENTATION

Barker Filtration
Work Order

Invoice # _____ Invoice Date ___/___/___

Date work completed: 3/5/10 Customer #: 21501

Customer name: MEC (First) Hill (Last)

Work to be accomplished: 3049 Cloverbrook /

5012 SN 10187 DC 00333

Test Results:	TDS	pH	H	Fe	N	T&L	ALK	Mang	CL2
	24	6.2	1	.4	1	1.2	20	0	0

Other elements: _____

Equipment:	Next service date:	Next salt delivery date:
_____	___/___/___	___/___/___
_____	___/___/___	___/___/___
_____	___/___/___	___/___/___

Remarks: 5012 time OK 20% cap left 2AM 216gpd 1000, 57833 total 3 day (Auto) 20-5 RT O-ring missing, replaced, removed old carbon & replaced with 2 bags gravel & 1 cu ft white carbon, missing drain flow controller, replaced, 12"

$45.95 $3.50

Parts Used: 1 copper dist. bracket (70779-70) 1 RTOR (3170254) 2 bags gravel (81635-) 2 lbs 190 nibs 1 5gpm flow washer (1107100) 13.95 Net 30's

Barker Filtration
Work Order

Invoice # ____________ Invoice Date ___/___/___

Date work completed: 3 / 15 / 11 Customer #: 21501

Customer name: MEC Diane Vhaslan
(First) (Last)

Work to be accomplished: 3043 Clover Cr / Carbon Change
3100PF12 (SN 1025)

Test Results:

TDS	pH	H	Fe	N	T&L	ALK	Mang	CL2
32	6.5	1	.5	1	1.1	30	0	0

Other elements: ____________

Equipment:	Next service date:	Next salt delivery date:
	/ /	/ /
	/ /	/ /
	/ /	3 day / /

Remarks: 3100: Error 1, 7894 total, (Auto), (16-10) 20-8 off,
1 hour slow, reset. 2AM, 329 gpd, 1000g, Countdown OK,
microswitch bad, replaced, OK now
RTOR missing, replaced, removed old carbon (no gravel)
& replaced gravel (used their carbon 14"

has commercial 12x54 tank, no lateral. #3.50

Parts Used: 1 microswitch (7145186) #21.95 1 RTOR (7170254)
24 lbs gravel (#1.65) 2 hrs 190 miles
Nat 3011

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment

AUG 11 2011

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

UST DOCKET 45 keh

Re: QAPP Contractor Addendum Directive
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Groundwater Sampling Report received March 10, 2011
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced report. The report indicates the presence of chemicals of concern in the groundwater.

To determine what risk the referenced release may pose to the environment and public health, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of a groundwater sampling event as outlined in the UST Quality Assurance Program Plan (QAPP) is necessary. A groundwater sampling event for BTEX, Naphthalene, MtBE, 1,2-DCA, and EDB should be conducted in accordance with the UST Quality Assurance Program Plan and must be conducted in compliance with all applicable regulations. A copy of SCDHEC QAPP for the Underground Storage Tank Division is available at http://www.dhec.sc.gov/environment/lwm/html/ust.htm

Please have your contractor complete and submit the QAPP Contractor Addendum and Cost Agreement within thirty days of the date of this letter. Every component may not be necessary to complete the above scope of work. The State Underground Petroleum Environmental Response Bank (SUPERB) Account allowable cost for each component is included on the Assessment Component Cost Agreement Form. **Please note that technical and financial preapproval from the Department must be issued before work begins**.

On all correspondence regarding this site, please reference UST Permit #09322. If you have questions or need additional information, feel free to call me at (803) 896-6397.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

cc: Midlands Environmental Consultants, PO Box 854, Lexington, SC, 29071
Technical File

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

AUG 11 2011

UST DOCKET

Re: Corrective Action Options
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Management Division (Division) of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the technical file and determined that active corrective action is necessary at the site to mitigate petroleum impact and ensure that there is no detrimental exposure to human health or the environment.

Funds from the State Underground Petroleum Environmental Response Bank (SUPERB) Account will soon be available for active corrective action. The selected technology must reduce the petroleum chemicals of concern (CoC) concentrations to site-specific target levels (SSTLs) determined by the Division.

The SUPERB Site Rehabilitation and Fund Access Regulations R.61-98 require the UST owner/operator to develop and implement a reasonable, cost-effective corrective action to be performed by a SCDHEC-certified site rehabilitation contractor. As the owner/operator for the release reported on June 30, 1993 you may choose one of two options as to how to proceed with this requirement: state lead or owner/operator lead.

State Lead Option:

- If you choose the state lead option, the Division will procure a certified site rehabilitation contractor to perform corrective action on your behalf. The SCDHEC will enter into an enforceable contract with the awarded contractor. As long as you do not interfere with or prohibit the work at your site, you will not be responsible in the event the state selected contractor does not perform appropriately or does not make satisfactory progress towards achieving the established corrective action goals. To utilize the state lead option, please sign and return the Permission form within 15 days of the date of this letter.

Owner/Operator Lead Option:

- If you select the owner/operator lead option, you will be required to select a contractor to perform the corrective action. In order to assist you in determining the clean-up technology, time frame, clean-up levels, and associated costs, the Division will prepare a technical specification package and provide you copies to send to contractors of your choice. In addition, the Division will announce the request for solicitations in the South Carolina Business Opportunities, a bi-weekly state government publication, to ensure that an adequate solicitation response is obtained so that a fair and competitive price can be established. This announcement will clearly indicate that you will select the contractor to implement the corrective action.
- Compensation to the contractor will be from the SUPERB Account, but you may have the obligation to pay your selected contractor for any costs not approved by the SCDHEC.

- The Division strongly suggests that a written contract between you and the selected contractor be developed following the completion of the solicitation process. The parties to this contract would be you and the contractor you choose; SCDHEC would not be a party to this contract. The Division's function would be to monitor and ensure progress of corrective action activities.
- If the contractor you select does not or cannot complete the required activities, you will be required to find another certified contractor to complete the required activities for the remainder of the existing financial approval amount. No additional funding from the SUPERB Account may be allowed. Under R.61-92, Part 280: Underground Storage Tank Control Regulations, you as the owner/operator are ultimately responsible to SCDHEC for the actions of your contractor. The SCDHEC will pursue enforcement actions against you if the contractor you select does not make satisfactory progress towards achieving established corrective actions goals. To utilize the owner/operator lead option, please sign and return the enclosed Active Corrective Action Options Form within 15 days of the date of this letter.

On all correspondence or inquiries regarding this project, please reference UST Permit #09322. If you have any questions, please contact me at (803) 896-6397 or thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Permission form
Active Corrective Action Options form

cc: Technical file (w/o enc)

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

AUG 12 2011

UST DOCKET 47 tech

Re: GAC Change Directive
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322; CA#42129
Release reported June 30, 1993
York County

Dear Ms. Smith

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (SCDHEC) recognizes your commitment to continue work at this site utilizing Midlands Environmental Consultants, Inc. (MECI). The next scope of work needed is the changing of the filters of the Granulated Activated Carbon (GAC) Units. A report documenting the changing of the GAC filters is due within 30 days from the date of this letter.

MECI can submit an invoice for direct billing from the State Underground Petroleum Environmental Response Bank (SUPERB) Account. Please note that all applicable South Carolina certification requirements apply to the laboratory services, well installation, and report preparation. All site rehabilitation activities must be performed and submitted by a South Carolina Certified Underground Storage Tank Site Rehabilitation Contractor.

On all correspondence or inquiries regarding this project, please reference **UST Permit #09322.** If you have any questions, please feel free to contact me by phone at (803) 896-6397, by fax at (803) 896-6245,or email at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Approved cost agreement (ACA)

cc: MECI, PO Box 854, Lexington, SC, 29071 (w/ enc.)
Technical file (w/o enc)

Approved Cost Agreement 42129

Facility: 09322 SMITHS GROCERY

THOMADL

PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB						
		B	PERSONNEL	1.0000	290.00	290.00
19 RPT/PROJECT MNGT & COORDINATIO						
		PCT	PERCENT	0.1500	1,190.00	178.50
24 GAC SYSTEM						
		C	FILTER REPLACEMENT/REMOVAL	2.0000	450.00	900.00
				Total Amount		1,368.50

State Lead Option

UST Delta AUG 15 2011 PROGRAM

PERMISSION FORM

UNDERGROUND STORAGE TANK AND PROPERTY OWNER

UST Permit #09322

If you are both the owner of the former or existing underground storage tanks for the release reported on June 30, 1993 and the current property owner, please complete this form.

I, Lois B. Smith, certify that I am the identified legal owner of the abandoned underground storage tanks for the release reported on June 30, 1993 and property located at the facility identified below or serve as the authorized representative for the owner. I grant permission to the South Carolina Department of Health and Environmental Control (SCDHEC) to secure on my behalf contractor services to conduct assessment and corrective action activities as required, and authorize SCDHEC, or a contractor selected by SCDHEC, to enter this property at reasonable times only to accomplish these site rehabilitation tasks. The contractor(s) will be designated as my contractor for only the required site rehabilitation activities. Compensation to the contractor(s) will be from the SUPERB Account and I will have no obligation to pay the contractor(s). I understand that SCDHEC or its contractor will be responsible for notifying me of all activities that are necessary prior to their initiation and will promptly provide to me a copy of each environmental report. I understand that I may choose to select my own contractor at the completion of any phase of work by notifying the Division of Underground Storage Tank Management in writing.

Name of Facility Smiths Groc Phone # 803-684-6289

Street Address of Facility 3176 Charlotte Hwy

Town, City, District, Suburb York

Name of nearest intersecting street, road, highway, alley Hwy 49

Is this facility within the city limits? (yes or no) No

Does a public water or sewer utility service this facility? (yes or no) No, if no, please provide the name and phone number of a person that we can contact that can assist in the location of private water and septic tank lines Lois B Smith or Reid Smith phone number 8036846289 or 8036847886

Is the property currently leased or rented to someone? (yes or no) No. If yes, please provide their name _____ and phone number _____ and let them know about the pending site rehabilitation activities. If vehicles or other mobile structures are parked over the monitoring wells, they should be moved before SCDHEC's contractor arrives at the site.

NAME of UST/property owner (Please Print): Lois B. Smith

Phone Number (home) 8036846289 (work) _____

Signature of UST/property Owner: Lois B Smith

Witness: [signature]

Date: 8/12/11 Month Aug Day 12 Year 2011

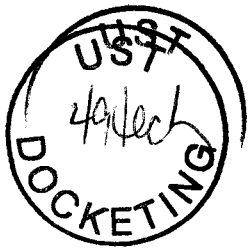
UST DOCKET 48 tech

UNDERGROUND STORAGE TANK (UST) OWNER/OPERATOR LEAD INFORMATION SHEET

1. CONTRACTOR OF CHOICE

As the UST Owner/Operator of UST Permit # 09322, I would like to use the contractor or person(s)* listed below and request that they represent me for: (check one)

( ) Initial Groundwater Assessment
( ) Other (please specify)_____
(X) all future assessments and remedial scopes. **



Name of Contractor/Person(s): Midlands Environmental Consultants, Inc.

Address: 235-B Dooley Road, Lexington, SC 29073

Telephone Number: (803) 808-2043

Note: Site rehabilitation activities must be performed by a SCDHEC Certified Site Rehabilitation Contractor in accordance with R.61-98.

*indicate if the person listed is your own employee

** if you would like the contractor to perform all future assessment activities at this and/or other facilities that have confirmed releases, please provide a list of all sites on your letterhead and provide the information requested in items 2 and 3 below within the context of the letter.

2. FINANCIAL OR FAMILIAL RELATIONSHIP

Does a financial or familial relationship, as defined below, exist between you and the contractor/person that you listed above? _____ Yes _X_ No (please initial)

Financial Relationship: A connection or association through a material interest of sources of income which exceed five percent of annual gross income from a business entity.

Familial Relationship: A connection or association by family or relatives, in which a family member or relative has a material interest. Family or relatives include: father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, grandchild, great grandchild, step grandparent, step great grandparent, step grandchild, step great grandchild, or fiancee.

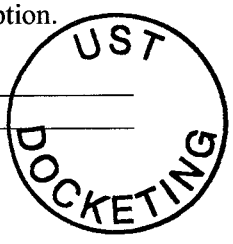
3. PAYMENT

You can pay the contractor and, upon the submittal of the canceled check (or a notarized statement from the contractor), be compensated from the SUPERB Account, or have payment issued directly from us to the contractor.

I request that payment be made to me after I have paid the contractor. _____ Yes _____ No (please initial)
I request that payment be made directly to the contractor. _X_ Yes _____ No (please initial)

Note: All costs must receive prior financial approval from the Department regardless of payment option.

Underground Storage Tank Owner/Operator Signature Lois B Smith
Date 9-11



Midlands
Environmental
Consultants, Inc.

August 17, 2011

Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Report of Granular Activation Carbon (GAC) Unit Filter Change
Smith's Grocery
S.C. Highway 49
York, South Carolina
SCDHEC Site ID# 09322, CA # 42129
MECI Project Number 11-3533
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

On behalf of Ms. Lois Smith, Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached Report of Well Installation, Groundwater Sampling, and Chemical Analyses of Groundwater Samples for the referenced site. This report describes assessment activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

PROJECT INFORMATION

The subject site (Smith's Grocery) is located near the intersection of S.C. Highway 49 and Southern Pines Road, York, York County, South Carolina (see Figure 1). The site consists of an approximately 2.00 acre parcel of land (see Figure 2), and currently occupied by a convenience store. The site formerly maintained one 6,000 gallon gasoline UST and one 8,000 gallon gasoline UST. The South Carolina Department of Health and Environmental Control (SCDHEC) reported release of petroleum product from two single walled underground storage tanks (UST) at the subject site in June of 1993, which was confirmed in September of 1996.

The above project information is based on SCDHEC files.

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

FIELD EXPLORATION

Field exploration conducted at the site include:

- Granular Activated Carbon (GAC) Unit Filter Change.

GRANULAR ACTIVATED CARBON (GAC) UNIT FILTER CHANGE AND REPAIR

MECI was contacted by SCDHEC on August 8, 2011 to discuss a concern that had been brought to their attention by Mr. Thomas Hill (WSW-Hill). It was reported that Mr. Hill's water was exhibiting foul odors. It was determined that due to the high priority of the filter change that the Contractors Addendum (UST Management Division Quality Assurance Program Plan, June 2011, Appendix B) would not be necessary to conduct the GAC filter change. Additionally, it was decided that pre and post GAC samples would not need to be collected following the GAC filter change due to the lack of the contractor's addendum. Futhermore, it was discussed that a comprehensive groundwater sampling event at the subject site would be requested in the near future to obtain analytical data from the subject water supply wells.

On August 9, 2011, MECI personnel mobilized to the subject site to change the GAC filters on two water supply wells (WSW-Swift and WSW-Hill). Both GAC filters were changed in accordance with SCDHEC regulations and the manufacturers (EcoWater Systems) guidelines. The spent gravel/carbon media was removed from both GAC units and the inside the carbon vessels were thouroughly cleaned. Both GAC units were refilled with 24 lbs of gravel (covering the bottom distributor) and completed with an approximate two cubic feet of new liquid phase activated carbon or until there was an approximate 12" inches of freeboard space between the top of activated carbon and the top distributor. After the filter change, each unit was allowed to properly backwash and the electronic component was reset to reflect appropriate time/backwash cycle (3 day -1,000 gallon cycle). As discussed above, pre and post GAC water samples were not collected following the GAC filter changes.

Midlands Environmental appreciates the opportunity to offer our professional environmental services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

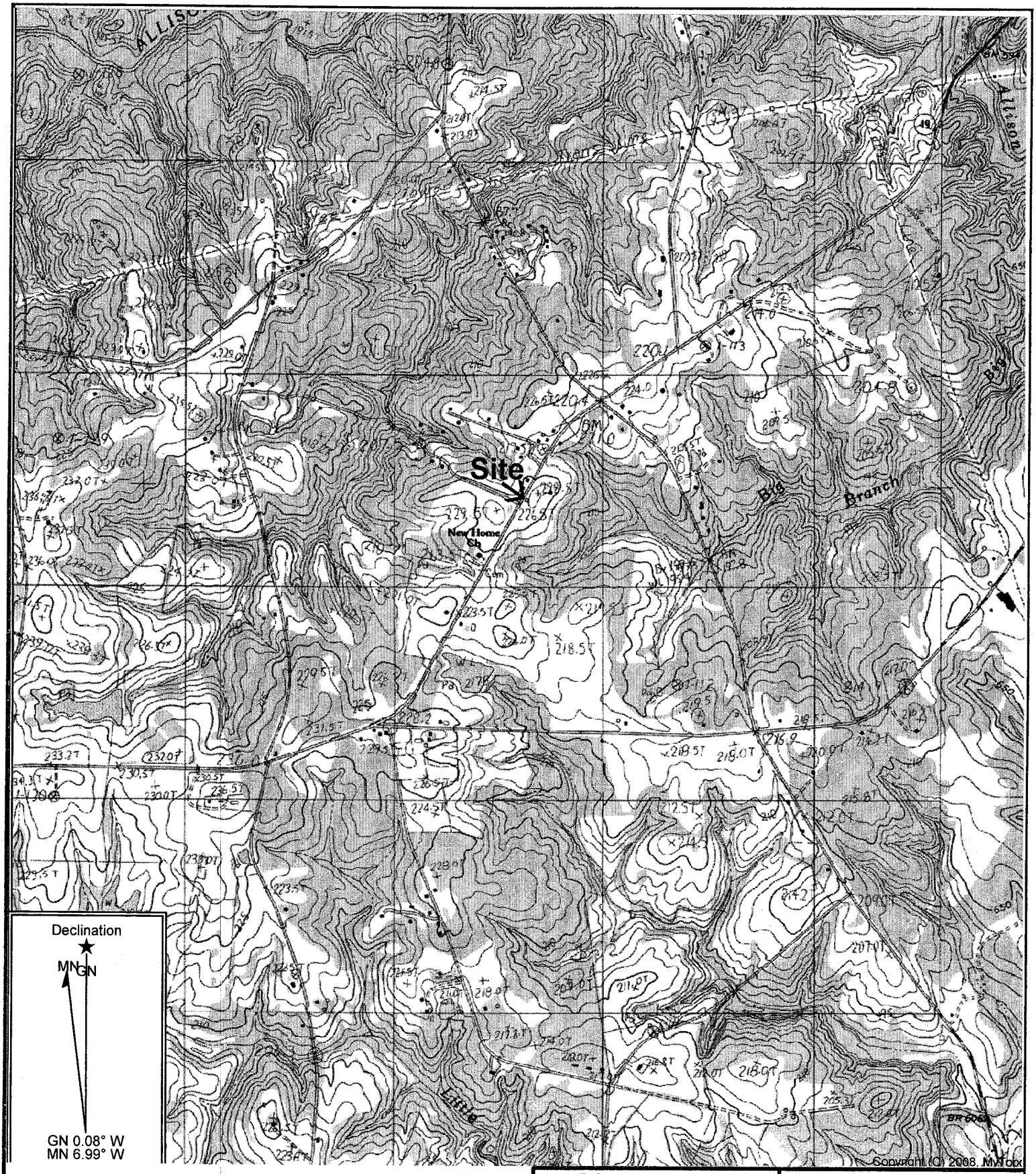
Sincerely,
Midlands Environmental Consultants, Inc.

Courtney M. Sanders
Staff Biologist

Jeff L. Coleman
Senior Scientist

Attachments

FIGURES



Copyright (C) 2008, MyTopo

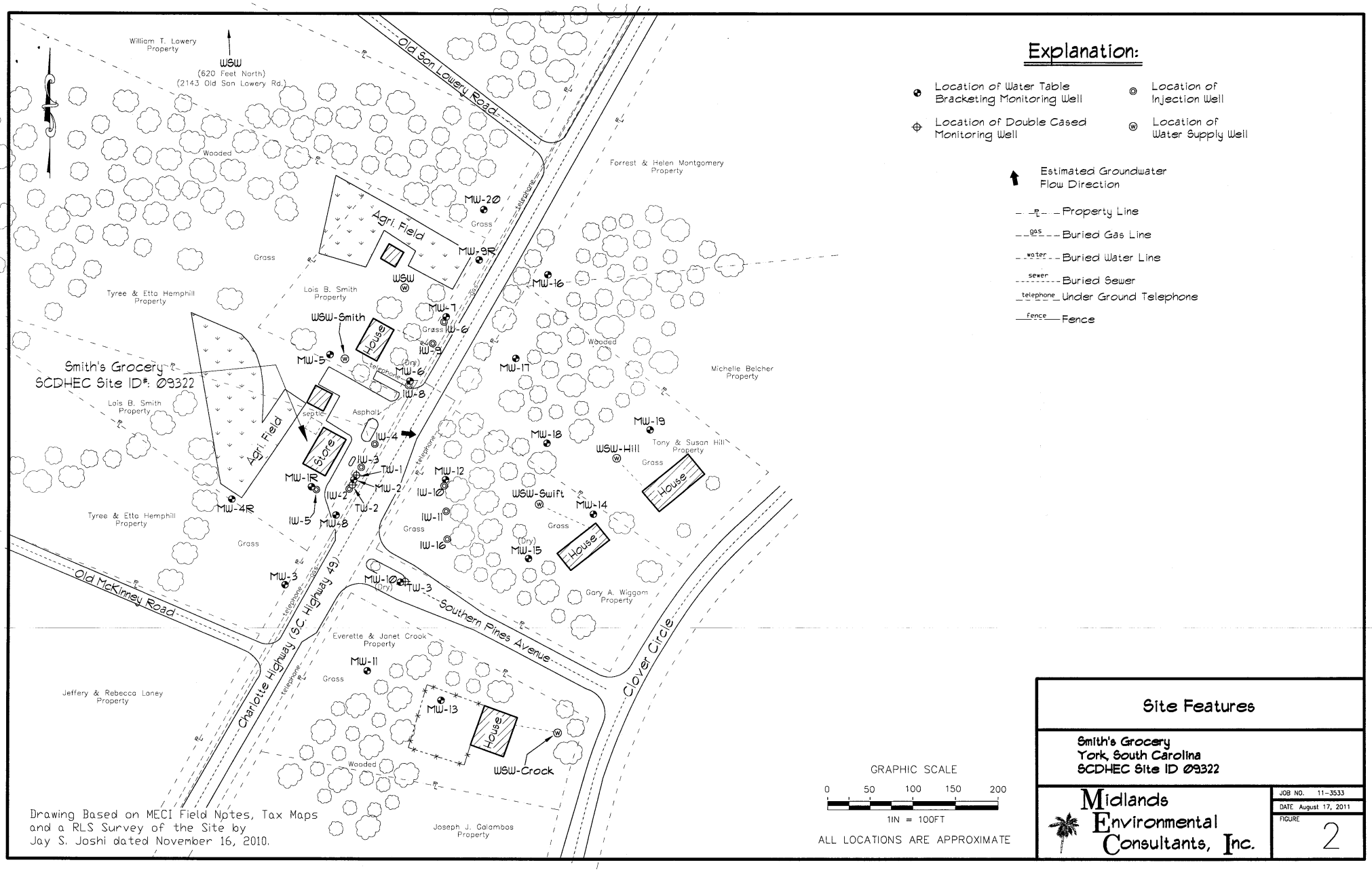
GRAPHIC SCALE

0 1000 2000 4000

1IN = 2000FT

Reference: Clover, South Carolina
USGS 7.5 Min. Quad
Countour Interval – 3 Meters

Midlands Environmental Consultants, Inc.	Site Location
Smith's Grocery South Carolina Highway 49, Clover, SC SCDHEC Site ID# 09322	
Figure 1	MECI 11-3533



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Buried Sewer
- Under Ground Telephone
- Fence

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3533
DATE August 17, 2011
FIGURE 2

0/0

Midlands Environmental Consultants, Inc.

September 13, 2011

UST
SEP 15 2011
PROGRAM

UST
#51
DOCKETING

Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: QAPP Contractor Addendum – Revision 1
Smith's Grocery
York, South Carolina
SCDHEC Site ID Number 09322
MECI Project Number 11-3516
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached QAPP Contractor Addendum for the referenced site.

On August 24, 2011, MECI personnel performed a site visit to the subject site to evaluate site conditions, locate monitoring wells and identify potential problems for future sampling activities.

If you have any question or comments please feel free to contact us at 803-808-2043.

Sincerely,
Midlands Environmental Consultants, Inc.

Courtney M. Sanders
Staff Biologist

Brendon P. Kelly
Project Scientist

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SC DHEC UST Programmatic QAPP
For
Smith's Grocery, SCDHEC Site ID# 09322

SC Highway 49, York, South Carolina

Prepared by:
Courtney M. Sanders
Staff Biologist
Midlands Environmental Consultants, Inc.
(Certified Site Rehabilitation Contractor UCC-0009)
235-B Dooley Road
Lexington, SC 29073
(803)808-2043

Date: September 13, 2011

Approvals

Debra Thoma SC DHEC Project Manager	Debra Thoma Signature	Date 9/16/11
Brendon P. Kelly Contractor QA Manager	 Signature	Date 9/14/11
Bryan T. Shane, P.G. Site Rehabilitation Contractor	 Signature	Date 9-14-11
Michael Woodrum Laboratory Director	 Signature	Date 9/13/2011

A2 Table of Contents

A1 Title and Approval Page 1
A2 Table of Contents 2
A3 Distribution List 3
Table 1A Addendum Distribution List 3
A4 Project Organization 3
Table 2A Addendum Role Identification and Contact Information 4
Figure 1A Organizational Chart 4
A5 Problem Definition/Background 4
A6 Project/Task Description 5
A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs) 5
A8 Training and Certificates 5
Table 3A Required Training and Licenses 6
A9 Documents and Records 7
Table 4A Record Identification, Storage, and Disposal 7
Section B Measurement/Data Acquisition 7
B1 Sampling Process/Experimental Design 7
Table 5A Sampling Activities 8
B2 Sampling Methods 8
Table 6A Field Corrective Action 12
B3 Sample Handling and Custody 12
B4 Analytical Methods 13
Table 7A Analytical SOPs and Referenced Methods 13
Table 8A SOP Abbreviation Key 14
Table 9A Corrective Action Procedures 15
Table 10A Sample Disposal Procedures 16
B5 Quality Control Requirements: 16
B6 Field Instrument and Equipment Testing, Inspection and Maintenance 16
Table 11A Instrument and Equipment Maintenance 17
Table 12A Instrument and Equipment Inspection 18
B7 Instrument Calibration and Frequency 18
Table 13A Instrument Calibration Criteria and Corrective Action 19
B8 Inspection/Acceptance Requirements for Supplies and Consumables 20
Table 14A List of Consumables and Acceptance Criteria 20
B9 Data Acquisition Requirements (Non-Direct Measurements) 21
Table 15A Non-Direct Measurements 21
B10 Data Management 21
Section C Assessment and Oversight 22
C1 Assessment and Response Actions 22
C2 Reports to Management 23
Section D Data Validation and Usability 23

A3 Distribution List

Name	Title	Organization/Address	Telephone Number	Fax Number	Email Address
Debra Thoma	SC DHEC Technical Project Manager	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6397	803-896-6245	thomadl@dhec.sc.gov
Bryan T. Shane, P.G.	Site Rehabilitation Contractor	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bts@meci.net
Brendon P. Kelly	Quality Assurance Officer	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bpk@meci.net
Jeff L. Coleman	Field Manager	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	jlc@meci.net
Michael Woodrum	Laboratory Director	Shealy Environmental Services,Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	mwoodrum@shealylab.com
	Well Services/Driller				

Table 1A Addendum Distribution List

A4 Project Organization

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
Project Manager	Debra Thoma	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6397	803-896-6245	thomadl@dhec.sc.gov
Site Rehabilitation Contractor	Bryan T. Shane, P.G.	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bts@meci.net
Quality Assurance Officer	Brendon P. Kelly	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bpk@meci.net
Field Manager	Jeff L. Coleman	Midlands Environmental Consultants, Inc. 235-B Dooley Road	803-808-2043	803-808-2048	jlc@meci.net

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
		Lexington, SC 29073			
Analytical Laboratory Director	Michael Woodrum	Shealy Environmental Services,Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	mwoodrum@shealylab.com
Soil Boring and Monitoring Well Driller					
Project Verifier	Courtney M. Sanders or Brendon P. Kelly	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net

Table 2A Addendum Role Identification and Contact Information

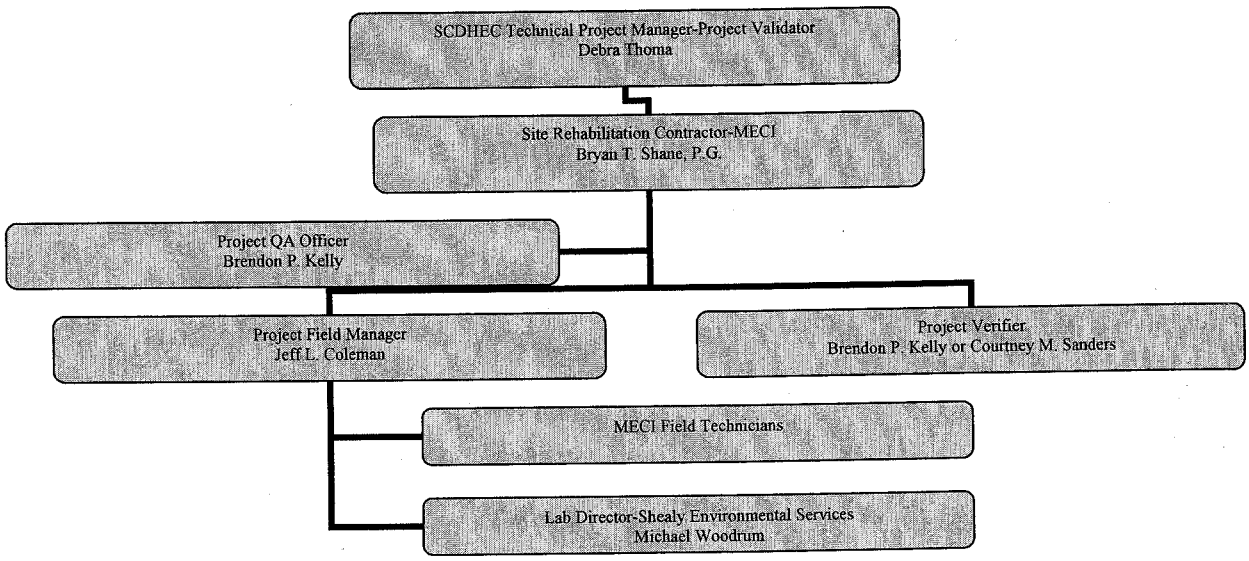


Figure 1A Organizational Chart

A5 Problem Definition/Background

Discuss the background (as much as is known) of the site and appropriate historical information, and why this site is being assessed.

The subject site (Smith's Grocery) is located at 3176 Charlotte Highway, York, York County, South Carolina. The subject site previously maintained one 6,000 gallon gasoline underground storage tank (UST) and one 8,000 gallon gasoline UST. These UST's were abandoned by removal from ground in March of 1996. The South Carolina Department of Health and Environmental Control (SCDHEC) reported a release of petroleum product from these UST's in June of 1993 and confirmed the release in September of 1996. The subject site is currently rated a Class 1D.

A comprehensive sampling event is being conducted on the network of monitoring wells installed in relation with the release of petroleum product and injection wells installed in association with prior remediation attempts at the site. Additionally, four water supply wells will be sampled to determine petroleum impact to the groundwater.

Please answer the following: Does this project fall under UST or Brownfields area?

Underground Storage Tank Division

A6 Project/Task Description

1. ***Summarize what is known about the work to be done. This can be a short sentence indicating what the Scope of this project is (see Master QAPP Section A6).***

A comprehensive sampling event will be conducted at the subject site (Smith's Grocery) to determine current site conditions, and use the analytical data as a baseline for Active Corrective Action (ACA).

2. ***The work will begin within*** fourteen (14) days of receipt of approved QAPP contractors addendum ***after cost approval and sampling should be complete by*** twenty-one (21) days of receipt of approved QAPP contractors addendum.

3. ***Are there are time or resource constraints? Include those factors that may interfere with the tentative schedule.***

Factors that may prevent schedule work will be, but not limited to, inclement weather, equipment malfunction, and machine failure.

A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs)

The subject site is located at 3176 Charlotte Highway, York, York County, South Carolina. The site is currently Smith's Grocery.

A8 Training and Certificates

Required training and licenses:

Title/Job	Name	Training Required	Date training received	Type of License	License Number
Principal Geologist	Bryan T. Shane, P.G.	Professional Geologist	10/30/1993	State of South Carolina	1102
Senior Scientist	Jeff Coleman	OSHA 40 hr HAZWOPER	7/27/2007	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	7/27/2011	N/A	N/A
Project Scientist	Brendon Kelly	OSHA 40 hr HAZWOPER	8/21/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/14/2010	N/A	N/A
Staff Geologist	John Bryant	OSHA 40 hr HAZWOPER	4/17/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/14/2010	N/A	N/A
Field Technician	Brian Owen	OSHA 40 hr HAZWOPER	8/21/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/14/2010	N/A	N/A
Staff Biologist	Courtney Sanders	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
Staff Biologist	Kyle Pudney	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
Staff Biologist	Chris Lashley	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
Staff Biologist	Gavin Globensky	OSHA 40 hr HAZWOPER	7/29/2011	N/A	N/A
Lab Manager	Michael Woodrum	***	***	Lab Certification	SC 32010

Table 3A Required Training and Licenses

Brendon P. Kelly of Midlands Environmental Consultants, Inc. is responsible to ensuring that personnel participating in this project receive the proper training. All training records will be stored in the following location:235-B Dooley Road, Lexington, SC 29073.

It is understood that training records will be produced if requested by SC DHEC.

The Following Laboratory(ies) will be used for this Project:

Commercial Lab(s)

Full Name of the Laboratory___Shealy Environmental Services, Inc.____
Name of Lab Director_____Michael Woodrum_____

SC DHEC Certification Number 32010
Parameters this Lab will analyze for this project:

BTEX, Napth, MTBE, 1,2 DCA, (EPA Method 8260-B), and EDB (EPA Method 8011).
& oxygenates

Please note: SC DHEC may require that the contractor submit some or all of the Laboratory's SOPs as part of this QAPP.

A9 Documents and Records

Personnel will receive the most current version of the QAPP Addendum via: (Check all that apply)

____US Mail ____Courier __X__ Hand delivered

Other (please specify):_____E-mailed electronic copies___

Record	Produced By	Hardcopy/ Electronic	Storage Location For how long?	Archival
Instrument Raw Data	Target, Thermospec, or Iteva software	Hardcopy and Electronic	Hardcopy: Offsite storage for 7 yrs Electronic: Two external storage device backups – one offsite, one onsite storage for 10 yrs	Yes
Final Reports	LIMS	Electronic	Electronic: Two external storage device backups – one offsite, one onsite storage for 10 years	Yes
Field Work	Field Staff	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
Chain of Custody	Field Staff	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
QAPP Addendum	Brendon Kelly	Hardcopy & Electronic	MECI office: 235B Dooley Road / Min. 5 years	Yes
Internal QC record	Brendon Kelly	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
Sampling Report	Brendon Kelly	Hardcopy & Electronic	MECI office: 235B Dooley Road / Min. 5 years	Yes

Table 4A Record Identification, Storage, and Disposal

Section B Measurement/Data Acquisition

B1 Sampling Process/Experimental Design

Item	Start Date	End Date	Comments
Site Reconnaissance	8/24/11	8/24/11	Already Completed
QAPP preparation	8/26/11	8/26/11	In progress
QAPP approval	8/26/11	9/16/11	Assuming three week turnaround
Monitoring well Sampling	9/17/11	9/24/11	Sampled within 1 week of QAPP approval
Report Preparation	9/25/11	10/16/11	Three weeks to prepare/submit report

Table 5A Sampling Activities

B2 Sampling Methods

Please note: The contractor must follow sampling protocols as given in the UST QAPP.

***Estimate* the number of samples of each matrix that are expected to be collected:**

Soil	_____
Ground Water from monitoring wells	_____34____
From Drinking/Irrigation water wells	_____6____
Field Duplicate Collection	_____2____
Field Blank Collection	_____1____
Trip Blank	_____1____
From surface water features	_____0____
Total number of Water samples	_____44____

Notes:
During the August 24, 2011 site visit, thirty-four (34) monitoring wells were located. Additionally, four water supply wells (WSW-Smith, WSW-Crock, WSW-Swift (Pre and Post GAC), and WSW-Hill (Pre and Post GAC) were located and determined to be operational.

During the site visit, it was noted that monitoring wells IW-2, IW-3, IW-4, IW-6, IW-8, IW-9, IW-10, IW-16, IW-18, MW-2, MW-5, MW-7, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20, TW-1, and TW-3 need a combined fifty two (52) bolts to secure the wells in place. Total Bolts Needed: **52 Bolts**

Samples will be analyzed by Shealy Environmental Services, Inc. for BTEX, Napth, MTBE, 1,2 DCA, (8260B), and EDB (8011).

For the sample matrices indicated above, please describe how samples will be collected and the equipment needed.

Monitoring Well Sampling

Water Level Measurement

-MECI personnel utilize Electronic Water Level Indicators for Water Level Measurements. Each sampling crew carries an electronic water level indicator for use on downgradient monitoring wells and an Oil/Water Interface probe for use on source area wells or wells that have historically contained measurable free phase petroleum product.

-Prior to usage, the indicator is decontaminated with isopropanol applied by a Teflon squeeze bottle and rinsed with analyte free water. This rinse water is collected and run through a portable GAC (granulated activated carbon) unit.

-The indicator is slowly lowered into the water table, and the water level is recorded to the nearest 0.01 feet.

-When free phase petroleum product is encountered, the Oil-Water Interface probe is slowly lowered into the monitoring well until product is encountered; this measurement is recorded to the nearest 0.01 feet. The meter is then lowered through the product until water is encountered. The probe is then pulled back up through the well until product is encountered again; this measurement is recorded to the nearest 0.01 feet.

-If the total depth of a monitoring well is required, after a groundwater level is recorded, the indicator probe is lowered until the bottom of the monitoring well is encountered. This depth is recorded to the nearest 0.01 feet. Following a total depth measurement, the entire length of probe tape is decontaminated with isopropanol and rinsed with analyte free water.

-All measurements will be taken from the top of the well casing.

Monitoring Well Purging

-Where necessary, monitoring wells will be purged prior to sampling if: the well screen does not bracket the watertable, if a screened interval is not known, purging is specifically asked for by the SCDHEC project manager, or a monitoring well has not previously been sampled.

-Purging will be completed utilizing a prepackaged, clear, disposable polyethylene bailer and nylon rope. Following purging/sampling of a well, the bailer and rope will be properly disposed.

-A new set of Nitrile gloves will be worn at each monitoring well, and at any time samples are handled.

-Prior to purging, the water level of the well will be determined using an electronic water level indicator. The water level, total well depth and well diameter will be used to determine the amount of water standing in the water column. The following table presents gallons of water per foot of water column in selected diameters of wells:

Well Diameter (inches)	Gallons of Water/Foot	Well Diameter (inches)	Gallons of Water/Foot
1	0.047	8	2.611
2	0.163	10	4.08
4	0.653	12	5.875

6	1.469		

-The length of the water column multiplied by the gallons of water per foot will provide the number of gallons in one well volume of water.
-Purging will continue until three well volumes of water are evacuated, or where field measurements of pH, Specific Conductivity (uS) and Temperature (°C) have stabilized to within 10% of previous values or until all accessible well water is evacuated (purged dry). Field measurements of these parameters will be taken and recorded in field notes, prior to purging and after each well volume of water has been purged.
-When purging a well with a diameter larger than 2", a submersible Redi-Flo2 pump can be used.
-Prior to usage, the pump assembly will be cleaned using a laboratory grade detergent and rinsed with analyte free water.
-The pump is lowered into the water column utilizing an attached nylon rope. DO NOT LOWER THE PUMP USING THE ELECTRICAL CORD OR HOSE.
-Once the pump has been lowered to the desired depth, the nylon rope is securely attached to an anchor at the ground surface (i.e. metal stake, truck bumper, etc). The power cord is attached to the speed controller which is attached to the generator.
-Slowly increase the speed of the controller until a desired flow rate is achieved. The pump should not be allowed to run dry.
-Purge water will be treated on-site utilizing a GAC unit.

Monitoring Well Sampling

-No-purge sampling will be conducted in previously sampled monitoring wells if: the water level is within the screened interval of the well or specifically asked for by the SCDHEC project manager.
-Immediately prior to sampling, laboratory provided labels will be placed on all sample vials and containers. These labels will include the site name, sample ID, analysis to be completed, date and time.
-Sampling will be conducted utilizing prepackaged, clear, disposable polyethylene bailers and nylon rope. Following sampling of a well, the bailer and rope will be properly disposed. A new set of Nitrile gloves will be worn at each monitoring well, and at any time samples are handled.
-The bailer is lowered into the well until it encounters the watertable, the bailer is then allowed to fill with water and is extracted from the well. Samples are placed in laboratory provided and approved sampling containers. Following sample collection, the samples are immediately placed in laboratory provided coolers, pre-filled with wet ice obtained from the MECI office.
-When requested by the SCDHEC project manager, passive diffusion bags (PDB) can be used to obtain no purge samples from discreet intervals within a water column or from wells were it is not possible to treat purge water on-site (i.e. DNAPL contamination).
-Prior to installation of a PDB, all equipment used should be washed with isopropanol and rinsed with analyte free water (weights, PDB clamps, etc.).
-Wearing Nitrile gloves, the PDB is filled with analyte free water, sealed with a PDB clamp according to the manufacturer and attached to a nylon rope. The PDB is then lowered into the well to a specified depth.
-After a minimum of two weeks in the well, the PDB is removed from the well and a sample taken using a disposable, prepackaged, sealed sampling straw to puncture the bag and fill sample vials.

-Once the samples are taken, they are to be immediately placed in laboratory provided coolers, pre-filled with wet ice obtained from the MECI office.

-One field duplicate will be taken for every twenty (20) monitoring wells sampled at a site. This blank is a duplicate sample taken from a monitoring well near the source area, and is sampled in accordance with MECI Standard Operating Procedures.

-One field blank will be prepared for each day a site is sampled. A field blank is prepared using lab provided DI water placed into laboratory provided sample containers.

-One trip blank per cooler used in sampling will be used at each site. The trip blank is prepared by the laboratory.

-Once a sample has been taken, a sample time will be recorded in the field notes, along with any information about monitoring well condition that should be brought to the attention of the project manager.

Water Supply Well (WSW) and Surface Water Sampling

-Before sampling any WSW, an attempt should be made to speak with the owner of the well, to inform them of the work requested by SCDHEC.

-WSW's should be sampled at the well head, or as close to the well head as possible. If it is not possible to obtain the sample from the well head, field notes should record exactly were the sample was taken (spigot on side of well house, spigot on home, etc.)

-The WSW should be purged prior to sampling by allowing the WSW to run until the holding tank has emptied or the well pump turns on. Wearing Nitrile gloves, the sample should be placed in approved, laboratory provided sampling containers. Following sample collection, the samples are immediately placed in laboratory provided coolers, pre-filled with wet ice obtained from the MECI office.

-Surface waters will be sampled near the location requested on the SCDHEC provided map. When sampling a moving water body, an attempt should be made to obtain the sample from an area of lower flow. Wearing Nitrile gloves, the sample will be collected and placed in approved, laboratory provided sampling containers. Following sample collection, the samples are immediately placed in laboratory proved coolers, pre-filled with wet ice obtained from the MECI office.

Will Sampling Equipment have to be cleaned and decontaminated or is everything disposable?

All equipment, excluding electronic water level indicators and field probes, is disposable.

If sampling equipment must be cleaned please give a detailed description of how this is done and the disposal of by-products from the cleaning and decontamination.

Prior to usage of non-disposable equipment, it is decontaminated with isopropanol applied by a Teflon squeeze bottle and rinsed with analyte free water. This rinse water is collected and run through a portable GAC (granulated activated carbon) unit.

Identify any equipment and support facilities needed. This may include such things as Fed-ex to ship the samples, a Geoprobe, field analysis done by another contractor (who must be certified), and electricity to run sampling equipment.

All samples will be shipped to the lab via courier or overnight shipping company.

Address the actions to be taken when problems occur in the field, and the person responsible for taking corrective action and how the corrective action will be documented.

Failure	Response	Documentation	Individual Responsible
Water level indicator not working properly	Attempt to clean probe, change battery, use back-up indicator if need be.	Record on field sheets, notify office staff. Take indicator out of rotation until problem identified and corrected.	Field Staff, Field Manager
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
Wells not located	Use metal detector, measure from known points, contact project manager for additional information.	Record method used to attempt to locate the well on field sheets, and possibly reasoning for the well to be missing	Field Staff

Table 6A Field Corrective Action

B3 Sample Handling and Custody

1. ***How will the samples get from the Site to the Lab to ensure holding requirements are met?***

Following sample collection, the samples are immediately place in a laboratory provided cooler, pre-filled with wet ice obtained from the MECI office. Samples are transported to the MECI office once a sampling event is complete. A Chain of Custody (CoC) is filled out following the sampling event by the field staff. See attached CoC. If a lab provided courier is scheduled to visit the MECI offices the day following a sampling event, sampling coolers are repacked with wet ice, and left at the office for pick-up the following morning. If no courier is schedule to visit the MECI office the day following a sampling event, all sampling coolers are repacked with ice and are dropped off at a lab approved shipping company for overnight delivery to the lab.

2. ***How will the contactors cool the samples and keep the samples cool?***

All samples are kept on wet ice, obtained from MECI office.

3. ***How will the lab determine the temperature of the samples upon receipt? Will they be using a temperature blank?***

A calibrated thermometer and temperature blank will be used to document sample temperature. The temperature blank is immediately checked by the sample receiving technician upon arrival at the laboratory.

4. ***Where will the samples be stored in the Lab once they are received?***

All samples are stored in clean refrigeration units monitored and maintained at 4 degrees C + or – 2 degrees. Volatile organic samples are stored separately form all other samples.

5. ***Describe the chain of custody procedure and attach a copy of each chain of custody that will be used. If a Chain of Custody SOP exists from the Lab and the Contractor is willing to adhere to it, then this may be attached.***

A chain of custody (COC) will be filled out for each sampling event at each project site. COC to be signed by MECI and Shealy Environmental technician at time physical transfer of samples occurs to courier. Shealy uses the following COC procedures to protect sample integrity following pickup by their courier: A full time Sample Receiving Technician receives all samples and completes a Sample Receipt Checklist (SRC), which will identify any anomalies, if any exist the Sample Receiving Technician or Project Manager must resolve the deviation internally and/or notify the client to resolve the anomaly

B4 Analytical Methods

1. ***Identify the SOPs which will be used to analyze the samples, the method which the SOP references and the equipment or instrumentation that is needed:***

Parameter	SOP ID*	Method Referenced	Equipment	Comments
BTEX+Naph+MTBE+Oxygentaes	S-VO-002	8260B	GC/MS	
PAH's	S-SV-021	8270D	GC/MS	
EDB	S-SV-012	8011	GC	
Lead,T.	S-IM-022	6010C	ICP	
Ferrous Iron	S-IN-009	SM 3500-FED	Spectrophotometer	
Nitrate	S-IN-042	353.2	Auto-analyzer/Lachate	
Sulfate	S-IN-010	300.0	Ion Chromatograph	
Methane	S-VO-004	RSK-175	GC	
TOC	S-IN-030	Walkley-Black	N/A	
DRO - TPH	S-SV-001	8015C	GC	
pH	MECI SOP 4.3.6	*	YSI 63	
Conductivity	MECI SOP 4.3.6	*	YSI 63	
Dissolved Oxygen	MECI SOP 4.3.6	*	YSI 550A	
Temperature	MECI SOP 4.3.6	*	YSI 550A	

Table 7A Analytical SOPs and Referenced Methods

- **This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.**

Abbreviation	Lab Identification of this SOP	Full Name of the SOP
S-VO-002	S-VO-002	GC/MS VOLATILES ANALYSIS BASED ON EPA METHODS 8260B AND 624 PREPARED BY EPA METHODS 5030B, 5035 AND 3585
S-SV-021	S-SV-021	GC/MS ANALYSIS BASED ON EPA METHOD 8270D PREPARED BY EPA METHODS 3520C, 3550C AND 3580A
S-SV-012	S-SV-012	GC/ECD ANALYSIS OF EDB AND DBCP BASED ON METHOD 8011 & 504.1
S-IM-022	S-IM-022	INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPECTROSCOPY-PECTROMETRIC METHOD for TRACE ELEMENT ANALYSES METHOD 6010C
S-IN-009	S-IN-009	FERROUS IRON (PHENANTHROLINE METHOD) STANDARD METHOD 3500-Fe D
S-IN-042	S-IN-042	NITRATE+NITRITE NITROGEN BY EPA METHOD 353.2, NITRATE NITROGEN BY 353.2 SUBTRACTION, AND NITRITE NITROGEN BY EPA METHOD 353.2
S-IN-010	S-IN-010	INORGANIC ANIONS BY ION CHROMATOGRAPHY EPA METHOD 300.0 and SW-846 9056 and 9056A
S-VO-004	S-VO-004	STANDARD OPERATING PROCEDURE GC ANALYSIS BASED ON METHOD RSKSOP-175
S-IN-030	S-IN-030	TOTAL ORGANIC CARBON (TOC) WALKLEY-BLACK PROCEDURE
S-SV-001	S-SV-001	GC/FID DIESEL RANGE ORGANICS ANALYSIS BASED ON METHOD 8015B and/or 8015C PREPARED BY EPA METHODS 3520C, 3550C and 3580A
MECI SOP 4.3.6	MECI SOP 4.3.6	Sampling Standard operating procedures

Table 8A SOP Abbreviation Key

2. Identify procedures to follow when failures occur, identify the individual responsible for corrective action and appropriate documentation:

Failure	Response	Documented Where?	Individual Responsible
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
COC or Sample Receiving issues	Call Client	Sample Receiving Checklist (SRC)	PM – Kelly Maberry kmaberry@shealylab.com
Analytical errors	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum mwoodrum@shealylab.com
QA/QC	Corrective Action Form	CAF filled out by PM	Lab Director –Michael

Failure	(CAF)		Woodrum mwoodrum@shealylab.com QA/QC Officer – Jami Savje Jsavje@shealylab.com
On time delivery	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum mwoodrum@shealylab.com QA/QC Officer – Jami Savje Jsavje@shealylab.com

Table 9A Corrective Action Procedures

3. Identify sample disposal procedures.

Analysis	Matrix	Schedule for disposal	Method for disposal	Comments
BTEX+Naph+MTBE+Oxygenates	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
PAH's	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
EDB	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Lead	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Ferrous Iron	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as	

			Hazardous or non-Hazardous waste.	
Nitrate,Sulfate	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Methane	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
All	Water	On-Site	Portable Granulated Activated Carbon (GAC) Unit	All waste water produced from sampling and decontamination activities will be run through a GAC unit

Table 10A Sample Disposal Procedures

4. Provide SOPs for the Kerr Method or the Ferrous Iron Method if these are parameters for this study. This can be attached or written here. If attached please note that it is an attachment and where it is located (if applicable).

B5 Quality Control Requirements:

All QC will follow the requirements laid out in Section B5 of the UST Programmatic QAPP.

B6 Field Instrument and Equipment Testing, Inspection and Maintenance

1. Identify all field and laboratory equipment needing periodic maintenance, the schedule for this, and the person responsible. Note the availability and location of spare parts.

Instrument	Serial Number	Type of Maintenance	Frequency	Parts needed/Location	Person responsible
Volatiles Mass Spec	ALL	Change traps, clean ion source, replace filaments	Periodic	Laboratory	MSV Analyst
Semivolatile Mass	ALL	Injection port	Periodic	Laboratory	MSSV Analyst

Specc		maintenance, ion source maintenance, column replacement			
ECD GC	ALL	Injection port maintenance, column replacement	Periodic	Laboratory	GC Analyst
Dionex IC	ALL	Replace auto sampler filter, tubing, line filter, sample Line and Waste Line, as needed. Check Reagent levels, flow rate, waste line.	Periodic	Laboratory	IC Analyst
ICP	ALL	Clean Sample introduction system , auto sampler, torch, Change spray chamber, torch tubing, tubing	Periodic	Laboratory	ICP Analyst
Leeman Mercury Analyzer	ALL	Clean GLS, Change Pump tubing, Nafion Dryer, Lamp	Periodic	Laboratory	Mercury Analyst
Flow Injection Analysis – Lachat 8000	ALL	Replace sample and reagent lines, replace light source, re-wrap heating coil, replace column	Periodic/As Needed	Laboratory	Nitrate Analyst
YSI 63	All	Replace probe tip	Yearly	Order from YSI	B. Kelly
YSI 63	All	Replace batteries	As Needed	In stock at office	Field Staff
YSI 63	All	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
YSI 63	All	Check buffer solutions for expiration	Weekly	In stock at office	B. Kelly
YSI 550A	All	Replace membrane	4 to 8 weeks	In stock at office	Field Staff
YSI 550A	All	Replace batteries	As Needed	In stock at office	Field Staff
YSI 550A	All	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff

Table 11A Instrument and Equipment Maintenance

2. Identify the testing criteria for each lab or field instrument that is used to ensure the equipment is performing properly. Indicate how deficiencies, if found, will be resolved, re-inspections performed, and effectiveness of corrective action determined and documented. Give the person responsible for this

Instrument/Equipment & Serial Number	Type of Inspection	Requirement	Individual Responsible	Resolution of Deficiencies
Volatiles Mass Spec	Daily calibration check	Method Requirements	MSV Analyst	Recalibration or instrument

				maintenance
Semi-volatiles Mass Spec	Daily calibration check	Method Requirements	MSSV Analyst	Recalibration or instrument maintenance
ECD GC	Daily calibration check	Method Requirements	GC Analyst	Recalibration or instrument maintenance
Dionex IC	Daily calibration check	Method Requirements	Nitrate Analyst	Recalibration or instrument maintenance
ICP	Daily calibration check	Method Requirements	ICP Analyst	Recalibration or instrument maintenance
Leeman Mercury Analyzer	Daily calibration check	Method Requirements	Mercury Analyst	Recalibration or instrument maintenance
Flow Injection Analysis – Lachat 8000	Daily and continuing calibration check	See calibration criteria	INM Analyst	Recalibration or instrument maintenance
YSI 63	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
YSI 550A	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer

Table 12A Instrument and Equipment Inspection

B7 Instrument Calibration and Frequency

1. Identify equipment, tools, and instruments for field or lab work that should be calibrated and the frequency.
2. Describe how the calibrations should be performed and documented, indicating test criteria and standards or certified equipment.
3. Identify how deficiencies should be resolved and documented. Identify the person responsible for corrective action.

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Volatiles Mass Spec	Minimum of 5 calibration	When indicated by continuous	Method Criteria	Detailed in SOP	MSV Analyst	S-VO-002

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
	standards for all compounds	calibration verification standard				
Semi-volatile Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	MSSV Analyst	S-SV-021
GC ECD	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	GC Analyst	S-SV-012
Dionex IC	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	IC Analyst	S-IN-010
ICP	Minimum of 3 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	ICP Analyst	S-IM-022
Cetac Mercury Analyzer	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	Mercury Analyst	S-IM-006
Lacaht QuickChem 8000	Minimum of 5 calibration standards	Daily or when indicated by calibration verification standard	Method Criteria	Detailed in SOP	Nitrate Analyst	S-IN-042
YSI 63	pH Calibration	Daily	+/- 0.2 pH units	clean/replace probe tip, recalibrate	Field Staff	6a & 6b
YSI 63	Conductivity Calibration	As directed by manufacturer	+/- 10 uS	clean/replace probe tip, recalibrate	Field Staff	6a & 6b
YSI 550A	DO calibration	Daily	+/- 0.25 mg/l	clean/replace probe tip, recalibrate	Field Staff	6a & 6b
YSI 550A	Temperature Calibration	Daily	+/- 1 °C	clean/replace probe tip, recalibrate	Field Staff	6a & 6b
Electronic Water Level Indicator	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***
Oil/Water Interface probe	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***

Table 13A Instrument Calibration Criteria and Corrective Action

*** This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.**

B8 Inspection/Acceptance Requirements for Supplies and Consumables

1. Identify critical supplies and consumables for field and laboratory, noting supply source, acceptance criteria, and procedures for tracking, storing and retrieving these materials.
2. Identify the individual(s) responsible for this.

Item	Vendor	Acceptance criteria	Handling/Storage Conditions	Person responsible for inspection and tracking.
Laboratory Chemicals	Fisher,VWR	Certificates of analysis and laboratory testing	Laboratory storage	Receiving and laboratory personnel
Laboratory standards	O2Si, Restek, High Purity, VHG, Supelco	Certificates of analysis and laboratory verifications	Vendor specific storage conditions	Laboratory Analysts
Sample Containers	Daniels Scientific, QEC	Certificates of analysis and laboratory testing	Bottle storage area	Sample receiving personnel
Clear, Disposable polyethylene Bailers	Preferred Pump	Individual sleeves intact, ball valve operational	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
Nylon Rope	Preferred Pump	Covered with plastic	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
Nitrile Gloves	Preferred Pump	Unopened box, no holes	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
40 mL HCL preserved amber vials	Shealy Environmental Services	Custody seal intact	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
250 mL HNO3 preserved metals vials	Shealy Environmental Services	Custody seal intact	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
Coolers	Shealy Environmental Services	Intact	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
pH Buffer	TRS Environmental, Enviroequipment	Within expiration date	Stored in calibration room	B. Kelly, Field Staff
Conductivity Standard	TRS Environmental, Enviroequipment	Within expiration date	Stored in calibration room	B. Kelly, Field Staff
DO Membranes	YSI, Enviroequipment	Clean, in box	Stored in calibration room	B. Kelly, Field Staff
Batteries	Any Store	Not previously used	Stored in calibration room	B. Kelly, Field Staff

Table 14A List of Consumables and Acceptance Criteria

B9 Data Acquisition Requirements (Non-Direct Measurements)

1. Identify data sources, for example, computer databases or literature files, or models that should be accessed or used.
2. Describe the intended use of this information and the rationale for their selection, i.e., its relevance to project.
3. Indicate the acceptance criteria for these data sources and/or models.

Data Source	Used for	Justification for use in this project	Comments

Table 15A Non-Direct Measurements

4. Identify key resources/support facilities needed.

There are no non-direct measurements in this project

B10 Data Management

1. Describe the data management scheme from field to final use and storage.

Following sample collection and chain of custody production, samples are shipped to the lab. Field work from the field staff is reviewed by the MECI project manager, and converted into digital form. All data entry is subsequently checked to validate the data entry. The original copies of the field work are stored in MECI files for a minimum of 5 years. Digital copies of the work are stored on the MECI server, which is backed up weekly, and stored for a minimum of 5 years. The digital copy of the field work is presented to SCDHEC with the final report.

2. How does the lab and field staff ensure that no unauthorized changes are made to the chain of custody, sampling notebooks, laboratory notebooks and computer records?

The laboratory maintains comprehensive Quality Control and Training Programs. All sample receipt data, sample log-in, and analytical data is peer reviewed, including review for inappropriate changes. Data management, review procedures and the Quality Systems Program are documented in the laboratory's Quality Manual and Standard Operating Procedures. The Quality Assurance Department oversees adherence to and review of these programs.

All MECI field work is produced using ink-pens. Any attempt to alter field data, after sampling is complete, can be readily identified. MECI keeps a carbon copy of the chain of custody after it is shipped to the lab. This copy is kept with the field work. If any change to the CoC are suspected, this original carbon copy can be use to identify potential changes.

3. How does the lab ensure that there are no errors in samples records including times when sample information is compiled, data calculated and/or transmitted?

Sample data acquisition software is reviewed periodically. The LIMS database is backed up daily and is able to be restored in the event of a system failure. These procedures are documented in laboratory SOP S-AD-003, LIMS. The IT Manager is responsible for these systems and procedures."

4. How will the data be archived once the report is produced? How can it be retrieved? (This applies to both electronic and hard copies).

Laboratory Hardcopy data stored off site is logged, maintained and archived by the Quality Assurance Department. Laboratory Electronic Data Reports are maintained through IT back up under the responsibility of the IT Systems Manager.

MECI keeps all field work and paper copies of reports in its in-house filing system. All paper copies are stored for a minimum of 5 years. Any file can be retrieved easily by going to the correct filing cabinet/box.

All electronic copies of reports generated are kept on the MECI server. This server is backed-up on a weekly basis. Any file stored on the MECI server can be retrieved instantly, by accessing the server. All electronic files are stored for a minimum of 5 years on the server.

Section C Assessment and Oversight

C1 Assessment and Response Actions

1. *The Contractor is supposed to observe field personnel daily during sampling activities to ensure samples are collected and handled properly and report problems to DHEC within 24 hours. . Please state who is responsible for doing this and what observations will be made. Will this person have the authority to stop work if severe problems are seen?*

Field audits can be conducted on any field personnel at any time. MECI field audits can be conducted by the Field Manger, who will be responsible for ensuring that field personnel adhere to the QAPP. If during a random field audit, severe problems are found, work will be stopped by the field manager and the QA officer contacted to determine corrective action. All problems must be corrected prior to any additional work being performed. Should it be requested, an On-site Field Audit can be scheduled with the SCDHEC project manager.

2. *The SCDHEC UST QAPP states that the Lab will receive an Offsite Technical System Audit. For this project, what assessments will be done on the Commercial Lab(s) that are being used—other than their certification audit? When or how often are these done? Who will the results be given to and who has the ability to stop work if problems are severe?*

The laboratory participates in annual Proficiency Testing through an approved vendor, Wibby Environmental. Proficiency Testing results are provided to the Office of Environmental Laboratory Certification.

C2 Reports to Management

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

Section D Data Validation and Usability

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

D H E C

PROMOTE PROTECT PROSPER

South Carolina Department of Health and Environmental Control

ASSESSMENT COMPONENT COST PROPOSAL
SOUTH CAROLINA
Department of Health and Environmental Control
Underground Storage Tank Management Division
State Underground Petroleum Environmental Response Bank Account

Facility Name: Smith's Grocery

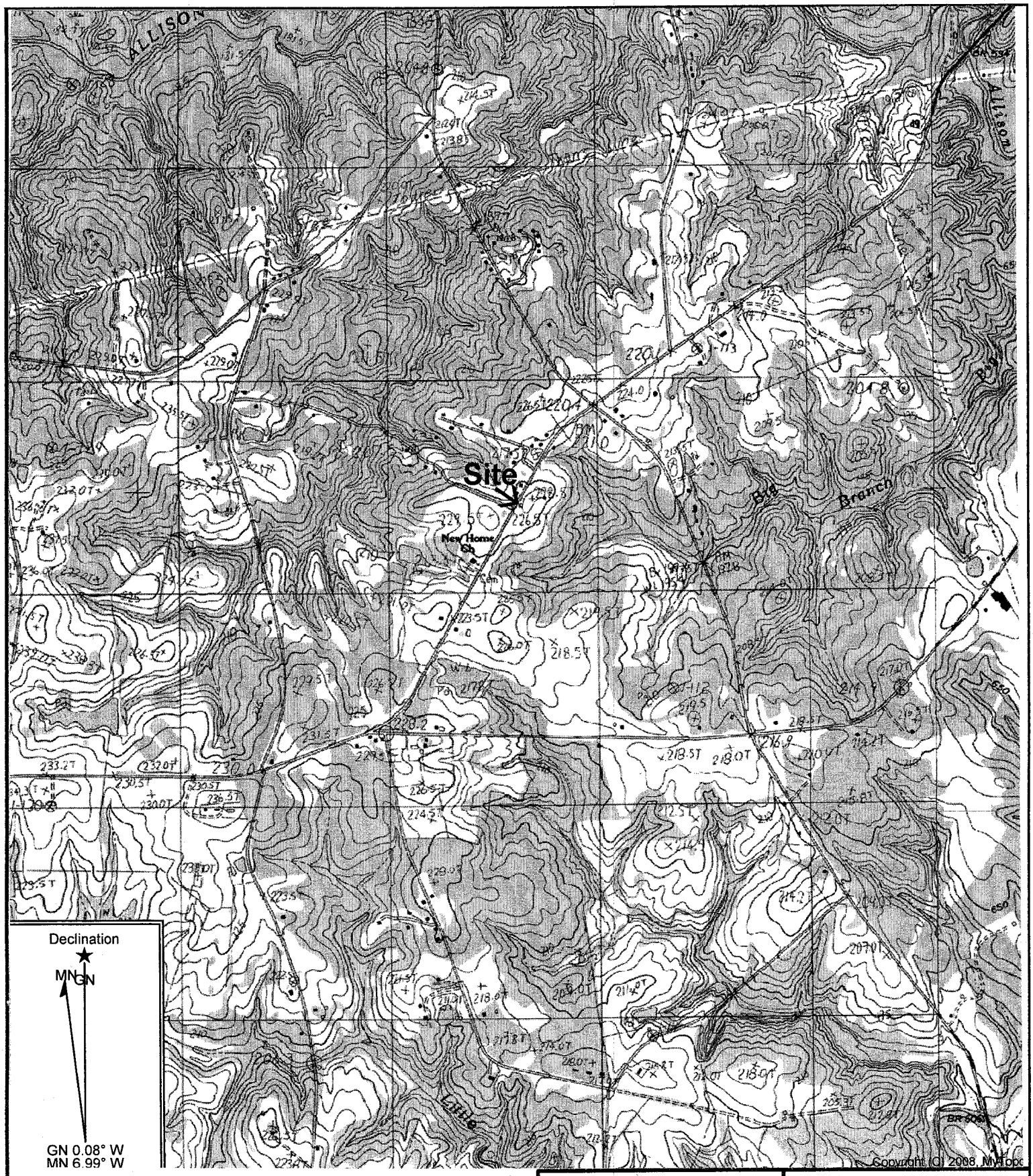
UST Permit #: 09322 **Cost Agreement #:**

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1. **Plan***				
B. Tax Map		x	$50.00	$0.00
C. Tier II or Comp. Plan /QAPP Appendix B	1	x	$525.00	$525.00
2. **Receptor Survey ***		x	$500.00	$0.00
3. **Survey (500 x 500 feet)**				
A. Comprehensive Survey		x	$1,000.00	$0.00
B. Subsurface Geophysical Survey				
1. < 10 meters below grade		x	$2,750.00	$0.00
2. > 10 meters below grade		x	$3,250.00	$0.00
C. Geophysical UST or Drum Survey		x	$1,125.00	$0.00
4. **Mob/Demob (Each)**				
A. Equipment		x	$575.00	$0.00
B. Personnel	2	x	$290.00	$580.00
C. Adverse Terrain Vehicle to install wells		x	$575.00	$0.00
5. **Soil Borings (hand auger)* (Feet)**		feet x	$14.00	$0.00
6. **Soil Borings (drilled) & Field Screening ***				
Rate includes collection of water sample or soil sample, and lab or other analyses				
A. Standard		feet x	$17.00	$0.00
C. Fractured Rock		feet x	$27.50	$0.00
7. **Soil Leachability Model (Each)**		each x	$200.00	$0.00
8. **Abandonment* (per foot)**				
A. 2" diameter or less		feet x	$5.00	$0.00
B. Greater than 2" to 6" diameter		feet x	$5.50	$0.00
C. Dug/Bored well (up to 6 foot diameter)		feet x	$18.00	$0.00
9. **Well Installation* (per foot)**				
A. Water Table (hand augered)		feet x	$20.00	$0.00
B. Water Table (drill rig)		feet x	$38.00	$0.00
C. Telescoping/ Pit Cased		feet x	$58.00	$0.00
D. Rock Drilling		feet x	$58.00	$0.00
E. 2" Rock Coring		feet x	$45.00	$0.00
G. Rock Multi-sampling ports/screens		feet x	$47.20	$0.00
H. Recovery Well (4 inch diameter)		each x	$45.00	$0.00
I. Pushed Pre-packed screen (1.25 diameter)		each x	$18.50	$0.00
J. Rotosonic (2 inch diameter)		each x	$45.00	$0.00
10. **Groundwater Sample Collection / Gauge Depth to Water or Product (Each)**				
A. Groundwater Purge	3	wells x	$55.00	$165.00
B. Air or Vapors		samples x	$90.00	$0.00
C. Water Supply	6	samples x	$30.00	$180.00
D. Groundwater No Purge or Duplicate	33	samples x	$35.00	$1,155.00
E. Gauge Well only		per well x	$20.00	$0.00
F. Sample Below Product		wells x	$50.00	$0.00
G. Pasive Diffusion Bag		each x	$40.00	$0.00
H. Field Blank	1	each x	$5.00	$5.00

11. Laboratory Analyses-Groundwater (Each Sample)					
A1. BTEX+Naphth.+ Oxyg's+ 1,2 DCA + Ethanol	44	samples x	$100.00		$4,400.00
AA. Lead, Filtered		samples x	$46.00		$0.00
B1. Rush EPA Method 8260B (All of item A.)		samples x	$143.00		$0.00
C1. Trimethal, Butyl, and Isopropyl Benzenes		samples x	$40.00		$0.00
D. PAH's		samples x	$120.00		$0.00
E. Lead, Unfiltered		samples x	$20.00		$0.00
F. EDB by EPA 8011	42	samples x	$55.00		$2,310.00
FF. EDB by EPA Method 8011 Rush		samples x	$75.00		$0.00
G. 8 RCRA Metals		samples x	$140.00		$0.00
H. TPH (9070)		samples x	$55.00		$0.00
I. pH		samples x	$10.00		$0.00
J. BOD		samples x	$40.00		$0.00
P1. Ethanol		samples x	$21.50		$0.00
11. **Analyses-Soil (Each Sample)**					
Q. BTEX + Naphth.		samples x	$100.00		$0.00
R. PAH's		samples x	$120.00		$0.00
S. 8 RCRA Metals		samples x	$150.00		$0.00
T. Oil & Grease (9071)		samples x	$60.00		$0.00
U. TPH-DRO (3550B/8015B)		samples x	$65.00		$0.00
V. TPH- GRO (5030B/8015B)		samples x	$65.00		$0.00
W. Grain size/hydrometer		samples x	$99.00		$0.00
X. Total Organic Carbon		samples x	$35.00		$0.00
11. **Analyses-Air (Each Sample)**					
Y. BTEX + Naphthalene		samples x	$247.50		$0.00
11. **Analyses-Free Phase Product (Each Sample)**					
Z. Hydrocarbon Fuel Identification		samples x	$620.00		$0.00
12. **Aquifer Characterization***					
A. Pumping Test		hours x	$120.00		$0.00
B. Slug Test*		tests x	$150.00		$0.00
C. Fractured Rock		tests x	$500.00		$0.00
13. **Free Product Recovery Rate Test* (Each)**		tests x	$120.00		$0.00
14. **Fate/Transport Modeling**					
A. Mathematical Model		each x	$300.00		$0.00
B. Computer Model		each x	$500.00		$0.00
15. **Risk Evaluation**					
A. Tier I Risk Evaluation		x	$300.00		$0.00
B. Tier II Risk Evaluation		x	$500.00		$0.00
16. **Subsequent Survey***		x	$300.00		$0.00
17. **Disposal* (gallons or tons)**					
A. Wastewater	50	gallons x	$0.80		$40.00
B1. Free Product		gallons x	$0.85		$0.00
C. Soil Treatment/Disposal		tons x	$72.50		$0.00
D. Drilling fluids		gallons x	$0.80		$0.00
18. **Miscellaneous (attach receipts)**					
		x			$0.00
		x			$0.00
		x			$0.00
20. **Tier I Assessment (Use DHEC 3665 form)**		x			$0.00
21. **IGWA (Use DHEC 3666 form)**		x			$0.00
22. **Corrective Action (Use DHEC 3667 form)**		x			$0.00

23. **Aggressive Fluid & Vapor Recovery (AFVR)**					
A. 8-hour Event*		each x	$3,000.00		$0.00
B. AFVR per-hour Continuance		per hour x	$204.00		$0.00
C. Off-gas treatment per-hour Continuance		per hour x	$35.00		$0.00
24. **Granulated Activated Carbon (GAC) filter system installation & service:**					
A. New GAC System Installation*		each x	$2,500.00		$0.00
B1. Refurbished GAC Sys. Install*		each x	$1,180.00		$0.00
C. Filter replacement/removal*		each x	$450.00		$0.00
D1. GAC System removal, cleaning, & refurbishment*		each x	$720.00		$0.00
E. GAC System housing		each x	$450.00		$0.00
F. In-line particulate filter		each x	$150.00		$0.00
G. Additional piping & fittings		feet x	$4.00		$0.00
25. **Well Repair**					
A. Additional Copies of the Report Delivered		each x	$32.50		$0.00
B. Repair 2x2 MW pad		each x	$100.00		$0.00
C. Repair 4x4 MW pad		each x	$150.00		$0.00
D. Repair well vault		each x	$225.00		$0.00
F. Replace well cover bolts	52	each x	$10.00		$520.00
G. Replace locking well cap & lock		each x	$15.00		$0.00
H. Replace/Repair stick-up		each x	$137.50		$0.00
I. Convert Flush-mount to Stick-up		each x	$175.00		$0.00
J. Convert Stick-up to Flush-mount		each x	$125.00		$0.00
K. Replace missing/illegible well ID plate		each x	$22.50		$0.00
Report Prep & Project Management	15%	x	$9,880.00		$1,482.00
TOTAL					$11,362.00

*The appropriate mobilization cost can be added to complete these tasks, as necessary



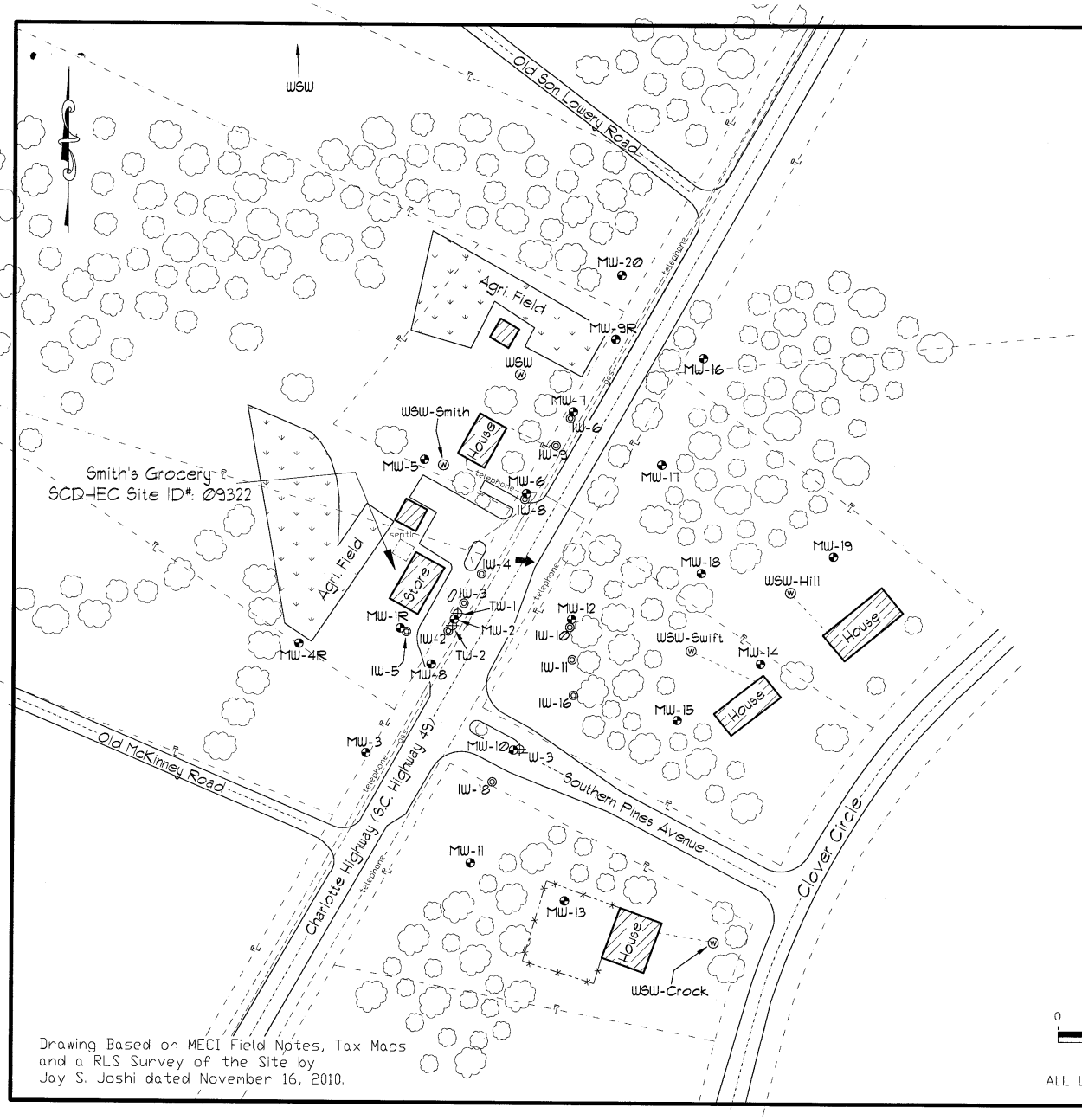
GRAPHIC SCALE

0 1000 2000 4000

1IN = 2000FT

Reference: Clover, South Carolina
USGS 7.5 Min. Quad
Countour Interval – 3 Meters

Midlands Environmental Consultants, Inc.	Site Location
Smith's Grocery S.C. Highway 49, Clover, SC SCDHEC Site ID# 09322	
Figure 1	MECI 11-3516



Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Buried Sewer
- Under Ground Telephone
- Fence

Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3208
DATE February 24, 2011
FIGURE 2

SHEALY

Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 12602

Client	Report to Contact	Sampler (Printed Name)	Quote No.
Address	Telephone No. / Fax No. / Email	Waybill No.	Page ___ of ___
City / State / Zip Code	Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		
Project Name			
Project Number	P.O Number		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis	Number of Containers	Bottle (See Instructions on back)	Preservative	Lot No.	Remarks / Cooler ID

Turn Around Time Required (Prior lab approval required for expedited TAT)
☐ Standard ☐ Rush (Please Specify)

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler			1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory Received by		

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack
Receipt Temp. _____ °C
Temp. Blank ☐ Y / ☐ N

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

SEP 26 2011

UST 52 tech DOCKETING

Re: Groundwater Sampling Directive
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322; CA#42131
Release reported June 30, 1993
Site-Specific QAPP Contractor Addendum & Cost Agreement received September 15, 2011
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced addendum submitted on your behalf by Midlands Environmental Consultants, Inc (MECI). The groundwater sampling event should be conducted in accordance with the UST Quality Assurance Division Plan and must be conducted in compliance with all applicable regulations. A copy of SCDHEC QAPP for the UST Management Division is available at http://www.scdhec.gov/environment/lwm/html/ust.htm.

Groundwater sampling activities at the site should begin immediately upon receipt of this letter. Cost agreement number 42131 has been approved for the amount shown on the enclosed cost agreement form. Samples should be analyzed for BTEXMN, DCA, Oxygenates, and EDB. A **no-purge** groundwater sample should be collected from all monitoring wells associated with this facility unless the well screen does not bracket the water table then the well should be purged before sampling.

The Groundwater Sampling Report, contractor checklist, and invoice are due within 90 days from the date of this letter. The report (a signed .pdf copy on CD is preferred) submitted at the completion of these activities should include information as required in Section A9 of the UST Program QAPP.

MECI can submit an invoice for direct payment from State Underground Petroleum Environmental Response Bank (SUPERB) Account for preapproved costs. By law, the SUPERB Account cannot compensate any costs that are not pre-approved. Please note that applicable South Carolina certification requirements regarding laboratory services and report preparation must be satisfied. If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available. The UST Management Division, because of unnecessary dilution, cannot make decisions if the reporting limit of individual petroleum CoC exceeds Risk-Based Screening Levels (RBSLs). The UST Management Division encourages the use of 'J' values as necessary so the appropriate action can be determined for a release. Note that the Division may deny payment for any non-detect analysis where the reporting limit exceeds the RBSL. The Division cannot make closure decisions based on elevated reporting limits and the SUPERB Account will not reimburse for erroneously elevated detection limits.

Please note that Sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that no costs will be allowed unless prior approval from the Department is obtained. If for any reason additional tasks will be completed, these additional tasks and the associated costs must be pre-approved by the Department for the costs to be paid. The SCDHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established

criteria. Further, SCDHEC reserves the right to question and/or reject costs if deemed unreasonable and to audit project records at any time during the project or after completion of work. All work must be conducted by well drillers, laboratories, and contractors that are licensed by the state of South Carolina and SCDHEC.

The Department grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the COC concentrations, based on laboratory analysis, are below Risk Based Screening Levels (RBSLs), please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence regarding this site, please reference UST Permit #09322. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6397, fax me at (803) 896-6245, or e-mail me at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Approved Cost Agreement (ACA)
Signed Site Specific QAPP Contractor Addendum Approval Page (copy)

cc: Bryan Shane, Midlands Environmental Consultants, Inc., PO Box 854, Lexington, SC, 29071 (w/ enc.)
✓Technical File (w/ enc.)

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SC DHEC UST Programmatic QAPP
For
Smith's Grocery, SCDHEC Site ID# 09322

SC Highway 49, York, South Carolina

Prepared by:
Courtney M. Sanders
Staff Biologist
Midlands Environmental Consultants, Inc.
(Certified Site Rehabilitation Contractor UCC-0009)
235-B Dooley Road
Lexington, SC 29073
(803)808-2043

Date: September 13, 2011

Approvals

Debra Thoma SC DHEC Project Manager	Debra Thoma Signature	Date 9/16/11
Brendon P. Kelly Contractor QA Manager	 Signature	Date 9/14/11
Bryan T. Shane, P.G. Site Rehabilitation Contractor	 Signature	Date 9-14-11
Michael Woodrum Laboratory Director	 Signature	Date 9/13/2011

Approved Cost Agreement 42131

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
01 PLAN						
		C	TIER II/COMP. PLAN/QAPP APP B	1.0000	525.00	525.00
04 MOB/DEMOB						
		B	PERSONNEL	2.0000	290.00	580.00
10 SAMPLE COLLECTION						
		A	GROUND WATER	3.0000	55.00	165.00
		C	WATER SUPPLY	6.0000	30.00	180.00
		D	GROUNDWATER NO-PURGE	33.0000	35.00	1,155.00
		H	FIELD BLANK	1.0000	5.00	5.00
11 ANALYSES	GW GROUNDWATER					
		A	BTEX+NAPTH+MTBE	44.0000	100.00	4,400.00
		F	EDB	42.0000	55.00	2,310.00
17 DISPOSAL						
		A	WASTEWATER	50.0000	0.80	40.00
19 RPT/PROJECT MNGT & COORDINATIO						
		PCT	PERCENT	0.1500	9,880.00	1,482.00
25 WELL REPAIR						
		F	REPLACE WELL COVER BOLTS	52.0000	10.00	520.00
				Total Amount		11,362.00

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

OCT 13 2011

Re: GAC Change Directive
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322; CA#42511
Release reported June 30, 1993
York County

Dear Ms. Smith

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (SCDHEC) recognizes your commitment to continue work at this site utilizing Midlands Environmental Consultants, Inc. (MECI). The next scope of work needed is the changing of the filters of the Granulated Activated Carbon (GAC) Units. A report documenting the changing of the GAC filters is due within 30 days from the date of this letter.

MECI can submit an invoice for direct billing from the State Underground Petroleum Environmental Response Bank (SUPERB) Account. Please note that all applicable South Carolina certification requirements apply to the laboratory services, well installation, and report preparation. All site rehabilitation activities must be performed and submitted by a South Carolina Certified Underground Storage Tank Site Rehabilitation Contractor.

On all correspondence or inquiries regarding this project, please reference **UST Permit #09322.** If you have any questions, please feel free to contact me by phone at (803) 896-6397, by fax at (803) 896-6245,or email at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Approved cost agreement (ACA)

cc: MECI, PO Box 854, Lexington, SC, 29071 (w/ enc.)
Technical file (w/o enc)

Approved Cost Agreement 42511

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB					
		B PERSONNEL	1.0000	290.00	290.00
19 RPT/PROJECT MNGT & COORDINATIO					
		PCT PERCENT	0.1500	1,190.00	178.50
24 GAC SYSTEM					
		C FILTER REPLACEMENT/REMOVAL	2.0000	450.00	900.00
			Total Amount		1,368.50

Midlands
Environmental
Consultants, Inc.

October 13, 2011

Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Report of Groundwater Sampling and Chemical Analyses
Smith's Grocery
S.C. Highway 49
York, South Carolina
SCDHEC Site ID# 09322, CA # 42131
MECI Project Number 11-3516
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

On behalf of Ms. Lois Smith, Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached Report of Well Installation, Groundwater Sampling, and Chemical Analyses of Groundwater Samples for the referenced site. This report describes assessment activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

PROJECT INFORMATION

The subject site (Smith's Grocery) is located near the intersection of S.C. Highway 49 and Southern Pines Road, York, York County, South Carolina (see Figure 1). The site consists of an approximately 2.00 acre parcel of land (see Figure 2), and currently occupied by a convenience store. The site formerly maintained one 6,000 gallon gasoline UST and one 8,000 gallon gasoline UST. The South Carolina Department of Health and Environmental Control (SCDHEC) reported release of petroleum product from two single walled underground storage tanks (UST) at the subject site in June of 1993, which was confirmed in September of 1996.

The above project information is based on SCDHEC files.

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

FIELD EXPLORATION

Field exploration conducted at the site includes:

- groundwater sampling; chemical analyses: and,
- water supply well sampling and chemical analyses.

MONITORING WELL SAMPLING AND CHEMICAL ANALYSES

On October 3, 2011, MECI personnel collected groundwater samples from twenty-five (25) wells at the subject site. Eleven (11) wells were gauged and determined to have insufficient water for sampling. Based on a request by SCDHEC personnel, not all of the wells were purged prior to sampling. Three (3) wells were purged prior to sampling. Purging was completed by bailing at least three well volumes of water from the well or until pH, conductivity, dissolved oxygen stabilized to within 10%, whichever occurred first. Sampling/purging was completed utilizing a prepackaged, clear, disposable polyethylene bailer and nylon rope. A new set of nitrile gloves were worn at each monitoring well, and at all time samples were handled. Field measurements of pH, conductivity, dissolved oxygen, and water temperature were obtained before well sampling process. MECI utilized YSI550A meter for DO (mg/L) and temperature readings (°C) and YSI63 meters for pH and conductivity (uS) readings. The attached Field Data Information Sheets and Table 1 presents the results of the field measurements obtained from the monitoring wells prior to sampling. The wells were sampled in accordance with SCDHEC's Quality Assurance Program Plan for the Underground Storage Tank Management Division (QAPP, Dated June 2011).

Groundwater samples obtained were sent to Shealy Environmental Services, Inc. of West Columbia, SC (SCDHEC Laboratory Certification #32010) for analysis.

The following sampling matrix contains well development and requested analyses for each well:

Monitoring Well	Purge	No Purge	Gauge Only	BTEX, Naphthalene, MTBE (EPA Method 8260-B)	EDB (EPA Method 8011)	1,2 DCA (EPA Method 8260-B)	8 Oxygenates (EPA Method 8260-B)	Total Lead (EPA Method 6010)	Sulfate (EPA Method 375.2)	Nitrate (EPA Method 335.2)	Methane (RSK Method)	PAH's (EPA Method 8270)	Ferrous Iron (Field Test)
				Analyte Sampled									
MW-1R		X		X	X	X	X						
MW-2		X		X	X	X	X						
MW-3		X		X	X	X	X						
MW-4R		X		X	X	X	X						
MW-5			X										
MW-6			X										
MW-7			X										
MW-8 (1)		X		X	X	X	X						
MW-9R		X		X	X	X	X						
MW-10			X										
MW-11			X										

Monitoring Well	Purge	No Purge	Gauge Only	BTEX, Naphthalene, MTBE (EPA Method 8260-B)	EDB (EPA Method 8011)	1,2 DCA (EPA Method 8260-B)	8 Oxygenates (EPA Method 8260-B)	Total Lead (EPA Method 6010)	Sulfate (EPA Method 375.2)	Nitrate (EPA Method 335.2)	Methane (RSK Method)	PAH's (EPA Method 8270)	Ferrous Iron (Field Test)
				Analyte Sampled									
MW-12		X		X	X	X	X						
MW-13		X		X	X	X	X						
MW-14			X										
MW-15			X										
MW-16		X		X	X	X	X						
MW-17			X										
MW-18			X										
MW-19		X		X	X	X	X						
MW-20		X		X	X	X	X						
TW-1	X			X	X	X	X						
TW-2	X			X	X	X	X						
TW-3	X			X	X	X	X						
IW-2		X		X	X	X	X						
IW-3 (1)		X		X	X	X	X						
IW-4		X		X	X	X	X						
IW-5		X		X	X	X	X						
IW-6		X		X	X	X	X						
IW-8		X		X	X	X	X						
IW-9		X		X	X	X	X						
IW-10		X		X	X	X	X						
IW-11			X										
IW-16			X										
IW-18		X		X	X	X	X						
IW-19		X		X	X	X	X						
IW-20		X		X	X	X	X						
Trip Blank				X	X	X	X						
Field Blank				X	X	X	X						
***MW-8 (2)**				X	X	X	X						
***IW-3 (2)**				X	X	X	X						

Notes: BTEX = benzene, toluene, ethylbenzene, & total xylenes MTBE=methyl tertiary butyl ether 1,2 DCA = 1,2 dicloroethane
PAH = polycyclic aromatic hydrocarbons

***Indicates Field Duplicate**

The results of the laboratory analyses are summarized in Table 2, Table 3, and presented in the attached Analytical data.

During sampling activities, a total of 39 locking bolts were replaced on several monitoring wells at the subject site. Several bolts were not replaced at the subject site, due to the vault "wings" being broken. A locking cap was also replaced on well IW-19. The drummed purge water was treated on-site by MECI personnel utilizing an activated carbon drum. A total of 36.0 gallons of purge/development water were disposed of in this manner. A disposal manifest for the drummed purge water is attached at the end of this report.

WATER SUPPLY WELL SAMPLING AND CHEMICAL ANALYSES

On October 3, 2011, MECI personnel sampled four water supply wells. WSW-Hill and WSW-Swift both contain granular activated carbon units (GAC) (WSW-Smith does not have a GAC unit). Pre-Gac and Post-Gac samples were obtained from WSW-Hill and WSW-Swift. The following matrix contains well status, owner(s), and tax map identification numbers:

Water Supply Well Number	Well Owner	York County Tax Map Number:	Notes:	Well Status
WSW-Crock	Everette D. Crook Jr.	4890401001	3035 Clover Circle	Currently in Use
WSW-Hill	Tony H. Hill	4890401023	3049 Clover Circle	Currently in Use
WSW-Smith	Lois B. Smith	4560000005	3176 Charlotte Highway	Currently in Use
WSW-Swift	Gary A. Wiggam	4890401024	3043 Clover Circle	Currently in Use

The samples collected from WSW-Crock, WSW-Hill, WSW-Smith, and WSW-Swift were sent to Shealy Environmental Services, Inc. of West Columbia, SC (SCDHEC Laboratory Certification #32010) for analysis. The samples collected were analyzed for BTEX, Naphthalene, MTBE, 1, 2 DCA, 8 Oxygenates (EPA Method 8260B), and EDB (EPA Method 8011). The results of the laboratory analyses are summarized in Table 2, Table 3, and presented in Appendix B.

GROUNDWATER ANALYTICAL RESULTS

As discussed above, groundwater samples obtained from the monitoring wells were analyzed for dissolved phase petroleum constituents. The analytical results indicate petroleum impact to the local groundwater with the highest dissolved concentrations detected in the area of well IW-2. The analytical results indicate dissolved total BTEX concentrations ranging from levels below detection limits (BDL) to 109,800 micrograms per liter in IW-2. The analytical results indicate dissolved MTBE concentrations ranging from levels below detection limits (BDL) to 570J micrograms per liter in monitoring well MW-2. The analytical results indicate dissolved Naphthalene concentrations ranging from levels below detection limits (BDL) to 970J micrograms per liter in monitoring well MW-8. The analytical results indicate dissolved EDB concentrations ranging from levels below detection limits (BDL) to 120 micrograms per liter in monitoring well IW-3. The results of the analyses for each monitoring well and specific parameters are listed on Table 2, Table 3, and in the attached laboratory reports.

WATER SUPPLY WELL ANALYTICAL RESULTS

Six samples were collected from water supply wells located near the subject site. Analytical results indicate EBD concentrations at 0.034 micrograms per liter in the sample collected from WSW-Crock. Analytical results indicate Benzene concentrations at 120 micrograms per liter, total Xylenes concentrations at 22 micrograms per liter, Naphthalene concentrations at 2.4J micrograms per liter, 1,2 DCA concentrations at 13 micrograms per liter and EDB concentration at 0.68 micrograms per liter in the Pre-GAC sample obtained from WSW-Hill. Analytical results indicate Benzene concentrations at 3.4J micrograms per liter, 1,2 DCA concentrations at 1.0J micrograms per liter, and EDB concentration at 0.035 micrograms per liter in the Post-GAC sample obtained from WSW-Hill. Analytical results indicate Benzene concentrations at 190 micrograms per liter, total Xylenes concentrations at 75 micrograms per liter, MTBE concentrations at 0.49J micrograms per liter,

Naphthalene concentrations at 19 micrograms per liter, 1,2 DCA concentrations at 22 micrograms per liter, and EDB concentration at 0.71 micrograms per liter in the Pre-GAC sample obtained from WSW-Swift. Analytical results indicate Benzene concentrations at 1.2J micrograms per liter and 1,2 DCA concentrations at 1.2J micrograms per liter in the Post-GAC sample obtained from WSW-Swift. Samples collected from WSW-Smith did not indicate petroleum impact. The results of the analyses are presented on Table 2, Table 3, and in the attached laboratory reports.

ASSESSMENT SUMMARY

Groundwater elevation data for the October 13, 2011, gauging events was plotted, and points of equal elevation were interpolated between the monitoring wells. A groundwater contour map of the surficial aquifer was thus prepared and is presented on Figure 3. The current groundwater flow direction is to the east towards the Big Branch Creek.

The analytical results indicate petroleum impact to the local groundwater with the highest dissolved concentrations detected in the area of well IW-2. The analytical results indicate dissolved total BTEX concentrations ranging from levels below detection limits (BDL) to 109,800 micrograms per liter in IW-2. The analytical results indicate dissolved MTBE concentrations ranging from levels below detection limits (BDL) to 570J micrograms per liter in monitoring well MW-2. The analytical results indicate dissolved Naphthalene concentrations ranging from levels below detection limits (BDL) to 970J micrograms per liter in monitoring well MW-8. The analytical results indicate dissolved EDB concentrations ranging from levels below detection limits (BDL) to 120 micrograms per liter in monitoring well IW-3. The results of the analyses for each monitoring well and specific parameters are listed on Table 2, Table 3, and in the attached laboratory reports. Figure 4 depicts graphically the concentrations of Total BTEX (indicator for plume migration) dissolved in the groundwater at the site. Figure 5 depicts graphically the concentrations of Naphthalene dissolved in the groundwater at the site. Figure 6 depicts graphically the concentrations of EDB dissolved in the groundwater at the site.

CoC concentrations in the monitoring wells have generally remained constant since the February 1, 2010 sampling event. An approximate one-half foot decline in watertable elevation has occurred since the February 2011 sampling event and has contributed to eleven monitoring wells having insufficient water for sampling purposes. Furthermore, current analytical results indicate that "break through" is occurring from the GAC units installed on WSW-Hill and WSW-Swift. As discussed above, analytical results indicate Benzene concentrations at 1.2J micrograms per liter and 1,2 DCA concentrations at 1.2J micrograms per liter in the Post-GAC sample obtained from WSW-Swift. Analytical results indicate Benzene concentrations at 3.4J micrograms per liter, 1,2 DCA concentrations at 1.0J micrograms per liter, and EDB concentration at 0.035 micrograms per liter in the Post-GAC sample obtained from WSW-Hill. MECI recommends the carbon filters be changed on both WSW-Hill and WSW-Swift.

It is MECI's professional opinion that additional assessment is necessary to define the vertical and horizontal extent of contamination downgradient of the source area. MECI proposes replacing monitoring wells MW-10, MW-14, MW-15, MW-17, and MW-18 and to conduct vertical field screening/well installation. This proposed additional assessment would aid in determining the correct zone of infiltration into the rock interface which may be contributing to the contamination detected in WSW-Hill and WSW-Swift, and to insure adequate data points are installed to continue to monitor the contaminant plume effectively. MECI also recommends that several well vaults and pads should be replaced to insure that the wells are able to be properly secured. As discussed above, only 39 locking bolts of the 52 bolts noted during the QAPP preparation were able to be replaced during the

subject sampling event. Additionally, MECI recommends a series of AFVR events be conducted on monitoring wells MW-1R, MW-2, MW-8, IW-2, IW-3, and IW-5 to reduce dissolved CoC concentrations and to mitigate the spread of off-site contamination.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assessment are consistent with those normally employed in hydrogeological assessment and waste management projects of this type. Our evaluation of site conditions has been based on our understanding of the site, project information provided to us, and data obtained in our exploration. The general subsurface conditions utilized in our evaluation have been based on interpretation of subsurface data between borings. Contents of this report are intended for the sole use by Ms. Lois Smith and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.

Jeff L. Coleman
Senior Scientist

Bryan T. Shane, P.G.
Principal Geologist

Attachments:

Contractor Checklist

Item#	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	X		
2	Is UST Owner/Operator name, address, & phone number provided?			X
3	Is name, address, & phone number of current property owner provided?			X
4	Is the DHEC Certified UST Site Rehabilitation Contractor's Name, Address, telephone number, and certification number provided?	X		
5	Is the name, address, telephone number, and certification number of the well driller that installed borings/monitoring wells provided?			X
6	Is the name, address, telephone number, and certification number of the certified laboratory(ies) performing analytical analyses provided?	X		
7	Has the facility history been summarized?	X		
8	Has the regional geology and hydrogeology been described?			X
9	Are the receptor survey results provided as required?			X
10	Has current use of the site and adjacent land been described?			X
11	Has the site-specific geology and hydrogeology been described?	X		
12	Has the primary soil type been described?			X
13	Have field screening results been described?			X
14	Has a description of the soil sample collection and preservation been detailed?			X
15	Has the field screening methodology and procedure been detailed?			X
16	Has the monitoring well installation and development dates been provided?			X
17	Has the method of well development been detailed?			X
18	Has justification been provided for the locations of the monitoring wells?			X
19	Have the monitoring wells been labeled in accordance with the UST QAPP guidelines?			X
20	Has the groundwater sampling methodology been detailed?	X		
21	Have the groundwater sampling dates and groundwater measurements been provided? See attached Table 1	X		
22	Has the purging methodology been detailed?	X		
23	Has the volume of water purged from each well been provided along with measurements to verify that purging is complete? See attached Field Data Information Sheets	X		
24	If free-product is present, has the thickness been provided? See attached Site Activity Summary Sheets			X
25	Does the report include a brief discussion of the assessment done and the results?	X		
26	Does the report include a brief discussion of the aquifer evaluation and results?			X
27	Does the report include a brief discussion of the fate & transport models used?			X

Item#	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk Evaluation)			X
29	Have the exposure pathways been analyzed? (Tier 2 Risk Evaluation)			X
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 Risk Evaluation)			X
31	Have recommendations for further action been provided and explained?	X		
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)			X
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)	X		
34	Has the current and historical laboratory data been provided in tabular format?	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?			X
36	Have the Site conceptual model tables been included? (Tier 1 Risk Evaluation)			X
37	Has the topographic map been provided with all required elements? (Figure 1)	X		
38	Has the site base map been provided with all required elements? (Figure 2)	X		
39	Have the CoC site maps been provided? (Figure 4, Figure 5, and Figure 6)	X		
40	Has the site potentiometric map been provided? (Figure 3)	X		
41	Have the geologic cross-sections been provided? (Figure 6)			X
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements? (Appendix A)			X
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements? (Appendix B)	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements? (Appendix C)			X
47	Have the soil boring/field screening logs been provided? (Appendix D)			X
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)			X
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)			X
50	Have the disposal manifests been provided? See attached	X		
51	Has a copy of the local zoning regulations been provided? (Appendix H)			X
52	Has all fate and transport modeling been provided? (Appendix I)			X
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)			X
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided?	X		

TABLES

TABLE 1
FIELD PARAMETERS
PAGE 1 OF 3
OCTOBER 3, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3516
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	Dissolved Oxygen (mg/l)	Temperature (^{o} Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well-head Elevation (ft)	Groundwater Elevation (ft)
MW-1R	10/26/2010	4.17	19.0	6.19	5.77	79.8	65.9	29-39	***	32.33	***	96.56	64.23
	2/1/2011	2.46	17.3	5.04	NT	57.7	NT	-	***	33.64	***	96.56	62.92
	10/3/2011	1.48	18.6	4.58	NT	59.6	NT	-	***	34.08	***	96.56	62.48
MW-2	10/26/2010	0.69	21.5	6.31	NT	117.1	NT	23-38	***	35.45	***	99.67	64.22
	2/1/2011	3.12	18.2	5.31	NT	96.9	NT	-	***	36.80	***	99.67	62.87
	10/3/2011	INS	INS	INS	INS	INS	INS	-	***	37.21	***	99.67	62.46
MW-3	10/26/2010	2.93	18.8	6.88	NT	31.9	NT	25-35	***	32.59	***	97.10	64.51
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	34.67	***	97.10	62.43
	10/3/2011	INS	INS	INS	INS	INS	INS	-	***	34.48	***	97.10	62.62
MW-4R	10/26/2010	6.81	17.8	5.89	5.56	45.2	33.9	24-34	***	28.38	***	92.55	64.17
	2/1/2011	6.21	17.5	5.73	NT	38.9	NT	-	***	29.43	***	92.55	63.12
	10/3/2011	2.45	17.1	4.96	NT	27.9	NT	-	***	30.03	***	92.55	62.52
MW-5	10/26/2010	INS	INS	INS	INS	INS	INS	20-30	***	29.84	***	94.36	64.52
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	30.10	***	94.36	64.26
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	94.36	DRY
MW-6	10/26/2010	INS	INS	INS	INS	INS	INS	27-37	***	35.57	***	98.93	63.36
	2/1/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	36.95	***	98.93	61.98
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	98.93	DRY
MW-7	10/26/2010	INS	INS	INS	INS	INS	INS	21-36	***	34.19	***	96.71	62.52
	2/1/2011	PROD	PROD	PROD	PROD	PROD	PROD	-	35.48	35.57	0.09	96.71	61.22
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	96.71	DRY
MW-8	10/26/2010	0.54	19.7	6.24	NT	119.9	NT	23-38	***	35.94	***	100.14	64.20
	2/1/2011	1.35	17.9	6.14	NT	108.1	NT	-	***	37.31	***	100.14	62.83
	10/3/2011	3.77	19.1	5.08	NT	170.1	NT	-	***	37.71	***	100.14	62.43
MW-9R	10/26/2010	5.91	18.5	6.64	5.63	33.2	25.5	28-38	***	32.50	***	94.95	62.45
	2/1/2011	2.15	16.3	4.48	NT	34.9	NT	-	***	33.77	***	94.95	61.18
	10/3/2011	2.73	17.3	5.63	NT	53.2	NT	-	***	34.13	***	94.95	60.82
MW-10	10/27/2010	INS	INS	INS	INS	INS	INS	29-44	***	41.12	***	104.83	63.71
	2/1/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	42.41	***	104.83	62.42
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	104.83	DRY

Notes:

1. mg/l = milligrams per liter.
2. Groundwater depths were measured from the top of the PVC riser pipe.
3. Stabalized groundwater levels measured 10/3/2011
4. NT = Not Tested
5. INS = Insufficient Water for Field Measurements
6. DRY = Monitoring well Dry at time of Sampling
7. NS = Not Sampled
8. TD = Total Depth
9. PROD = Free Phase Petroleum Product
10. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on 10/3/2011.
11. Groundwater elevation for MW-7 corrected for the presence of free phase petroleum product using a specific gravity for fuel of 0.85.

TABLE 1
FIELD PARAMETERS
PAGE 2 OF 3
OCTOBER 3, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3516
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	Dissolved Oxygen (mg/l)	Temperature (^{o} Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well-head Elevation (ft)	Groundwater Elevation (ft)
MW-11	10/26/2010	INS	INS	INS	INS	INS	INS	29-44	***	31.95	***	105.51	73.56
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	43.42	***	105.51	62.09
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	105.51	DRY
MW-12	10/26/2010	INS	INS	INS	INS	INS	INS	29-44	***	43.45	***	104.56	61.11
	2/1/2011	7.03	13.9	3.28	NT	124.5	NT	-	***	42.75	***	104.56	61.81
	10/3/2011	INS	INS	INS	INS	INS	INS	-	***	43.22	***	104.56	61.34
MW-13	10/26/2010	NS	NS	NS	NS	NS	NS	32-47	***	NS	***	105.35	NS
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	45.85	***	105.35	59.50
	10/3/2011	INS	INS	INS	INS	INS	INS	-	***	46.45	***	105.35	58.90
MW-14	10/26/2010	INS	INS	INS	INS	INS	INS	35-50 (TD=46.50)	***	44.51	***	103.95	59.44
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	44.67	***	103.95	59.28
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	103.95	DRY
MW-15	10/26/2010	DRY	DRY	DRY	DRY	DRY	DRY	35-50 (TD=47.60)	***	DRY	***	105.28	DRY
	2/1/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	105.28	DRY
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	105.28	DRY
MW-16	10/26/2010	1.28	17.4	6.09	NT	27.6	NT	22-37	***	33.81	***	95.06	61.25
	2/1/2011	4.20	14.9	3.35	NT	33.3	NT	-	***	35.06	***	95.06	60.00
	10/3/2011	INS	INS	INS	INS	INS	INS	-	***	35.35	***	95.06	59.71
MW-17	10/26/2010	INS	INS	INS	INS	INS	INS	25-40	***	38.27	***	99.52	61.25
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	39.60	***	99.52	59.92
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	99.52	DRY
MW-18	10/26/2010	INS	INS	INS	INS	INS	INS	31-46	***	43.79	***	103.17	59.38
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	45.22	***	103.17	57.95
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	103.17	DRY
MW-19	10/26/2010	INS	INS	INS	INS	INS	INS	35-50	***	46.65	***	103.32	56.67
	2/1/2011	3.84	16.8	5.79	NT	113.0	NT	-	***	47.99	***	103.32	55.33
	10/3/2011	INS	INS	INS	INS	INS	INS	-	***	48.55	***	103.32	54.77
MW-20	10/26/2010	4.13	19.0	5.35	NT	30.1	NT	20-35	***	30.84	***	93.39	62.55
	2/1/2011	5.13	15.7	4.62	NT	22.6	NT	-	***	32.13	***	93.39	61.26
	10/3/2011	4.69	17.2	5.05	NT	28.1	NT	-	***	32.45	***	93.39	60.94

Notes:

1. mg/l = milligrams per liter.
2. Groundwater depths were measured from the top of the PVC riser pipe.
3. Stabalized groundwater levels measured 10/3/2011
4. NT = Not Tested
5. INS = Insufficient Water for Field Measurements
6. DRY = Monitoring well Dry at time of Sampling
7. NS = Not Sampled
8. TD = Total Depth
9. PROD = Free Phase Petroleum Product
10. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on 10/3/2011.
11. Groundwater elevation for MW-7 corrected for the presence of free phase petroleum product using a specific gravity for fuel of 0.85.

TABLE 1
FIELD PARAMETERS
PAGE 3 OF 3
OCTOBER 3, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3516
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	Dissolved Oxygen (mg/l)	Temperature (^{o} Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well-head Elevation (ft)	Groundwater Elevation (ft)
TW-1	10/26/2010	0.94	20.3	6.51	6.18	191.3	190.6	56-61	***	35.30	***	99.79	64.49
	2/1/2011	1.69	18.0	5.10	5.28	160.6	276.7	-	***	36.92	***	99.79	62.87
	10/3/2011	1.77	21.1	5.67	5.25	327.6	305.7	-	***	37.34	***	99.79	62.45
TW-2	10/26/2010	1.00	20.0	9.38	6.64	213.5	296.8	86-88	***	35.72	***	99.79	64.07
	2/1/2011	1.81	17.5	5.63	5.07	270.1	302.3	-	***	37.08	***	99.79	62.71
	10/3/2011	4.68	20.0	8.14	7.42	143.0	352.1	-	***	37.40	***	99.79	62.39
TW-3	10/26/2010	0.72	20.5	5.72	5.41	51.3	63.1	66-71	***	40.38	***	104.17	63.79
	2/1/2011	6.84	16.9	5.82	4.22	54.3	60.2	-	***	41.83	***	104.17	62.34
	10/3/2011	1.10	18.8	5.89	5.42	53.8	63.2	-	***	42.24	***	104.17	61.93
IW-2	10/3/2011	1.72	20.9	5.42	NT	226.1	NT	TD=41.70	***	37.30	***	99.69	62.39
IW-3	10/3/2011	Sheen	Sheen	Sheen	Sheen	Sheen	Sheen	TD=41.80	***	37.21	***	99.60	62.39
IW-4	10/3/2011	1.81	19.8	5.14	NT	86.9	NT	TD=41.95	***	37.50	***	99.22	61.72
IW-5	10/3/2011	2.07	18.9	5.28	NT	189.5	NT	TD=41.20	***	34.74	***	97.26	62.52
IW-6	10/3/2011	1.57	17.5	5.43	NT	145.1	NT	TD=42.18	***	34.95	***	96.89	61.94
IW-8	10/3/2011	1.89	18.5	5.44	NT	184.4	NT	TD=43.50	***	37.40	***	99.10	61.70
IW-9	10/26/2010	0.84	20.5	6.28	NT	124.5	NT	TD = 42.90	***	34.55	***	98.87	64.32
	2/1/2011	4.88	16.4	2.79	3.58	92.7	256.6	-	***	35.80	***	98.87	63.07
	10/3/2011	4.05	18.3	4.91	NT	87.3	NT	-	***	36.30	***	98.87	62.57
IW-10	10/3/2011	INS	INS	INS	INS	INS	INS	TD=45.03	***	43.22	***	104.70	61.48
IW-11	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	Unknown	***	DRY	***	106.04	DRY
IW-16	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	Unknown	***	DRY	***	107.04	DRY
IW-18	10/3/2011	3.23	19.3	5.37	NT	613.0	NT	TD=44.11	***	43.07	***	103.87	60.80
IW-19	10/3/2011	1.95	19.0	5.75	NT	335.2	NT	TD=43.05	***	39.93	***	101.64	61.71
IW-20	10/3/2011	2.36	19.2	6.02	NT	296.5	NT	TD=42.30	***	40.22	***	102.19	61.97

Notes:

1. mg/l = milligrams per liter.
2. Groundwater depths were measured from the top of the PVC riser pipe.
3. Stabalized groundwater levels measured 10/3/2011
4. NT = Not Tested
5. INS = Insufficient Water for Field Measurements
6. DRY = Monitoring well Dry at time of Sampling
7. NS = Not Sampled
8. TD = Total Depth
9. PROD = Free Phase Petroleum Product
10. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on 10/3/2011.
11. Groundwater elevation for MW-7 corrected for the presence of free phase petroleum product using a specific gravity for fuel of 0.85.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
PAGE 1 OF 4
OCTOBER 3, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3516
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-1R	10/26/10	**7,360**	**30,200**	**5,060**	**28,800**	**71,420**	**4.3J**	**1,190J**	**26.3**	**18.3**
	02/01/11	**7,900**	**28,100**	**6,080**	**28,100**	**70,180**	<250	**583**	<250	**20.1**
	10/03/11	**8,200**	**32,000**	**6,500**	**37,000**	**83,700**	<2,000	**850J**	**200J**	**18**
MW-2	10/26/10	**2,860**	**3,630**	**390**	**3,710**	**10,590**	**79.5J**	**110**	**112**	**15.1**
	02/01/11	**2,100**	**2,590**	**174**	**1,750**	**6,614**	**199**	<125	**224**	**18.2**
	10/03/11	**11,000**	**19,000**	**1,600**	**11,000**	**42,600**	**570J**	<1,000	**710J**	**20**
MW-3	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-4R	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-5	10/26/10	<5.0	**101**	**1.9J**	**11.5**	**114.4J**	<5.0	**3.5J**	<5.0	<0.020
	02/01/11	<5.0	**4.8J**	<5.0	<10.0	**4.8J**	<5.0	<5.0	<5.0	NT
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-6	10/26/10	**18.2**	**2.2J**	**14.8**	**74.4**	**109.6J**	<5.0	**5.6**	<5.0	**0.13**
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	10/26/10	<250	**875**	**2,120**	**21,500**	**24,495**	<250	**1,150**	<250	**1.1**
	02/01/11	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-8	10/26/10	**10,100**	**37,700**	**4,420**	**26,100**	**78,320**	<500	**866**	<500	**29.2**
	02/01/11	**11,400**	**52,000**	**5,360**	**29,900**	**98,660**	<1,250	**978J**	<1,250	**18.0**
	10/03/11	**11,000**	**55,000**	**5,400**	**32,000**	**103,400**	<2,000	**970J**	**370J**	**22**
MW-9R	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-10	10/27/10	**6,280**	**17,700**	**5,220**	**26,000**	**55,200**	<250	**813**	**112J**	**48.9**
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
12. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
PAGE 2 OF 4
OCTOBER 3, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3516
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-11	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	NT
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-12	10/26/10	**1,870**	**24.0**	**479**	**838**	**3,211.0**	<5.0	**112**	**38.8**	**0.95**
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	**1.8J**	**0.057**
	10/03/11	**3.5J**	<5.0	<5.0	<5.0	**3.5J**	<5.0	<5.0	**2.8J**	<0.022
MW-13	10/26/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-14	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-15	10/26/10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	10/26/10	**4.1J**	<5.0	<5.0	<10.0	**4.1J**	<5.0	**3.2J**	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	**2.8J**	**2.8J**	<5.0	<5.0	<5.0	**0.034**
	10/03/11	**0.31J**	<5.0	<5.0	<5.0	**0.31J**	<5.0	<5.0	<5.0	**0.037**
MW-17	10/26/10	**250**	<5.0	<5.0	**45.5**	**295.5**	**2.1J**	**8.7**	<5.0	**0.046**
	02/01/11	**34.5**	<10.0	<10.0	**21.5**	**56.0**	<10.0	<10.0	<10.0	NT
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-18	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.021
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-19	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	**253**	<5.0	<10.0	**253**	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-20	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.020

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
12. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
PAGE 3 OF 4
OCTOBER 3, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3516
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
TW-1	10/26/10	**8,720**	**293**	**2,370**	**11,900**	**23,283**	<250	**559**	<250	**20.6**
	02/01/11	**1,920**	**106**	**785**	**4,230**	**7,041**	<100	**228**	<100	**4.0**
	10/03/11	**10,000**	**3,100**	**3,500**	**17,000**	**33,600**	**55J**	**480J**	<500	**18**
TW-2	10/26/10	**12,900**	**17,400**	**1,930**	**9,830**	**42,060**	**217J**	**624**	<500	**0.062**
	02/01/11	**12,500**	**19,400**	**1,850**	**9,440**	**43,190**	**191J**	**296J**	<500	<0.020
	10/03/11	**9,300**	**17,000**	**2,100**	**11,000**	**39,400**	**140J**	**380J**	**310J**	<0.019
TW-3	10/26/10	**152**	**12.9**	<5.0	**20.5**	**185.4**	<5.0	**5.2**	**3.6J**	**1.4**
	02/01/11	**242**	**9.0**	**2.1J**	**37.0**	**290.1J**	<5.0	**6.5**	**13.4**	**2.1**
	10/03/11	**74**	<5.0	<5.0	**14**	**88**	<5.0	**1.7J**	**9.5**	**0.98**
IW-2	10/03/11	**22,000**	**56,000**	**4,800**	**27,000**	**109,800**	<2,500	<2,500	<2,500	**21**
IW-3	10/03/11	**19,000**	**39,000**	**3,900**	**22,000**	**83,900**	**390J**	<2,000	<2,000	**120**
IW-4	10/03/11	**68**	**12**	**4.1J**	**58**	**142.1J**	<5.0	<5.0	<5.0	<0.019
IW-5	10/03/11	**13,000**	**57,000**	**5,000**	**30,000**	**105,000**	<2,500	<2,500	<2,500	**7.8**
IW-6	10/03/11	**140**	**18J**	**87**	**2,200**	**2,445J**	<50	**340**	<50	<0.019
IW-8	10/03/11	**1,900**	**89J**	**2,400**	**8,100**	**12,489J**	<200	**480**	<200	**0.87**
IW-9	10/26/10	**505**	**562**	**1,250**	**5,110**	**7,427**	**5.8J**	**335**	<10.0	**0.39**
	02/01/11	**408**	**642**	**1,340**	**6,090**	**8,480**	<5.0	**389**	<5.0	**0.52**
	10/03/11	**280**	**250**	**1,100**	**5,100**	**6,730**	<100	**340**	<100	**0.38**
IW-10	10/03/11	**510**	<50	**210**	**1,500**	**2,220**	<50	**67**	<50	**1.7**
IW-11	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-16	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
12. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
PAGE 4 OF 4
OCTOBER 3, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3516
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
IW-18	10/03/11	**490**	<10	**350**	**200**	**1,040**	<10	**38**	**58**	**0.36**
IW-19	10/03/11	**1,500**	**1,800**	**880**	**4,400**	**8,580**	<100	**150**	**50J**	**11**
IW-20	10/03/11	**3.8J**	<5.0	**3.2J**	**22**	**29.0J**	<5.0	**3.6J**	<5.0	<0.020
WSW-Crock	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	**0.039**
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	**0.022**
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	**0.034**
WSW-Hill (Pre)	10/26/10	**14.0**	<5.0	<5.0	<10.0	**14.0**	<5.0	<5.0	**1.6J**	**0.33**
	02/01/11	**27.4**	<5.0	<5.0	**5.9J**	**33.3J**	<5.0	<5.0	**6.0**	**0.33**
	03/15/11	**63.2**	<5.0	<5.0	**12.5**	**75.7**	<5.0	<5.0	**6.8**	**0.60**
	10/03/11	**120**	<5.0	<5.0	**22**	**142**	<5.0	**2.4J**	**13**	**0.68**
WSW-Hill (Post)	10/26/10	**2.4J**	<5.0	<5.0	<10.0	**2.4J**	<5.0	<5.0	**1.3J**	**0.034**
	02/01/11	**3.7J**	<5.0	<5.0	<10.0	**3.7J**	<5.0	<5.0	<5.0	**0.062**
	03/15/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	**3.4J**	<5.0	<5.0	<5.0	**3.4J**	<5.0	<5.0	**1.0J**	**0.035**
WSW-Smith	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
WSW-Swift (Pre)	10/26/10	**288**	<5.0	<5.0	**67.6**	**355.6**	<5.0	**11.8**	**23.5**	**1.3**
	02/01/11	**7.5**	<5.0	<5.0	**9.7J**	**17.2J**	<5.0	<5.0	**6.7**	**0.45**
	03/15/11	**22.7**	<5.0	<5.0	**17.0**	**39.7**	<5.0	**3.5J**	**8.0**	**0.57**
	10/03/11	**190**	<5.0	<5.0	**75**	**265**	**0.49J**	**19**	**22**	**0.71**
WSW-Swift (Post)	10/26/10	**157**	<5.0	**1.6J**	**46.7**	**205.3J**	**3.0J**	**13.6**	**12.5**	**0.60**
	02/01/11	**7.8**	<5.0	<5.0	**8.8J**	**16.6J**	<5.0	<5.0	**7.1**	**0.45**
	03/15/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	**1.2J**	<5.0	<5.0	<5.0	**1.2J**	<5.0	<5.0	**1.2J**	<0.020

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
12. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
PAGE 1 OF 2
OCTOBER 3, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3516
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	tert-Amyl alcohol (µg/l)	tert-Amyl methyl ether (µg/l)	3,3-Dimethyl-1-butanol (µg/l)	tert Butyl Alcohol (µg/l)	tert-Butyl Formate (µg/l)	Diisopropyl ether (µg/l)	Ethanol (µg/l)	Ethyl tert-butyl ether (µg/l)
MW-1R	10/26/10	**325**	<10.0	<100	<100	<50.0	**61.1**	**334**	<10.0
	10/03/11	<8,000	<4,000	<8,000	<8,000	<2,000	<2,000	<40,000	<400
MW-2	10/26/10	<2,000	<200	<2,000	<2,000	<1,000	**195**	<4,000	<200
	10/03/11	**6,000**	<2,000	<4,000	**1,700J**	<1,000	**870J**	<20,000	<200
MW-3	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	<20	<10	<20	<20	<5.0	<5.0	<100	<1.0
MW-4R	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	<20	<10	<20	<20	<5.0	<5.0	<100	<1.0
MW-5	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-6	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	10/26/10	<5,000	<500	<5,000	<5,000	<2,500	<250	<10,000	<500
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-8	10/26/10	<10,000	<1,000	<10,000	<10,000	<5,000	<500	<20,000	<1,000
	10/03/11	<8,000	<4,000	<8,000	<8,000	<2,000	**210J**	<40,000	<400
MW-9R	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	<20	<10	<20	<20	<5.0	<5.0	<100	<1.0
MW-10	10/27/10	<5,000	<500	<5,000	<5,000	<2,500	**167J**	<10,000	<500
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-11	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-12	10/26/10	**917**	<10.0	<100	<100	<50.0	**65.0**	<200	<10.0
	10/03/11	**7.0J**	<10	<20	<20	<5.0	**3.3J**	<100	<1.0
MW-13	10/26/10	NS	NS	NS	NS	NS	NS	NS	NS
	10/03/11	<20	<10	<20	<20	<5.0	<5.0	<100	<1.0
MW-14	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-15	10/26/10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	<20	<10	<20	<20	<5.0	<5.0	<100	<1.0
MW-17	10/26/10	**90.5J**	<10.0	<100	<100	<50.0	**14.5**	<200	<10.0
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-18	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-19	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	<20	<10	<20	<20	<5.0	<5.0	<100	<1.0

Notes:

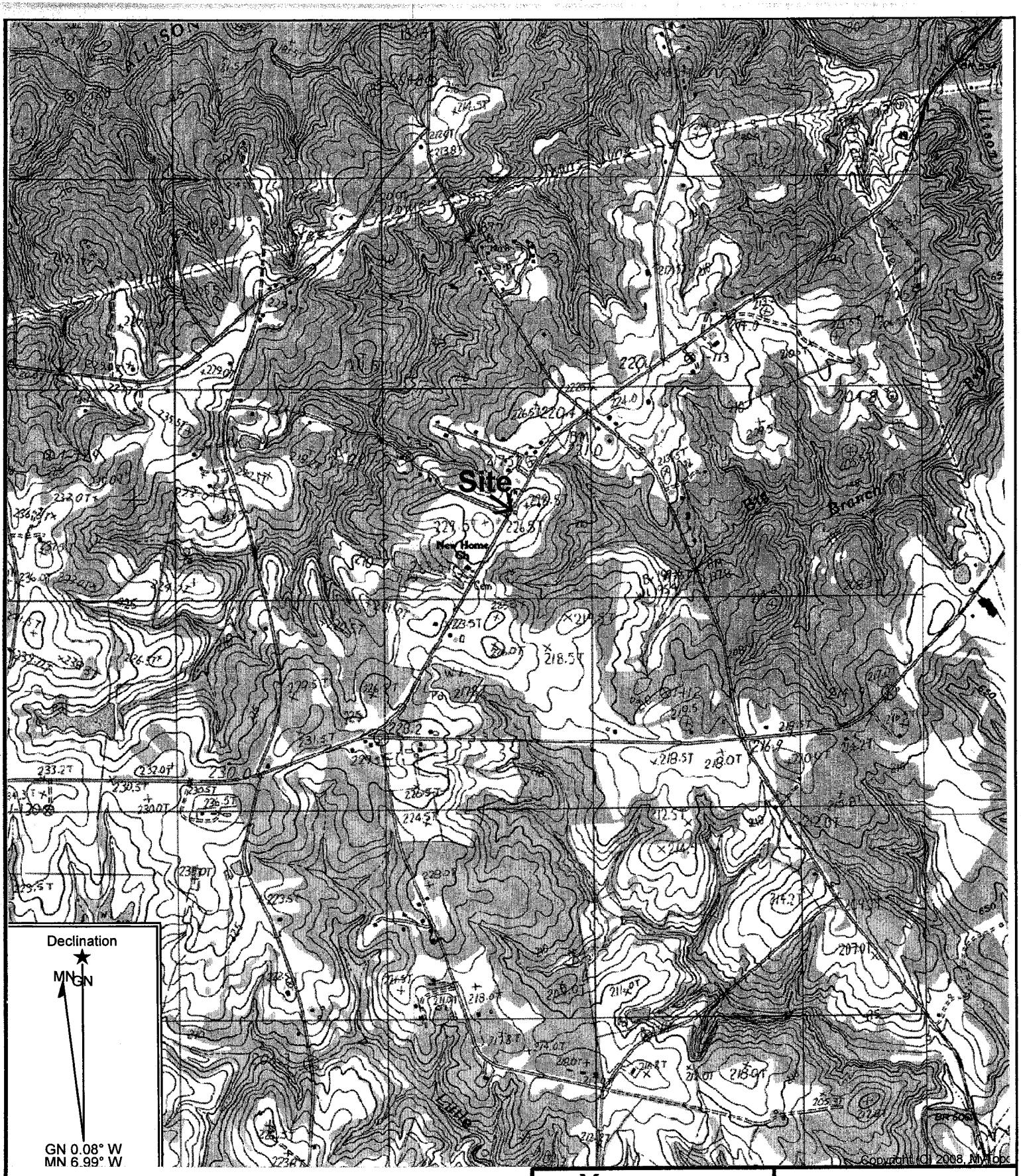
1. µg/l = micrograms per liter
2. NS = Not Sampled
3. DRY = Well Dry at the time of Sampling
4. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
5. "B" values = Detected in the Method Blank

TABLE 3
GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
PAGE 2 OF 2
OCTOBER 3, 2011 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3516
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	tert-Amyl alcohol (µg/l)	tert-Amyl methyl ether (µg/l)	3,3-Dimethyl-1-butanol (µg/l)	tert Butyl Alcohol (µg/l)	tert-Butyl Formate (µg/l)	Diisopropyl ether (µg/l)	Ethanol (µg/l)	Ethyl tert-butyl ether (µg/l)
MW-20	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	<20	<10	<20	<20	<5.0	<5.0	<100	<1.0
TW-1	10/26/10	<5,000	<500	<5,000	<5,000	<2,500	**166J**	<10,000	<500
	10/03/11	<2,000	<1,000	<2,000	<2,000	<500	**190J**	<10,000	<100
TW-2	10/26/10	**6,670J**	<1,000	<10,000	<10,000	<5,000	**541**	<20,000	<1,000
	10/03/11	**3,100**	<1,000	<2,000	<2,000	<500	**360J**	<10,000	<100
TW-3	10/26/10	**138**	<10.0	<100	<100	<50.0	**14.4**	<200	<10.0
	10/03/11	**130**	<10	<20	<20	<5.0	**23**	<100	<1.0
IW-2	10/03/11	**3,600J**	<5,000	<10,000	<10,000	<2,500	**450J**	<50,000	<500
IW-3	10/03/11	**11,000**	<4,000	<8,000	<8,000	<2,000	**650J**	<40,000	<400
IW-4	10/03/11	**6.7J**	<10	<20	<20	<5.0	**3.4J**	<100	<1.0
IW-5	10/03/11	<10,000	<5,000	<10,000	<10,000	<2,500	<2,500	<50,000	<500
IW-6	10/03/11	**110J**	<100	<200	**120J**	<50	<50	<1,000	<10
IW-8	10/03/11	<800	<400	<800	<800	<200	**21J**	<4,000	<40
IW-9	10/26/10	**168J**	<20.0	<200	<200	<100	**8.2J**	<400	<20.0
	10/03/11	<400	<200	<400	<400	<100	<100	<2,000	<20
IW-10	10/03/11	<200	<100	<200	**170J**	<50	**28J**	<1,000	<10
IW-11	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-16	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	10/03/11	**2,900**	<20	<40	**280**	<10	**85**	<200	<2.0
IW-19	10/03/11	**2,000**	<200	<400	**410**	<100	**42J**	<2,000	<20
IW-20	10/03/11	**180**	<10	<20	**26**	<5.0	**0.80J**	<100	<1.0
WSW-Crock	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	<20	<10	<20	<20	<5.0	<5.0	<100	<1.0
WSW-Hill (Pre)	10/26/10	**66.4J**	<10.0	<100	<100	<50.0	**7.8**	<200	<10.0
	10/03/11	**160**	<10	<20	**10J**	<5.0	**19**	<100	<1.0
WSW-Hill (Post)	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	**31**	<10	<20	<20	<5.0	**0.74J**	<100	<1.0
WSW-Smith	10/26/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
	10/03/11	<20	<10	<20	<20	<5.0	<5.0	<100	<1.0
WSW-Swift (Pre)	10/26/10	**506**	<10.0	<100	<100	<50.0	**42.0**	<200	<10.0
	10/03/11	**740**	<10	<20	<20	<5.0	**41**	**61BJ**	<1.0
WSW-Swift (Post)	10/26/10	**395**	<10.0	**124**	<100	<50.0	**25.5**	<200	<10.0
	10/03/11	**53**	<10	<20	**27**	<5.0	**0.44J**	<100	<1.0

Notes:
1. µg/l = micrograms per liter
2. NS = Not Sampled
3. DRY = Well Dry at the time of Sampling
4. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
5. "B" values = Detected in the Method Blank

FIGURES



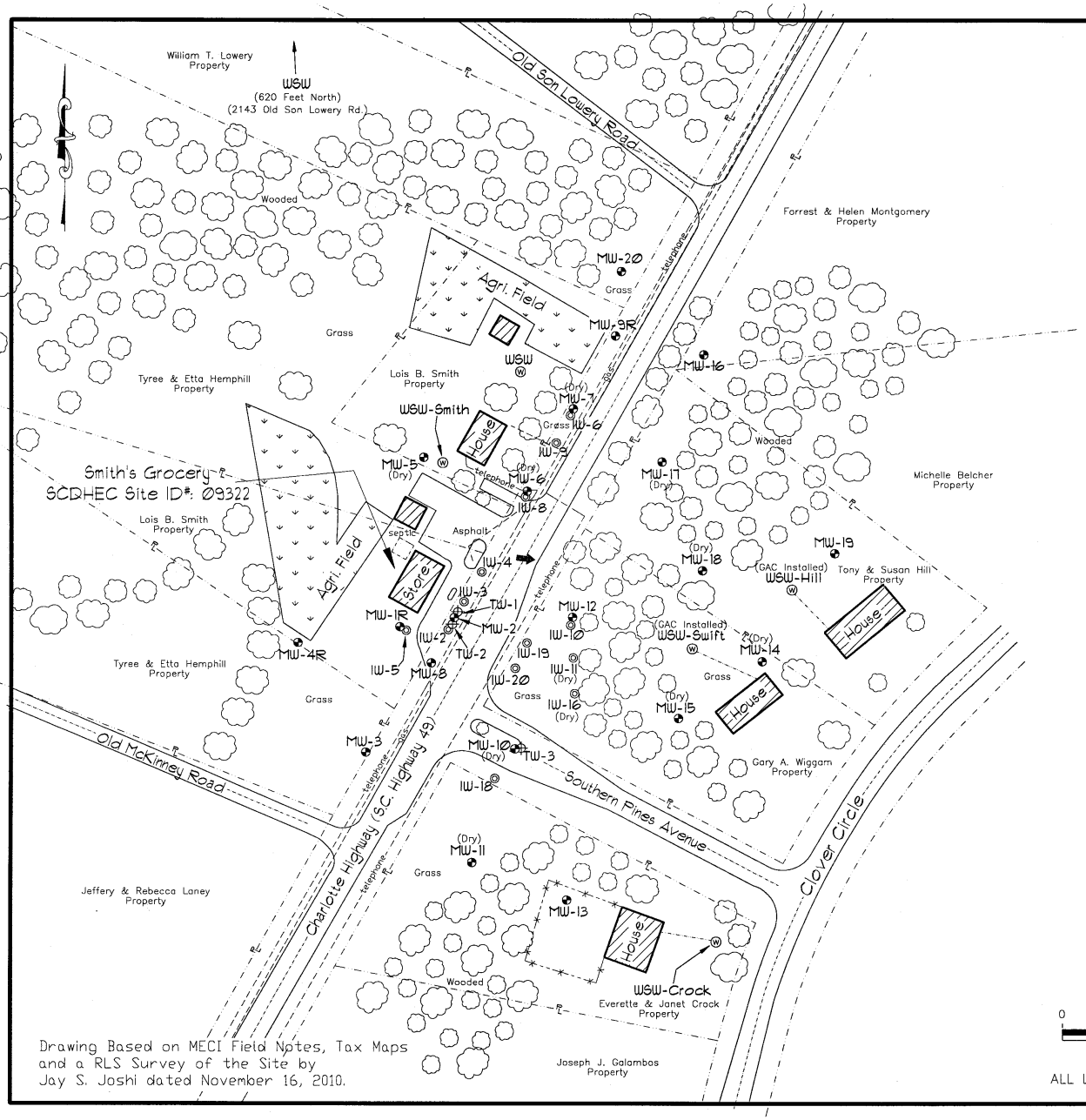
GRAPHIC SCALE

0 1000 2000 4000

1IN = 2000FT

Reference: Clover, South Carolina
USGS 7.5 Min. Quad
Countour Interval – 3 Meters

Midlands Environmental Consultants, Inc.	Site Location
Smith's Grocery S.C. Highway 49, Clover, SC SCDHEC Site ID# 09322	
Figure 1	MECI 11-3516



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Buried Sewer
- Under Ground Telephone
- Fence

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3516
DATE October 13, 2011
FIGURE 2

Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Groundwater Elevation Contour (feet)

Groundwater Elevation Data

Well *	Screened Interval (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well Head Elevation	Groundwater Elevation
MW-1R	29-39	---	34.08	---	96.56	62.48
MW-2	23-38	---	37.21	---	99.67	62.46
MW-3	25-35	---	34.48	---	97.10	62.62
MW-4R	24-34	---	30.03	---	92.55	62.52
MW-5	20-30	---	DRY	---	94.36	DRY
MW-6	27-37	---	DRY	---	98.93	DRY
MW-7	21-36	---	DRY	---	96.71	DRY
MW-8	23-38	---	37.71	---	100.14	62.43
MW-9R	28-38	---	34.13	---	94.95	60.82
MW-10	29-44	---	DRY	---	104.83	DRY
MW-11	29-44	---	DRY	---	105.51	DRY
MW-12	29-44	---	43.22	---	104.56	61.34
MW-13	32-47	---	46.45	---	105.35	58.90
MW-14	35-50	---	DRY	---	103.95	DRY
MW-15	35-50	---	DRY	---	105.28	DRY
MW-16	22-37	---	35.35	---	95.06	59.71
MW-17	25-40	---	DRY	---	99.52	DRY
MW-18	31-46	---	DRY	---	103.17	DRY
MW-19	35-50	---	48.55	---	103.32	54.77
MW-20	20-35	---	32.45	---	93.39	60.94
TW-1	56-61	---	37.34	---	99.79	62.45
TW-2	86-88	---	37.40	---	99.79	62.39
TW-3	66-71	---	42.24	---	104.17	61.93
IW-2	TD=41.70	---	37.30	---	99.69	62.39
IW-3	TD=41.80	Sheen	37.21	Sheen	99.60	62.39
IW-4	TD=41.95	---	37.50	---	99.22	61.72
IW-5	TD=41.20	---	34.74	---	97.26	62.52
IW-6	TD=42.18	---	34.95	---	96.89	61.94
IW-8	TD=43.50	---	37.40	---	99.10	61.70
IW-9	TD=42.90	---	36.30	---	98.87	62.57
IW-10	TD=45.03	---	43.22	---	104.70	61.48
IW-11	Unknown	---	DRY	---	106.04	DRY
IW-16	Unknown	---	DRY	---	107.04	DRY
IW-18	TD=44.11	---	43.07	---	103.87	60.80
IW-19	TD=43.05	---	39.93	---	101.64	61.71
IW-20	TD=42.30	---	40.22	---	102.19	61.97

Notes:

Depth to groundwater measured on October 3, 2011

Contour Interval = 2.00 Feet

Site Datum Based on Assumed Spot Elevation.

TW-1, TW-2, TW-3 not used in contouring.

DRY = Well Dry at time of sampling.

Groundwater Contours Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

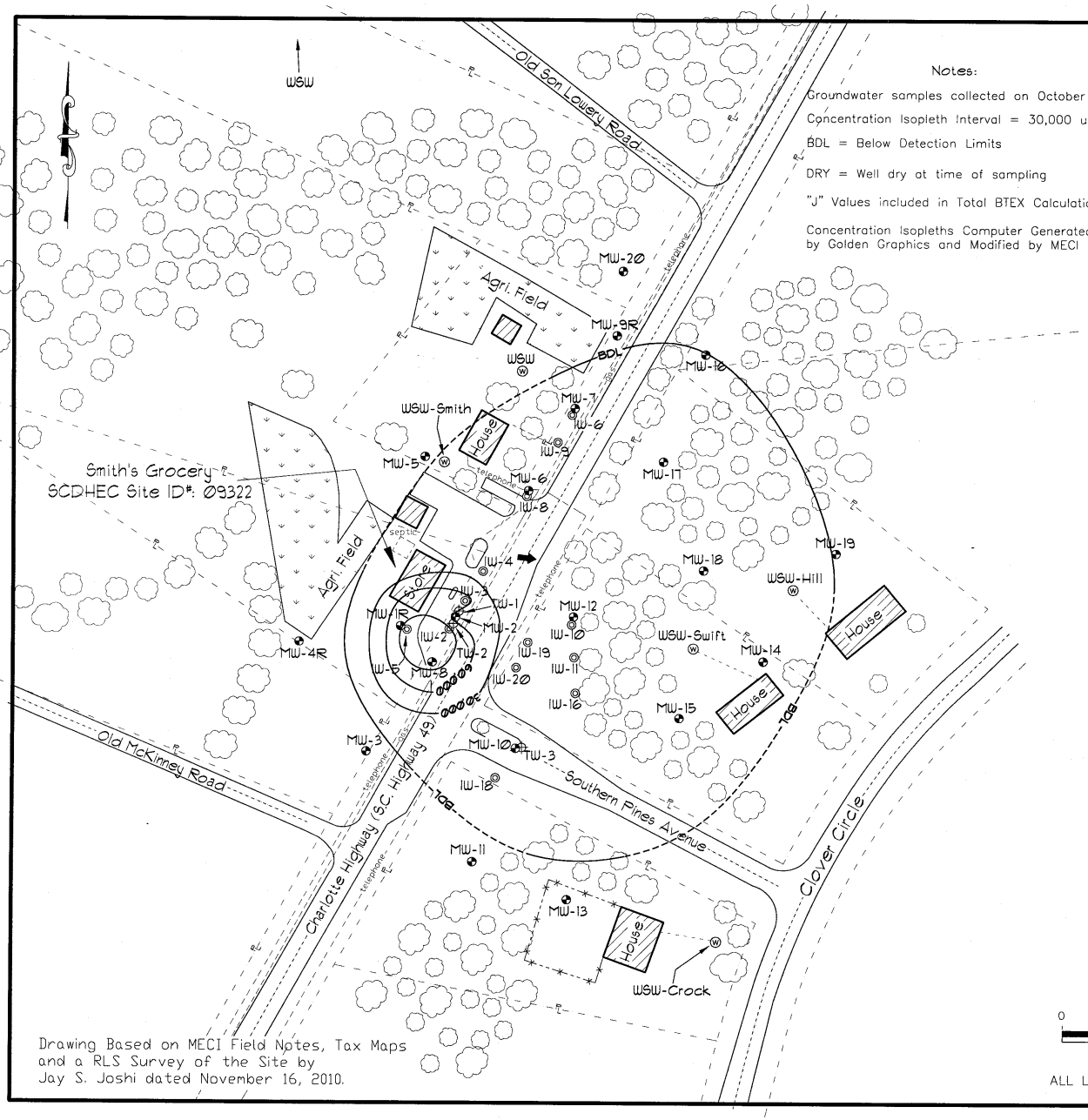
ALL LOCATIONS ARE APPROXIMATE

Groundwater Contour Map

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3516
DATE October 13, 2011
FIGURE 3



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Notes:

Groundwater samples collected on October 3, 2011.

Concentration Isopleth Interval = 30,000 ug/l

BDL = Below Detection Limits

DRY = Well dry at time of sampling

"J" Values included in Total BTEX Calculations

Concentration Isopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

Explanation:

- Location of Watertable Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Total BTEX Concentration Isopleth (ug/l)

COC Concentration Data

Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	12 DCA (ug/l)	EDB (ug/l)
MW-1R	8,200	32,000	6,500	37,000	83,700	<2,000	850J	200J	18
MW-2	11,000	19,000	1,600	11,000	42,600	570J	<1,000	710J	20
MW-3	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-4R	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-5	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-6	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-8	11,000	55,000	5,400	32,000	103,400	<2,000	970J	370J	22
MW-9R	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-12	3.5J	<5.0	<5.0	<5.0	3.5J	<5.0	<5.0	2.8J	<0.022
MW-13	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-14	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-15	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	0.31J	<5.0	<5.0	<5.0	0.31J	<5.0	<5.0	<5.0	0.037
MW-17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-18	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-19	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-20	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.020
TW-1	10,000	3,100	3,500	17,000	33,600	55J	480J	<500	18
TW-2	9,300	17,000	2,100	11,000	39,400	140J	380J	310J	<0.019
TW-3	74	<5.0	<5.0	14	88	<5.0	1.7J	9.5	0.98
IW-2	22,000	56,000	4,800	27,000	109,800	<2,500	<2,500	<2,500	21
IW-3	19,000	39,000	3,900	22,000	83,900	390J	<2,000	<2,000	120
IW-4	68	12	4.1J	58	142.1J	<5.0	<5.0	<5.0	<0.019
IW-5	13,000	57,000	5,000	30,000	105,000	<2,500	<2,500	<2,500	7.8
IW-6	140	18J	87	2,200	2,445J	<50	340	<50	<0.019
IW-8	1,900	89J	2,400	8,100	12,489J	<200	480	<200	0.87
IW-9	280	250	1,100	5,100	6,730	<100	340	<100	0.38
IW-10	510	<50	210	1,500	2,200	<50	67	<50	1.7
IW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-16	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	490	<10	350	200	1,040	<10	38	58	0.36
IW-19	1,500	1,800	880	4,400	8,580	<100	150	50J	11
IW-20	3.8J	<5.0	3.2J	22	29.0J	<5.0	3.6J	<5.0	<0.020
WSW-Crock	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	0.034
WSW-Hill(Pre)	120	<5.0	<5.0	22	142	<5.0	2.4J	13	0.68
WSW-Hill(Post)	3.4J	<5.0	<5.0	<5.0	3.4J	<5.0	<5.0	1.0J	0.035
WSW-Smith	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
WSW-Swift(Pre)	190	<5.0	<5.0	75	265	0.49J	19	22	0.71
WSW-Swift(Post)	1.2J	<5.0	<5.0	<5.0	1.2J	<5.0	<5.0	1.2J	<0.020

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

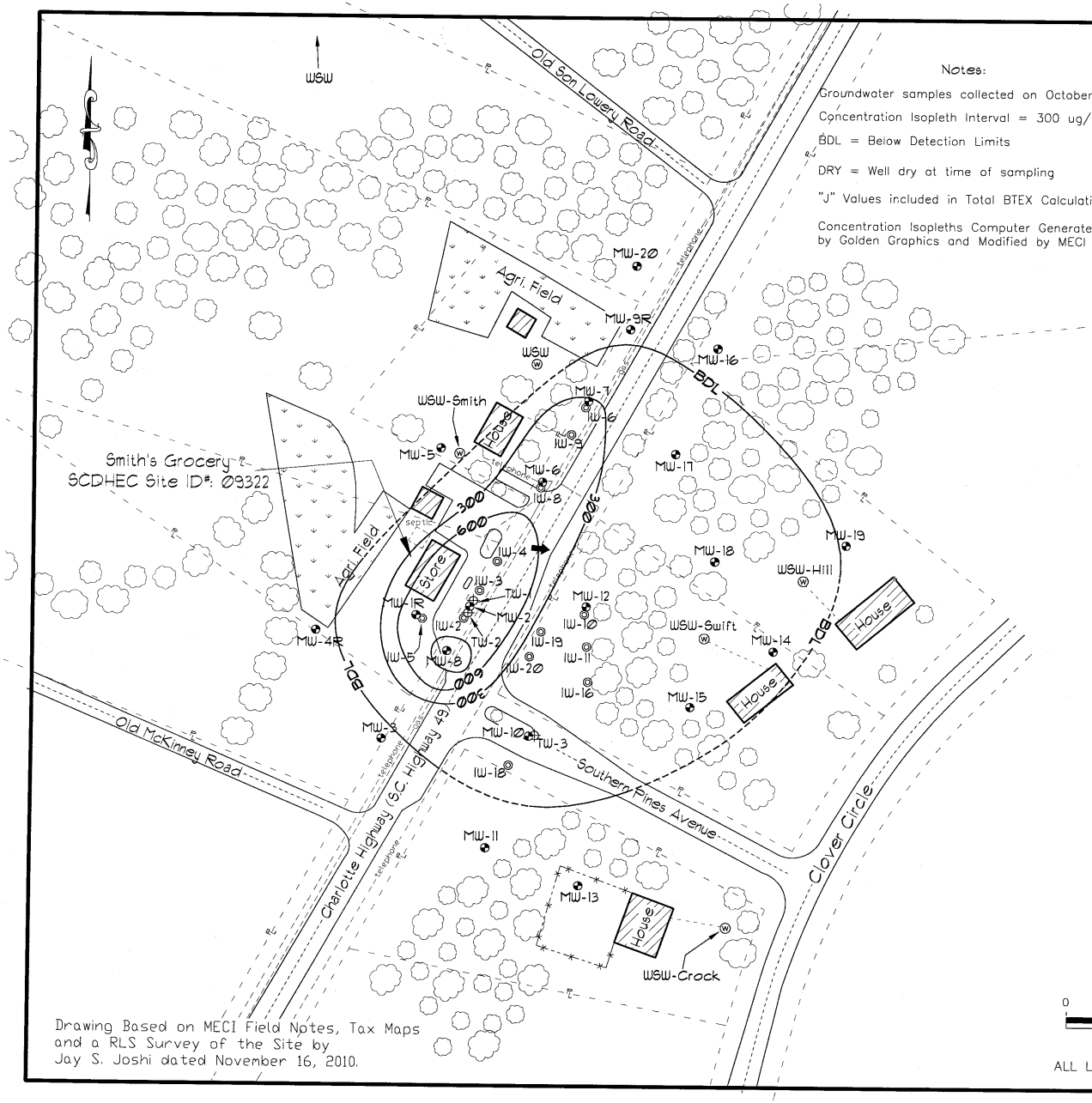
ALL LOCATIONS ARE APPROXIMATE

Total BTEX Isopleth Map

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3516
DATE October 13, 2011
FIGURE 4



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Notes:

Groundwater samples collected on October 3, 2011.

Concentration Isopleth Interval = 300 ug/l

BDL = Below Detection Limits

DRY = Well dry at time of sampling

"J" Values included in Total BTEX Calculations

Concentration Isopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

Explanation:

- Location of Watertable Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Naphthalene Concentration Isopleth (ug/l)

COC Concentration Data

Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
MW-1R	8,200	32,000	6,500	37,000	83,700	<2,000	850J	200J	18
MW-2	11,000	19,000	1,600	11,000	42,600	570J	<1,000	710J	20
MW-3	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-4R	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-5	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-6	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-8	11,000	55,000	5,400	32,000	103,400	<2,000	970J	370J	22
MW-9R	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-12	3.5J	<5.0	<5.0	<5.0	3.5J	<5.0	<5.0	2.8J	<0.022
MW-13	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-14	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-15	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	0.31J	<5.0	<5.0	<5.0	0.31J	<5.0	<5.0	<5.0	0.037
MW-17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-18	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-19	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-20	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.020
TW-1	10,000	3,100	3,500	17,000	33,600	55J	480J	<500	18
TW-2	9,300	17,000	2,100	11,000	39,400	140J	380J	310J	<0.019
TW-3	74	<5.0	<5.0	14	88	<5.0	1.7J	9.5	0.98
IW-2	22,000	56,000	4,800	27,000	109,800	<2,500	<2,500	<2,500	21
IW-3	19,000	39,000	3,900	22,000	83,900	390J	<2,000	<2,000	120
IW-4	68	12	4.1J	58	142.1J	<5.0	<5.0	<5.0	<0.019
IW-5	13,000	57,000	5,000	30,000	105,000	<2,500	<2,500	<2,500	7.8
IW-6	140	18J	87	2,200	2,445J	<50	340	<50	<0.019
IW-8	1,900	89J	2,400	8,100	12,489J	<200	480	<200	0.87
IW-9	280	250	1,100	5,100	6,730	<100	340	<100	0.38
IW-10	510	<50	210	1,500	2,200	<50	67	<50	1.7
IW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-16	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	490	<10	350	200	1,040	<10	38	58	0.36
IW-19	1,500	1,800	880	4,400	8,580	<100	150	50J	11
IW-20	3.8J	<5.0	3.2J	22	29.0J	<5.0	3.6J	<5.0	<0.020
WSW-Crack	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	0.034
WSW-Hill(Pre)	120	<5.0	<5.0	22	142	<5.0	2.4J	13	0.68
WSW-Hill(Post)	3.4J	<5.0	<5.0	<5.0	3.4J	<5.0	<5.0	1.0J	0.035
WSW-Smith	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
WSW-Swift(Pre)	190	<5.0	<5.0	75	265	0.49J	19	22	0.71
WSW-Swift(Post)	1.2J	<5.0	<5.0	<5.0	1.2J	<5.0	<5.0	1.2J	<0.020

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

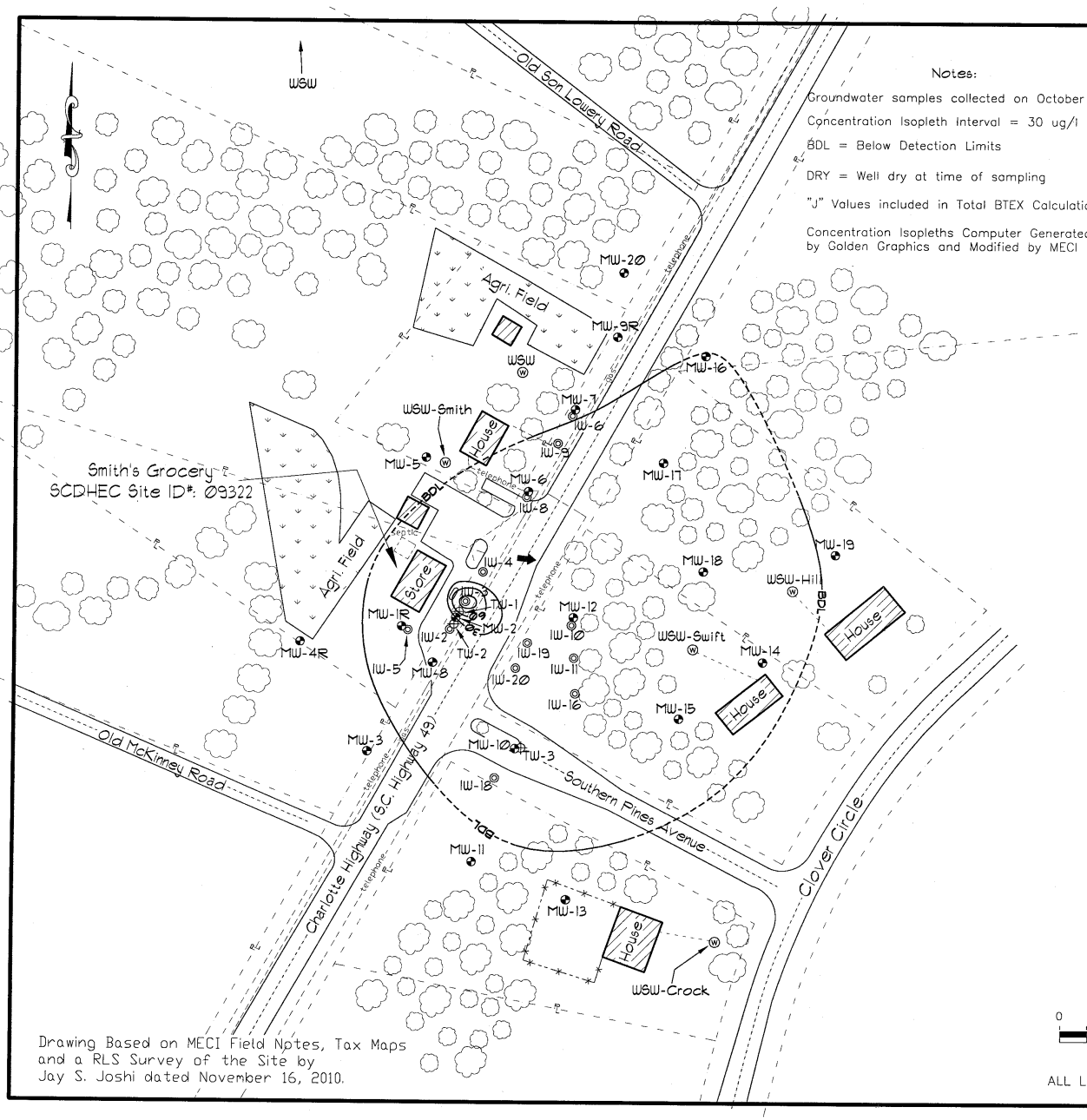
ALL LOCATIONS ARE APPROXIMATE

Naphthalene Isopleth Map

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3516
DATE October 13, 2011
FIGURE 5



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Notes:

Groundwater samples collected on October 3, 2011.

Concentration Isopleth Interval = 30 ug/l

BDL = Below Detection Limits

DRY = Well dry at time of sampling

"J" Values included in Total BTEX Calculations

Concentration Isopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

Explanation:

- Location of Watertable Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- EDB Concentration Isopleth (ug/l)

COC Concentration Data

Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	12 DCA (ug/l)	EDB (ug/l)
MW-1R	8,200	32,000	6,500	37,000	83,700	<2,000	850J	200J	18
MW-2	11,000	19,000	1,600	11,000	42,600	570J	<1,000	710J	20
MW-3	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-4R	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-5	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-6	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-8	11,000	55,000	5,400	32,000	103,400	<2,000	970J	370J	22
MW-9R	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-12	3.5J	<5.0	<5.0	<5.0	3.5J	<5.0	<5.0	2.8J	<0.022
MW-13	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-14	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-15	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	0.31J	<5.0	<5.0	<5.0	0.31J	<5.0	<5.0	<5.0	0.037
MW-17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-18	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-19	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-20	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.020
TW-1	10,000	3,100	3,500	17,000	33,600	55J	480J	<500	18
TW-2	9,300	17,000	2,100	11,000	39,400	140J	380J	310J	<0.019
TW-3	74	<5.0	<5.0	14	88	<5.0	1.7J	9.5	0.98
IW-2	22,000	56,000	4,800	27,000	109,800	<2,500	<2,500	<2,500	21
IW-3	19,000	39,000	3,900	22,000	83,900	390J	<2,000	<2,000	120
IW-4	68	12	4.1J	58	142.1J	<5.0	<5.0	<5.0	<0.019
IW-5	13,000	57,000	5,000	30,000	105,000	<2,500	<2,500	<2,500	7.8
IW-6	140	18J	87	2,200	2,445J	<50	340	<50	<0.019
IW-8	1,900	89J	2,400	8,100	12,489J	<200	480	<200	0.87
IW-9	280	250	1,100	5,100	6,730	<100	340	<100	0.38
IW-10	510	<50	210	1,500	2,200	<50	67	<50	1.7
IW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-16	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	490	<10	350	200	1,040	<10	38	58	0.36
IW-19	1,500	1,800	880	4,400	8,580	<100	150	50J	11
IW-20	3.8J	<5.0	3.2J	22	29.0J	<5.0	3.6J	<5.0	<0.020
WSW-Crock	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	0.034
WSW-Hill(Pre)	120	<5.0	<5.0	22	142	<5.0	2.4J	13	0.68
WSW-Hill(Post)	3.4J	<5.0	<5.0	<5.0	3.4J	<5.0	<5.0	1.0J	0.035
WSW-Smith	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
WSW-Swift(Pre)	190	<5.0	<5.0	75	265	0.49J	19	22	0.71
WSW-Swift(Post)	1.2J	<5.0	<5.0	<5.0	1.2J	<5.0	<5.0	1.2J	<0.020

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

EDB Isopleth Map

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3516
DATE October 13, 2011
FIGURE 6

ANALYTICAL RESULTS

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Midlands Environmental Consultants, Inc.
235 Dooley Rd
Lexington, SC 29073
Attention: Bryan Shane

Project Name: **Smith's Grocery**

Project Number: **11-3516**

Lot Number: **MJ04045**

Date Completed: **10/12/2011**

Kelly M. Maberry
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
Midlands Environmental Consultants, Inc.
Lot Number: MJ04045

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

Shealy is not NELAC certified for Phosphorus by 365.1 but is certified in SC and NC.

Shealy is not NELAC certified for VPH, but is certified for VPH in NC.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Receiving

Sample -035 for volatiles analysis contained two vials with air bubbles greater than ¼" or 6mm in diameter. The laboratory uses these vials for screening and the vials without bubbles for analysis whenever possible. Condition of samples is documented on the Sample Receipt Checklist (SRC).

GC/MS Volatiles

The LCS/LCSD associated with batch 69136 had tert-Butyl formate recovered above the acceptance limits. This demonstrates a high bias on analytical results. There were no detections for this compound in the samples associated with this batch; therefore, data quality is not impacted.

The method blank associated with sample -023 had ethanol detected at a concentration that was above the MDL but below the PQL. All samples associated with this method blank that have detections for ethanol have been flagged with a "B".

EDB/DBCP

Due to high detections for target compounds, samples -005, -012, -015, -016, -032 and -033 were diluted 50X, 20X, 40X, 200X, 50X and 200X, respectively. As a result, the associated surrogate was recovered outside of the acceptance limits. No corrective action was required, as dilutions of 5X and greater may impact surrogate recoveries.

The MS/MSD associated with sample -001 had EDB recovered outside of the acceptance limits. This demonstrates a matrix effect and data quality is not impacted.

Sample Summary

Midlands Environmental Consultants, Inc.

Lot Number: MJ04045

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	MW-1R	Aqueous	10/03/2011 1130	10/04/2011
002	MW-2	Aqueous	10/03/2011 1100	10/04/2011
003	MW-3	Aqueous	10/03/2011 1140	10/04/2011
004	MW-4R	Aqueous	10/03/2011 1135	10/04/2011
005	MW-8	Aqueous	10/03/2011 1025	10/04/2011
006	MW-9R	Aqueous	10/03/2011 1220	10/04/2011
007	MW-12	Aqueous	10/03/2011 1315	10/04/2011
008	MW-13	Aqueous	10/03/2011 1430	10/04/2011
009	MW-16	Aqueous	10/03/2011 1240	10/04/2011
010	MW-19	Aqueous	10/03/2011 1300	10/04/2011
011	MW-20	Aqueous	10/03/2011 1225	10/04/2011
012	TW-1	Aqueous	10/03/2011 1055	10/04/2011
013	TW-2	Aqueous	10/03/2011 1055	10/04/2011
014	TW-3	Aqueous	10/03/2011 1345	10/04/2011
015	IW-2	Aqueous	10/03/2011 1105	10/04/2011
016	IW-3	Aqueous	10/03/2011 1115	10/04/2011
017	IW-4	Aqueous	10/03/2011 1125	10/04/2011
018	IW-5	Aqueous	10/03/2011 1120	10/04/2011
019	IW-6	Aqueous	10/03/2011 1205	10/04/2011
020	IW-8	Aqueous	10/03/2011 1200	10/04/2011
021	IW-9	Aqueous	10/03/2011 1150	10/04/2011
022	IW-10	Aqueous	10/03/2011 1320	10/04/2011
023	WSW-Swift(Pre)	Aqueous	10/03/2011 1305	10/04/2011
024	WSW-Swift(Post)	Aqueous	10/03/2011 1305	10/04/2011
025	WSW-Hill (Pre)	Aqueous	10/03/2011 1310	10/04/2011
026	WSW-Hill (Post)	Aqueous	10/03/2011 1310	10/04/2011
027	WSW-Smith	Aqueous	10/03/2011 1211	10/04/2011
028	WSW-Crock	Aqueous	10/03/2011 1425	10/04/2011
029	IW-18	Aqueous	10/03/2011 1350	10/04/2011
030	IW-19	Aqueous	10/03/2011 1330	10/04/2011
031	IW-20	Aqueous	10/03/2011 1325	10/04/2011
032	MW-8 Dup	Aqueous	10/03/2011 1025	10/04/2011
033	IW-3 Dup.	Aqueous	10/03/2011 1115	10/04/2011
034	Field Blank	Aqueous	10/03/2011 1400	10/04/2011
035	Trip Blank	Aqueous	10/03/2011 1400	10/04/2011

(35 samples)

Executive Summary
Midlands Environmental Consultants, Inc.
Lot Number: MJ04045

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	MW-1R	Aqueous	Benzene	8260B	8200		ug/L	8
001	MW-1R	Aqueous	1,2-Dichloroethane	8260B	200	J	ug/L	8
001	MW-1R	Aqueous	Ethylbenzene	8260B	6500		ug/L	8
001	MW-1R	Aqueous	Naphthalene	8260B	850	J	ug/L	8
001	MW-1R	Aqueous	Toluene	8260B	32000		ug/L	8
001	MW-1R	Aqueous	Xylenes (total)	8260B	37000		ug/L	8
001	MW-1R	Aqueous	1,2-Dibromoethane (EDB)	8011	18		ug/L	9
002	MW-2	Aqueous	Benzene	8260B	11000		ug/L	10
002	MW-2	Aqueous	1,2-Dichloroethane	8260B	710	J	ug/L	10
002	MW-2	Aqueous	Ethylbenzene	8260B	1600		ug/L	10
002	MW-2	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	570	J	ug/L	10
002	MW-2	Aqueous	Toluene	8260B	19000		ug/L	10
002	MW-2	Aqueous	Xylenes (total)	8260B	11000		ug/L	10
002	MW-2	Aqueous	Diisopropyl ether (IPE)	8260B	870	J	ug/L	10
002	MW-2	Aqueous	tert-Amyl alcohol (TAA)	8260B	6000		ug/L	10
002	MW-2	Aqueous	tert-butyl alcohol (TBA)	8260B	1700	J	ug/L	10
002	MW-2	Aqueous	1,2-Dibromoethane (EDB)	8011	20		ug/L	11
005	MW-8	Aqueous	Benzene	8260B	11000		ug/L	16
005	MW-8	Aqueous	1,2-Dichloroethane	8260B	370	J	ug/L	16
005	MW-8	Aqueous	Ethylbenzene	8260B	5400		ug/L	16
005	MW-8	Aqueous	Naphthalene	8260B	970	J	ug/L	16
005	MW-8	Aqueous	Toluene	8260B	55000		ug/L	16
005	MW-8	Aqueous	Xylenes (total)	8260B	32000		ug/L	16
005	MW-8	Aqueous	Diisopropyl ether (IPE)	8260B	210	J	ug/L	16
005	MW-8	Aqueous	1,2-Dibromoethane (EDB)	8011	22		ug/L	17
007	MW-12	Aqueous	Benzene	8260B	3.5	J	ug/L	20
007	MW-12	Aqueous	1,2-Dichloroethane	8260B	2.8	J	ug/L	20
007	MW-12	Aqueous	Diisopropyl ether (IPE)	8260B	3.3	J	ug/L	20
007	MW-12	Aqueous	tert-Amyl alcohol (TAA)	8260B	7.0	J	ug/L	20
009	MW-16	Aqueous	Benzene	8260B	0.31	J	ug/L	24
009	MW-16	Aqueous	1,2-Dibromoethane (EDB)	8011	0.037		ug/L	25
012	TW-1	Aqueous	Benzene	8260B	10000		ug/L	30
012	TW-1	Aqueous	Ethylbenzene	8260B	3500		ug/L	30
012	TW-1	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	55	J	ug/L	30
012	TW-1	Aqueous	Naphthalene	8260B	480	J	ug/L	30
012	TW-1	Aqueous	Toluene	8260B	3100		ug/L	30
012	TW-1	Aqueous	Xylenes (total)	8260B	17000		ug/L	30
012	TW-1	Aqueous	Diisopropyl ether (IPE)	8260B	190	J	ug/L	30
012	TW-1	Aqueous	1,2-Dibromoethane (EDB)	8011	18		ug/L	31
013	TW-2	Aqueous	Benzene	8260B	9300		ug/L	32
013	TW-2	Aqueous	1,2-Dichloroethane	8260B	310	J	ug/L	32
013	TW-2	Aqueous	Ethylbenzene	8260B	2100		ug/L	32
013	TW-2	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	140	J	ug/L	32
013	TW-2	Aqueous	Naphthalene	8260B	380	J	ug/L	32
013	TW-2	Aqueous	Toluene	8260B	17000		ug/L	32

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
013	TW-2	Aqueous	Xylenes (total)	8260B	11000		ug/L	32
013	TW-2	Aqueous	Diisopropyl ether (IPE)	8260B	360	J	ug/L	32
013	TW-2	Aqueous	tert-Amyl alcohol (TAA)	8260B	3100		ug/L	32
014	TW-3	Aqueous	Benzene	8260B	74		ug/L	34
014	TW-3	Aqueous	1,2-Dichloroethane	8260B	9.5		ug/L	34
014	TW-3	Aqueous	Naphthalene	8260B	1.7	J	ug/L	34
014	TW-3	Aqueous	Xylenes (total)	8260B	14		ug/L	34
014	TW-3	Aqueous	Diisopropyl ether (IPE)	8260B	23		ug/L	34
014	TW-3	Aqueous	tert-Amyl alcohol (TAA)	8260B	130		ug/L	34
014	TW-3	Aqueous	1,2-Dibromoethane (EDB)	8011	0.98		ug/L	35
015	IW-2	Aqueous	Benzene	8260B	22000		ug/L	36
015	IW-2	Aqueous	Ethylbenzene	8260B	4800		ug/L	36
015	IW-2	Aqueous	Toluene	8260B	56000		ug/L	36
015	IW-2	Aqueous	Xylenes (total)	8260B	27000		ug/L	36
015	IW-2	Aqueous	Diisopropyl ether (IPE)	8260B	450	J	ug/L	36
015	IW-2	Aqueous	tert-Amyl alcohol (TAA)	8260B	3600	J	ug/L	36
015	IW-2	Aqueous	1,2-Dibromoethane (EDB)	8011	21		ug/L	37
016	IW-3	Aqueous	Benzene	8260B	19000		ug/L	38
016	IW-3	Aqueous	Ethylbenzene	8260B	3900		ug/L	38
016	IW-3	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	390	J	ug/L	38
016	IW-3	Aqueous	Toluene	8260B	39000		ug/L	38
016	IW-3	Aqueous	Xylenes (total)	8260B	22000		ug/L	38
016	IW-3	Aqueous	Diisopropyl ether (IPE)	8260B	650	J	ug/L	38
016	IW-3	Aqueous	tert-Amyl alcohol (TAA)	8260B	11000		ug/L	38
016	IW-3	Aqueous	1,2-Dibromoethane (EDB)	8011	120		ug/L	39
017	IW-4	Aqueous	Benzene	8260B	68		ug/L	40
017	IW-4	Aqueous	Ethylbenzene	8260B	4.1	J	ug/L	40
017	IW-4	Aqueous	Toluene	8260B	12		ug/L	40
017	IW-4	Aqueous	Xylenes (total)	8260B	58		ug/L	40
017	IW-4	Aqueous	Diisopropyl ether (IPE)	8260B	3.4	J	ug/L	40
017	IW-4	Aqueous	tert-Amyl alcohol (TAA)	8260B	6.7	J	ug/L	40
018	IW-5	Aqueous	Benzene	8260B	13000		ug/L	42
018	IW-5	Aqueous	Ethylbenzene	8260B	5000		ug/L	42
018	IW-5	Aqueous	Toluene	8260B	57000		ug/L	42
018	IW-5	Aqueous	Xylenes (total)	8260B	30000		ug/L	42
018	IW-5	Aqueous	1,2-Dibromoethane (EDB)	8011	7.8		ug/L	43
019	IW-6	Aqueous	Benzene	8260B	140		ug/L	44
019	IW-6	Aqueous	Ethylbenzene	8260B	87		ug/L	44
019	IW-6	Aqueous	Naphthalene	8260B	340		ug/L	44
019	IW-6	Aqueous	Toluene	8260B	18	J	ug/L	44
019	IW-6	Aqueous	Xylenes (total)	8260B	2200		ug/L	44
019	IW-6	Aqueous	tert-Amyl alcohol (TAA)	8260B	110	J	ug/L	44
019	IW-6	Aqueous	tert-butyl alcohol (TBA)	8260B	120	J	ug/L	44
020	IW-8	Aqueous	Benzene	8260B	1900		ug/L	46
020	IW-8	Aqueous	Ethylbenzene	8260B	2400		ug/L	46
020	IW-8	Aqueous	Naphthalene	8260B	480		ug/L	46
020	IW-8	Aqueous	Toluene	8260B	89	J	ug/L	46
020	IW-8	Aqueous	Xylenes (total)	8260B	8100		ug/L	46

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
020	IW-8	Aqueous	Diisopropyl ether (IPE)	8260B	21	J	ug/L	46
020	IW-8	Aqueous	1,2-Dibromoethane (EDB)	8011	0.87		ug/L	47
021	IW-9	Aqueous	Benzene	8260B	280		ug/L	48
021	IW-9	Aqueous	Ethylbenzene	8260B	1100		ug/L	48
021	IW-9	Aqueous	Naphthalene	8260B	340		ug/L	48
021	IW-9	Aqueous	Toluene	8260B	250		ug/L	48
021	IW-9	Aqueous	Xylenes (total)	8260B	5100		ug/L	48
021	IW-9	Aqueous	1,2-Dibromoethane (EDB)	8011	0.38		ug/L	49
022	IW-10	Aqueous	Benzene	8260B	510		ug/L	50
022	IW-10	Aqueous	Ethylbenzene	8260B	210		ug/L	50
022	IW-10	Aqueous	Naphthalene	8260B	67		ug/L	50
022	IW-10	Aqueous	Xylenes (total)	8260B	1500		ug/L	50
022	IW-10	Aqueous	Diisopropyl ether (IPE)	8260B	28	J	ug/L	50
022	IW-10	Aqueous	tert-butyl alcohol (TBA)	8260B	170	J	ug/L	50
022	IW-10	Aqueous	1,2-Dibromoethane (EDB)	8011	1.7		ug/L	51
023	WSW-Swift(Pre)	Aqueous	Benzene	8260B	190		ug/L	52
023	WSW-Swift(Pre)	Aqueous	1,2-Dichloroethane	8260B	22		ug/L	52
023	WSW-Swift(Pre)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.49	J	ug/L	52
023	WSW-Swift(Pre)	Aqueous	Naphthalene	8260B	19		ug/L	52
023	WSW-Swift(Pre)	Aqueous	Xylenes (total)	8260B	75		ug/L	52
023	WSW-Swift(Pre)	Aqueous	Diisopropyl ether (IPE)	8260B	41		ug/L	52
023	WSW-Swift(Pre)	Aqueous	Ethanol	8260B	61	BJ	ug/L	52
023	WSW-Swift(Pre)	Aqueous	tert-Amyl alcohol (TAA)	8260B	740		ug/L	52
023	WSW-Swift(Pre)	Aqueous	1,2-Dibromoethane (EDB)	8011	0.71		ug/L	53
024	WSW-Swift(Post)	Aqueous	Benzene	8260B	1.2	J	ug/L	54
024	WSW-Swift(Post)	Aqueous	1,2-Dichloroethane	8260B	1.2	J	ug/L	54
024	WSW-Swift(Post)	Aqueous	Diisopropyl ether (IPE)	8260B	0.44	J	ug/L	54
024	WSW-Swift(Post)	Aqueous	tert-Amyl alcohol (TAA)	8260B	53		ug/L	54
024	WSW-Swift(Post)	Aqueous	tert-butyl alcohol (TBA)	8260B	27		ug/L	54
025	WSW-Hill (Pre)	Aqueous	Benzene	8260B	120		ug/L	56
025	WSW-Hill (Pre)	Aqueous	1,2-Dichloroethane	8260B	13		ug/L	56
025	WSW-Hill (Pre)	Aqueous	Naphthalene	8260B	2.4	J	ug/L	56
025	WSW-Hill (Pre)	Aqueous	Xylenes (total)	8260B	22		ug/L	56
025	WSW-Hill (Pre)	Aqueous	Diisopropyl ether (IPE)	8260B	19		ug/L	56
025	WSW-Hill (Pre)	Aqueous	tert-Amyl alcohol (TAA)	8260B	160		ug/L	56
025	WSW-Hill (Pre)	Aqueous	tert-butyl alcohol (TBA)	8260B	10	J	ug/L	56
025	WSW-Hill (Pre)	Aqueous	1,2-Dibromoethane (EDB)	8011	0.68		ug/L	57
026	WSW-Hill (Post)	Aqueous	Benzene	8260B	3.4	J	ug/L	58
026	WSW-Hill (Post)	Aqueous	1,2-Dichloroethane	8260B	1.0	J	ug/L	58
026	WSW-Hill (Post)	Aqueous	Diisopropyl ether (IPE)	8260B	0.74	J	ug/L	58
026	WSW-Hill (Post)	Aqueous	tert-Amyl alcohol (TAA)	8260B	31		ug/L	58
026	WSW-Hill (Post)	Aqueous	1,2-Dibromoethane (EDB)	8011	0.035		ug/L	59
028	WSW-Crock	Aqueous	1,2-Dibromoethane (EDB)	8011	0.034		ug/L	63
029	IW-18	Aqueous	Benzene	8260B	490		ug/L	64
029	IW-18	Aqueous	1,2-Dichloroethane	8260B	58		ug/L	64
029	IW-18	Aqueous	Ethylbenzene	8260B	350		ug/L	64
029	IW-18	Aqueous	Naphthalene	8260B	38		ug/L	64
029	IW-18	Aqueous	Xylenes (total)	8260B	200		ug/L	64

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
029	IW-18	Aqueous	Diisopropyl ether (IPE)	8260B	85		ug/L	64
029	IW-18	Aqueous	tert-Amyl alcohol (TAA)	8260B	2900		ug/L	64
029	IW-18	Aqueous	tert-butyl alcohol (TBA)	8260B	280		ug/L	64
029	IW-18	Aqueous	1,2-Dibromoethane (EDB)	8011	0.36		ug/L	65
030	IW-19	Aqueous	Benzene	8260B	1500		ug/L	66
030	IW-19	Aqueous	1,2-Dichloroethane	8260B	50	J	ug/L	66
030	IW-19	Aqueous	Ethylbenzene	8260B	880		ug/L	66
030	IW-19	Aqueous	Naphthalene	8260B	150		ug/L	66
030	IW-19	Aqueous	Toluene	8260B	1800		ug/L	66
030	IW-19	Aqueous	Xylenes (total)	8260B	4400		ug/L	66
030	IW-19	Aqueous	Diisopropyl ether (IPE)	8260B	42	J	ug/L	66
030	IW-19	Aqueous	tert-Amyl alcohol (TAA)	8260B	2000		ug/L	66
030	IW-19	Aqueous	tert-butyl alcohol (TBA)	8260B	410		ug/L	66
030	IW-19	Aqueous	1,2-Dibromoethane (EDB)	8011	11		ug/L	67
031	IW-20	Aqueous	Benzene	8260B	3.8	J	ug/L	68
031	IW-20	Aqueous	Ethylbenzene	8260B	3.2	J	ug/L	68
031	IW-20	Aqueous	Naphthalene	8260B	3.6	J	ug/L	68
031	IW-20	Aqueous	Xylenes (total)	8260B	22		ug/L	68
031	IW-20	Aqueous	Diisopropyl ether (IPE)	8260B	0.80	J	ug/L	68
031	IW-20	Aqueous	tert-Amyl alcohol (TAA)	8260B	180		ug/L	68
031	IW-20	Aqueous	tert-butyl alcohol (TBA)	8260B	26		ug/L	68
032	MW-8 Dup	Aqueous	Benzene	8260B	11000		ug/L	70
032	MW-8 Dup	Aqueous	Ethylbenzene	8260B	5300		ug/L	70
032	MW-8 Dup	Aqueous	Naphthalene	8260B	1000	J	ug/L	70
032	MW-8 Dup	Aqueous	Toluene	8260B	52000		ug/L	70
032	MW-8 Dup	Aqueous	Xylenes (total)	8260B	31000		ug/L	70
032	MW-8 Dup	Aqueous	Diisopropyl ether (IPE)	8260B	220	J	ug/L	70
032	MW-8 Dup	Aqueous	tert-Amyl alcohol (TAA)	8260B	4900	J	ug/L	70
032	MW-8 Dup	Aqueous	1,2-Dibromoethane (EDB)	8011	22		ug/L	71
033	IW-3 Dup.	Aqueous	Benzene	8260B	20000		ug/L	72
033	IW-3 Dup.	Aqueous	1,2-Dichloroethane	8260B	460	J	ug/L	72
033	IW-3 Dup.	Aqueous	Ethylbenzene	8260B	3400		ug/L	72
033	IW-3 Dup.	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	470	J	ug/L	72
033	IW-3 Dup.	Aqueous	Naphthalene	8260B	760	J	ug/L	72
033	IW-3 Dup.	Aqueous	Toluene	8260B	39000		ug/L	72
033	IW-3 Dup.	Aqueous	Xylenes (total)	8260B	21000		ug/L	72
033	IW-3 Dup.	Aqueous	Diisopropyl ether (IPE)	8260B	810	J	ug/L	72
033	IW-3 Dup.	Aqueous	tert-Amyl alcohol (TAA)	8260B	15000		ug/L	72
033	IW-3 Dup.	Aqueous	1,2-Dibromoethane (EDB)	8011	130		ug/L	73

(180 detections)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-001**

Description: **MW-1R** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1130**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	400	10/06/2011 0210	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**8200**		**2000**	**80**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**200**	**J**	**2000**	**120**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**6500**		**2000**	**680**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		2000	160	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**850**	**J**	**2000**	**680**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**32000**		**2000**	**680**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**37000**		**2000**	**680**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	400	10/06/2011 0210	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		2000	160	ug/L	1
Ethanol	64-17-5	8260B	ND		40000	13000	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		8000	400	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		400	80	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		8000	2700	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		4000	80	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		8000	2700	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2000	400	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	20	10/11/2011 0936	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-001**

Description: **MW-1R** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1130**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	20	10/11/2011 0936	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**18**		**0.41**	**0.41**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		120	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-002**

Description: **MW-2** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1100**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	200	10/06/2011 1709	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**11000**		**1000**	**40**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**710**	**J**	**1000**	**60**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**1600**		**1000**	**340**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**570**	**J**	**1000**	**80**	**ug/L**	**1**
Naphthalene	91-20-3	8260B	ND		1000	340	ug/L	1
Toluene	**108-88-3**	**8260B**	**19000**		**1000**	**340**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**11000**		**1000**	**340**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		91	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	200	10/06/2011 1709	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**870**	**J**	**1000**	**80**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		20000	6600	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		4000	200	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		200	40	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**6000**		**4000**	**1300**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		2000	40	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**1700**	**J**	**4000**	**1300**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		1000	200	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		91	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	20	10/11/2011 0958	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-002**

Description: **MW-2** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1100**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	20	10/11/2011 0958	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**20**		**0.39**	**0.39**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		69	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-003**

Description: **MW-3** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1140**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2124	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2124	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1204	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-003**

Description: **MW-3** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1140**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1204	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		117	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-004**

Description: **MW-4R** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1135**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 1837	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 1837	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1226	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-004**

Description: **MW-4R** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1135**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1226	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		117	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-005**

Description: **MW-8** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1025**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	400	10/06/2011 0231	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**11000**		**2000**	**80**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**370**	**J**	**2000**	**120**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**5400**		**2000**	**680**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		2000	160	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**970**	**J**	**2000**	**680**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**55000**		**2000**	**680**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**32000**		**2000**	**680**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	400	10/06/2011 0231	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**210**	**J**	**2000**	**160**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		40000	13000	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		8000	400	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		400	80	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		8000	2700	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		4000	80	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		8000	2700	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2000	400	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-005**

Description: **MW-8** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1025**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1248	NCM	10/07/2011 1050	69288
2	8011	8011	50	10/12/2011 1545	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**22**		**0.97**	**0.97**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		79	57-137	N	625	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-006**

Description: **MW-9R** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1220**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 1859	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 1859	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1310	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-006**

Description: **MW-9R** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1220**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1310	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		106	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-007**

Description: **MW-12** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1315**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 1920	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**3.5**	**J**	**5.0**	**0.20**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**2.8**	**J**	**5.0**	**0.30**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 1920	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**3.3**	**J**	**5.0**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**7.0**	**J**	**20**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1332	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-007**

Description: **MW-12** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1315**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1332	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.022	0.022	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		100	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-008**

Description: **MW-13** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1430**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 1940	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		93	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 1940	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		93	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1354	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **MJ04045-008**

Description: **MW-13**
Matrix: **Aqueous**

Date Sampled: **10/03/2011 1430**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1354	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		105	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-009**

Description: **MW-16** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1240**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2001	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**0.31**	**J**	**5.0**	**0.20**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2001	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1417	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-009**

Description: **MW-16** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1240**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1417	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.037**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		108	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-010**

Description: **MW-19** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1300**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2022	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		94	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2022	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		94	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1439	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-010**

Description: **MW-19** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1300**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1439	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		101	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-011**

Description: **MW-20** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1225**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2043	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2043	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		101	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1501	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-20**
Date Sampled: **10/03/2011 1225**
Date Received: **10/04/2011**

Laboratory ID: **MJ04045-011**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1501	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		107	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: Midlands Environmental Consultants, Inc.
Laboratory ID: MJ04045-012
Description: TW-1
Matrix: Aqueous
Date Sampled: 10/03/2011 1055
Date Received: 10/04/2011

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	10/06/2011 1732	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**10000**		**500**	**20**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		500	30	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**3500**		**500**	**170**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**55**	**J**	**500**	**40**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**480**	**J**	**500**	**170**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**3100**		**500**	**170**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**17000**		**500**	**170**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		90	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	10/06/2011 1732	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**190**	**J**	**500**	**40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		10000	3300	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		2000	100	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		2000	670	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		1000	20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		2000	670	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		500	100	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		90	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-012**

Description: **TW-1** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1055**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1524	NCM	10/07/2011 1050	69288
2	8011	8011	20	10/11/2011 1020	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**18**		**0.39**	**0.39**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		123	57-137	N	226	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-013**

Description: **TW-2** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1055**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	10/06/2011 1755	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**9300**		**500**	**20**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**310**	**J**	**500**	**30**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**2100**		**500**	**170**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**140**	**J**	**500**	**40**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**380**	**J**	**500**	**170**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**17000**		**500**	**170**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**11000**		**500**	**170**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		91	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	10/06/2011 1755	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**360**	**J**	**500**	**40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		10000	3300	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		2000	100	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**3100**		**2000**	**670**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		1000	20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		2000	670	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		500	100	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		91	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/11/2011 1042	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-013**

Description: **TW-2** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1055**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/11/2011 1042	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		129	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-014**

Description: **TW-3** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1345**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2104	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**74**		**5.0**	**0.20**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**9.5**		**5.0**	**0.30**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**1.7**	**J**	**5.0**	**1.7**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**14**		**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2104	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**23**		**5.0**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**130**		**20**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	2	10/11/2011 1104	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **MJ04045-014**

Description: **TW-3**
Matrix: **Aqueous**

Date Sampled: **10/03/2011 1345**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	2	10/11/2011 1104	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.98**		**0.038**	**0.038**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		100	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-015**

Description: **IW-2** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1105**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	500	10/06/2011 1818	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**22000**		**2500**	**100**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		2500	150	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**4800**		**2500**	**850**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		2500	200	ug/L	1
Naphthalene	91-20-3	8260B	ND		2500	850	ug/L	1
Toluene	**108-88-3**	**8260B**	**56000**		**2500**	**850**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**27000**		**2500**	**850**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		89	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	500	10/06/2011 1818	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**450**	**J**	**2500**	**200**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		50000	17000	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	500	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	100	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**3600**	**J**	**10000**	**3400**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		5000	100	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	3400	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2500	500	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		89	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-015**

Description: **IW-2** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1105**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1631	NCM	10/07/2011 1050	69288
2	8011	8011	40	10/11/2011 1446	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**21**		**0.79**	**0.79**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		77	57-137	N	0.00	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-016**

Description: **IW-3** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1115**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	400	10/06/2011 1842	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**19000**		**2000**	**80**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		2000	120	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**3900**		**2000**	**680**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**390**	J	**2000**	**160**	**ug/L**	**1**
Naphthalene	91-20-3	8260B	ND		2000	680	ug/L	1
Toluene	**108-88-3**	**8260B**	**39000**		**2000**	**680**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**22000**		**2000**	**680**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		90	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	400	10/06/2011 1842	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**650**	J	**2000**	**160**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		40000	13000	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		8000	400	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		400	80	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**11000**		**8000**	**2700**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		4000	80	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		8000	2700	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2000	400	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		90	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-016**

Description: **IW-3** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1115**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1653	NCM	10/07/2011 1050	69288
2	8011	8011	200	10/11/2011 1148	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**120**		**3.9**	**3.9**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		84	57-137	N	0.00	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-017**

Description: **IW-4** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1125**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2145	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**68**		**5.0**	**0.20**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**4.1**	**J**	**5.0**	**1.7**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	**108-88-3**	**8260B**	**12**		**5.0**	**1.7**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**58**		**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2145	JJG		69165

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**3.4**	**J**	**5.0**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**6.7**	**J**	**20**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		101	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1716	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **MJ04045-017**

Description: **IW-4**
Matrix: **Aqueous**

Date Sampled: **10/03/2011 1125**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1716	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		107	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-018**

Description: **IW-5** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1120**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	500	10/06/2011 1905	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**13000**		**2500**	**100**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		2500	150	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**5000**		**2500**	**850**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		2500	200	ug/L	1
Naphthalene	91-20-3	8260B	ND		2500	850	ug/L	1
Toluene	**108-88-3**	**8260B**	**57000**		**2500**	**850**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**30000**		**2500**	**850**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		89	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	500	10/06/2011 1905	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		2500	200	ug/L	1
Ethanol	64-17-5	8260B	ND		50000	17000	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	500	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	100	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		10000	3400	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		5000	100	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	3400	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2500	500	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		89	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	10	10/11/2011 1211	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-018**

Description: **IW-5** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1120**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	10	10/11/2011 1211	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**7.8**		**0.19**	**0.19**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		73	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

N = Recovery is out of criteria

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-019**

Description: **IW-6** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1205**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	10/06/2011 1928	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**140**		**50**	**2.0**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		50	3.0	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**87**		**50**	**17**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	4.0	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**340**		**50**	**17**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**18**	**J**	**50**	**17**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**2200**		**50**	**17**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		92	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	10/06/2011 1928	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		50	4.0	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	330	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		200	10	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		10	2.0	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**110**	**J**	**200**	**67**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		100	2.0	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**120**	**J**	**200**	**67**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		50	10	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		92	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1800	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **MJ04045-019**
Description: **IW-6**
Matrix: **Aqueous**
Date Sampled: **10/03/2011 1205**
Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1800	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		114	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-020**

Description: **IW-8** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1200**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	40	10/06/2011 1951	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**1900**		**200**	**8.0**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		200	12	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**2400**		**200**	**68**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		200	16	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**480**		**200**	**68**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**89**	**J**	**200**	**68**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**8100**		**200**	**68**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		93	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	40	10/06/2011 1951	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**21**	**J**	**200**	**16**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		4000	1300	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		800	40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		40	8.0	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		800	270	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		400	8.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		800	270	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		200	40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		93	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1823	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-020**

Description: **IW-8** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1200**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 1823	NCM	10/07/2011 1050	69288

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.87**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		131	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-021**

Description: **IW-9** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1150**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/06/2011 2014	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**280**		**100**	**4.0**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		100	6.0	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**1100**		**100**	**34**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		100	8.0	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**340**		**100**	**34**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**250**		**100**	**34**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**5100**		**100**	**34**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		91	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/06/2011 2014	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		100	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		2000	660	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		400	20	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		20	4.0	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		400	130	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		200	4.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		400	130	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		91	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	10/12/2011 0427	NCM	10/11/2011 1557	69468

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-021**

Description: **IW-9** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1150**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	10/12/2011 0427	NCM	10/11/2011 1557	69468

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.38**		**0.019**	**0.019**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		115	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-022**

Description: **IW-10** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1320**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	10/06/2011 2036	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**510**		**50**	**2.0**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		50	3.0	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**210**		**50**	**17**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	4.0	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**67**		**50**	**17**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		50	17	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**1500**		**50**	**17**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		92	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	10/06/2011 2036	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**28**	**J**	**50**	**4.0**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		1000	330	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		200	10	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		10	2.0	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		200	67	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		100	2.0	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**170**	**J**	**200**	**67**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		50	10	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		92	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	2	10/11/2011 1317	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-022**

Description: **IW-10** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1320**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	2	10/11/2011 1317	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**1.7**		**0.043**	**0.043**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		123	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

N = Recovery is out of criteria

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-023**

Description: **WSW-Swift(Pre)** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1305**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/06/2011 2005	BM		69227

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**190**		**5.0**	**0.20**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**22**		**5.0**	**0.30**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.49**	**J**	**5.0**	**0.40**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**19**		**5.0**	**1.7**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**75**		**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/06/2011 2005	BM		69227
2	5030B	8260B	1	10/12/2011 1608	BM		69546

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**41**		**5.0**	**0.40**	**ug/L**	**1**
Ethanol	**64-17-5**	**8260B**	**61**	**BJ**	**100**	**33**	**ug/L**	**2**
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**740**		**20**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130		102	70-130
1,2-Dichloroethane-d4		98	70-130		98	70-130
Toluene-d8		100	70-130		100	70-130

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-023**

Description: **WSW-Swift(Pre)** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1305**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2122	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.71**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		105	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-024**

Description: **WSW-Swift(Post)** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1305**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2239	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**1.2**	**J**	**5.0**	**0.20**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**1.2**	**J**	**5.0**	**0.30**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2239	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**0.44**	**J**	**5.0**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**53**		**20**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**27**		**20**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2145	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-024**

Description: **WSW-Swift(Post)** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1305**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2145	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		103	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-025**

Description: **WSW-Hill (Pre)** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1310**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2300	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**120**		**5.0**	**0.20**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**13**		**5.0**	**0.30**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**2.4**	**J**	**5.0**	**1.7**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**22**		**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2300	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**19**		**5.0**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**160**		**20**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**10**	**J**	**20**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2207	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **MJ04045-025**

Description: **WSW-Hill (Pre)**
Matrix: **Aqueous**

Date Sampled: **10/03/2011 1310**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2207	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.68**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		130	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2321	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**3.4**	**J**	**5.0**	**0.20**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**1.0**	**J**	**5.0**	**0.30**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2321	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**0.74**	**J**	**5.0**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**31**		**20**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2229	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-Hill (Post)**
Date Sampled: **10/03/2011 1310**
Date Received: **10/04/2011**

Laboratory ID: **MJ04045-026**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2229	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.035**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		105	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-027**

Description: **WSW-Smith** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1211**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2342	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 2342	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2252	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-027**

Description: **WSW-Smith** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1211**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2252	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		112	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-028**

Description: **WSW-Crock** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1425**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/06/2011 0004	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/06/2011 0004	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2314	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-028**

Description: **WSW-Crock** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1425**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2314	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.034**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		113	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-029**

Description: **IW-18** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1350**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	2	10/06/2011 2059	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**490**		**10**	**0.40**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**58**		**10**	**0.60**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**350**		**10**	**3.4**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		10	0.80	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**38**		**10**	**3.4**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		10	3.4	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**200**		**10**	**3.4**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		90	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	2	10/06/2011 2059	BM		69237

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**85**		**10**	**0.80**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		200	66	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		40	2.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		2.0	0.40	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**2900**		**40**	**13**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		20	0.40	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**280**		**40**	**13**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		10	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		90	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2337	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-029**

Description: **IW-18** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1350**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/10/2011 2337	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.36		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		129	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-030**

Description: **IW-19** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1330**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/06/2011 0108	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**1500**		**100**	**4.0**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**50**	**J**	**100**	**6.0**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**880**		**100**	**34**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		100	8.0	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**150**		**100**	**34**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**1800**		**100**	**34**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**4400**		**100**	**34**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/06/2011 0108	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**42**	**J**	**100**	**8.0**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		2000	660	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		400	20	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		20	4.0	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**2000**		**400**	**130**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		200	4.0	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**410**		**400**	**130**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	10	10/11/2011 1339	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-030**

Description: **IW-19** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1330**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	10	10/11/2011 1339	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**11**		**0.23**	**0.23**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		74	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-031**

Description: **IW-20** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1325**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/06/2011 0045	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**3.8**	**J**	**5.0**	**0.20**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**3.2**	**J**	**5.0**	**1.7**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**3.6**	**J**	**5.0**	**1.7**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**22**		**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/06/2011 0045	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**0.80**	**J**	**5.0**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**180**		**20**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**26**		**20**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/11/2011 0021	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-031**

Description: **IW-20** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1325**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/11/2011 0021	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		112	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-032**

Description: **MW-8 Dup** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1025**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	400	10/06/2011 0128	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**11000**		**2000**	**80**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		2000	120	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**5300**		**2000**	**680**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		2000	160	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**1000**	**J**	**2000**	**680**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**52000**		**2000**	**680**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**31000**		**2000**	**680**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	400	10/06/2011 0128	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**220**	**J**	**2000**	**160**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		40000	13000	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		8000	400	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		400	80	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**4900**	**J**	**8000**	**2700**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		4000	80	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		8000	2700	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2000	400	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **MJ04045-032**

Description: **MW-8 Dup**
Matrix: **Aqueous**

Date Sampled: **10/03/2011 1025**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/11/2011 0043	NCM	10/07/2011 1050	69295
2	8011	8011	50	10/12/2011 1317	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	22		0.97	0.97	ug/L	2

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
1,1,1,2-Tetrachloroethane		92	57-137	N	628	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-033**

Description: **IW-3 Dup.** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1115**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	400	10/06/2011 0149	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**20000**		**2000**	**80**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**460**	**J**	**2000**	**120**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**3400**		**2000**	**680**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**470**	**J**	**2000**	**160**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**760**	**J**	**2000**	**680**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**39000**		**2000**	**680**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**21000**		**2000**	**680**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	400	10/06/2011 0149	JJG		69163

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**810**	**J**	**2000**	**160**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		40000	13000	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		8000	400	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		400	80	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**15000**		**8000**	**2700**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		4000	80	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		8000	2700	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2000	400	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-033**

Description: **IW-3 Dup.** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1115**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/11/2011 0106	NCM	10/07/2011 1050	69295
2	8011	8011	200	10/11/2011 1424	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**130**		**3.8**	**3.8**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137	N	0.00	57-137

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **M3040[illegible]**

Description: **Field Blank** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1400**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 1147	BM		69136

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		91	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 1147	BM		69136

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		111	70-130
Toluene-d8		91	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/11/2011 0128	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **MJ04045-034**

Description: **Field Blank**
Matrix: **Aqueous**

Date Sampled: **10/03/2011 1400**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/11/2011 0128	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		100	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **MJ04045-035**

Description: **Trip Blank** Matrix: **Aqueous**

Date Sampled: **10/03/2011 1400**

Date Received: **10/04/2011**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 1210	BM		69136

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	0.30	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		89	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/05/2011 1210	BM		69136

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		111	70-130
Toluene-d8		89	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/11/2011 0150	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit

ND = Not detected at or above the MDL

B = Detected in the method blank

J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

H = Out of holding time

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **MJ04045-035**

Description: **Trip Blank**
Matrix: **Aqueous**

Date Sampled: **10/03/2011 1400**

Date Received: **10/04/2011**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/11/2011 0150	NCM	10/07/2011 1050	69295

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		103	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
H = Out of holding time

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69136-001
Batch: 69136
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	5.0	0.20	ug/L	10/05/2011 0907
1,2-Dichloroethane	ND		1	5.0	0.30	ug/L	10/05/2011 0907
Ethylbenzene	ND		1	5.0	1.7	ug/L	10/05/2011 0907
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	10/05/2011 0907
Naphthalene	ND		1	5.0	1.7	ug/L	10/05/2011 0907
Toluene	ND		1	5.0	1.7	ug/L	10/05/2011 0907
Xylenes (total)	ND		1	5.0	1.7	ug/L	10/05/2011 0907

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		90	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: MQ69136-002
Batch: 69136
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	43		1	85	70-130	10/05/2011 0738
1,2-Dichloroethane	50	50		1	99	70-130	10/05/2011 0738
Ethylbenzene	50	51		1	103	70-130	10/05/2011 0738
Methyl tertiary butyl ether (MTBE)	50	49		1	98	70-130	10/05/2011 0738
Naphthalene	50	44		1	88	70-130	10/05/2011 0738
Toluene	50	45		1	91	70-130	10/05/2011 0738
Xylenes (total)	100	100		1	104	70-130	10/05/2011 0738

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		91	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: MQ69136-003
Batch: 69136
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	43		1	85	0.20	70-130	20	10/05/2011 0800
1,2-Dichloroethane	50	48		1	97	2.4	70-130	20	10/05/2011 0800
Ethylbenzene	50	51		1	102	0.70	70-130	20	10/05/2011 0800
Methyl tertiary butyl ether (MTBE)	50	48		1	96	2.6	70-130	20	10/05/2011 0800
Naphthalene	50	43		1	86	2.1	70-130	20	10/05/2011 0800
Toluene	50	46		1	92	1.5	70-130	20	10/05/2011 0800
Xylenes (total)	100	100		1	104	0.43	70-130	20	10/05/2011 0800

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		91	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69136-001
Batch: 69136
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	6.7	ug/L	10/05/2011 0907
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/05/2011 0907
tert-Butyl formate (TBF)	ND		1	5.0	1.0	ug/L	10/05/2011 0907
Diisopropyl ether (IPE)	ND		1	5.0	0.40	ug/L	10/05/2011 0907
3,3-Dimethyl-1-butanol	ND		1	20	1.0	ug/L	10/05/2011 0907
Ethanol	ND		1	100	33	ug/L	10/05/2011 0907
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.20	ug/L	10/05/2011 0907
tert-butyl alcohol (TBA)	ND		1	20	6.7	ug/L	10/05/2011 0907

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		90	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: MQ69136-002
Batch: 69136
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	980		1	98	70-130	10/05/2011 0738
tert-Amyl methyl ether (TAME)	50	51		1	102	70-130	10/05/2011 0738
tert-Butyl formate (TBF)	250	340	N	1	137	70-130	10/05/2011 0738
Diisopropyl ether (IPE)	50	45		1	90	70-130	10/05/2011 0738
3,3-Dimethyl-1-butanol	1000	880		1	88	70-130	10/05/2011 0738
Ethanol	5000	5400		1	107	70-130	10/05/2011 0738
Ethyl-tert-butyl ether (ETBE)	50	47		1	93	70-130	10/05/2011 0738
tert-butyl alcohol (TBA)	1000	960		1	96	70-130	10/05/2011 0738

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		91	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: MQ69136-003
Batch: 69136
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	930		1	93	5.1	70-130	20	10/05/2011 0800
tert-Amyl methyl ether (TAME)	50	51		1	101	0.53	70-130	20	10/05/2011 0800
tert-Butyl formate (TBF)	250	330	N	1	133	2.5	70-130	20	10/05/2011 0800
Diisopropyl ether (IPE)	50	44		1	88	1.5	70-130	20	10/05/2011 0800
3,3-Dimethyl-1-butanol	1000	850		1	85	4.5	70-130	20	10/05/2011 0800
Ethanol	5000	5100		1	101	6.0	70-130	20	10/05/2011 0800
Ethyl-tert-butyl ether (ETBE)	50	45		1	90	2.9	70-130	20	10/05/2011 0800
tert-butyl alcohol (TBA)	1000	910		1	91	5.1	70-130	20	10/05/2011 0800

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		91	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69163-001
Batch: 69163
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	5.0	0.20	ug/L	10/05/2011 2130
1,2-Dichloroethane	ND		1	5.0	0.30	ug/L	10/05/2011 2130
Ethylbenzene	ND		1	5.0	1.7	ug/L	10/05/2011 2130
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	10/05/2011 2130
Naphthalene	ND		1	5.0	1.7	ug/L	10/05/2011 2130
Toluene	ND		1	5.0	1.7	ug/L	10/05/2011 2130
Xylenes (total)	ND		1	5.0	1.7	ug/L	10/05/2011 2130

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: MQ69163-002
Batch: 69163
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	48		1	96	70-130	10/05/2011 2007
1,2-Dichloroethane	50	45		1	90	70-130	10/05/2011 2007
Ethylbenzene	50	50		1	100	70-130	10/05/2011 2007
Methyl tertiary butyl ether (MTBE)	50	50		1	101	70-130	10/05/2011 2007
Naphthalene	50	57		1	114	70-130	10/05/2011 2007
Toluene	50	48		1	97	70-130	10/05/2011 2007
Xylenes (total)	100	100		1	102	70-130	10/05/2011 2007

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: MQ69163-003
Batch: 69163
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	49		1	98	1.2	70-130	20	10/05/2011 2028
1,2-Dichloroethane	50	46		1	92	2.1	70-130	20	10/05/2011 2028
Ethylbenzene	50	49		1	98	1.6	70-130	20	10/05/2011 2028
Methyl tertiary butyl ether (MTBE)	50	49		1	99	1.6	70-130	20	10/05/2011 2028
Naphthalene	50	56		1	112	1.5	70-130	20	10/05/2011 2028
Toluene	50	48		1	96	0.32	70-130	20	10/05/2011 2028
Xylenes (total)	100	100		1	100	2.0	70-130	20	10/05/2011 2028

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69163-001
Batch: 69163
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	6.7	ug/L	10/05/2011 2130
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/05/2011 2130
tert-Butyl formate (TBF)	ND		1	5.0	1.0	ug/L	10/05/2011 2130
Diisopropyl ether (IPE)	ND		1	5.0	0.40	ug/L	10/05/2011 2130
3,3-Dimethyl-1-butanol	ND		1	20	1.0	ug/L	10/05/2011 2130
Ethanol	ND		1	100	33	ug/L	10/05/2011 2130
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.20	ug/L	10/05/2011 2130
tert-butyl alcohol (TBA)	ND		1	20	6.7	ug/L	10/05/2011 2130

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: MQ69163-002
Batch: 69163
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1300		1	129	70-130	10/05/2011 2007
tert-Amyl methyl ether (TAME)	50	50		1	101	70-130	10/05/2011 2007
tert-Butyl formate (TBF)	250	300		1	120	70-130	10/05/2011 2007
Diisopropyl ether (IPE)	50	50		1	100	70-130	10/05/2011 2007
3,3-Dimethyl-1-butanol	1000	1300		1	128	70-130	10/05/2011 2007
Ethanol	5000	5500		1	110	70-130	10/05/2011 2007
Ethyl-tert-butyl ether (ETBE)	50	47		1	94	70-130	10/05/2011 2007
tert-butyl alcohol (TBA)	1000	1200		1	116	70-130	10/05/2011 2007

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: MQ69163-003
Batch: 69163
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1200		1	123	4.1	70-130	20	10/05/2011 2028
tert-Amyl methyl ether (TAME)	50	49		1	99	1.7	70-130	20	10/05/2011 2028
tert-Butyl formate (TBF)	250	300		1	118	1.4	70-130	20	10/05/2011 2028
Diisopropyl ether (IPE)	50	48		1	95	4.7	70-130	20	10/05/2011 2028
3,3-Dimethyl-1-butanol	1000	1300		1	129	1.0	70-130	20	10/05/2011 2028
Ethanol	5000	6000		1	120	9.0	70-130	20	10/05/2011 2028
Ethyl-tert-butyl ether (ETBE)	50	47		1	93	0.74	70-130	20	10/05/2011 2028
tert-butyl alcohol (TBA)	1000	1100		1	114	1.8	70-130	20	10/05/2011 2028

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: MJ04045-001DU
Batch: 69163
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	ND	ND		400	0.00	20	10/06/2011 0252
tert-Amyl methyl ether (TAME)	ND	ND		400	0.00	20	10/06/2011 0252
tert-Butyl formate (TBF)	ND	ND		400	0.00	20	10/06/2011 0252
Diisopropyl ether (IPE)	ND	ND		400	0.00	20	10/06/2011 0252
3,3-Dimethyl-1-butanol	ND	ND		400	0.00	20	10/06/2011 0252
Ethanol	ND	ND		400	0.00	20	10/06/2011 0252
Ethyl-tert-butyl ether (ETBE)	ND	ND		400	0.00	20	10/06/2011 0252
tert-butyl alcohol (TBA)	ND	ND		400	0.00	20	10/06/2011 0252

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS - MS

Sample ID: MJ04045-005MS
Batch: 69163
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	ND	400000	400000		400	99	70-130	10/06/2011 0313
tert-Amyl methyl ether (TAME)	ND	20000	20000		400	98	70-130	10/06/2011 0313
tert-Butyl formate (TBF)	ND	100000	110000		400	113	70-130	10/06/2011 0313
Diisopropyl ether (IPE)	210	20000	21000		400	103	70-130	10/06/2011 0313
3,3-Dimethyl-1-butanol	ND	400000	410000		400	102	70-130	10/06/2011 0313
Ethanol	ND	2000000	1800000		400	90	70-130	10/06/2011 0313
Ethyl-tert-butyl ether (ETBE)	ND	20000	19000		400	94	70-130	10/06/2011 0313
tert-butyl alcohol (TBA)	ND	400000	360000		400	89	70-130	10/06/2011 0313

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		103	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69165-001
Batch: 69165
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	5.0	0.20	ug/L	10/05/2011 1723
1,2-Dichloroethane	ND		1	5.0	0.30	ug/L	10/05/2011 1723
Ethylbenzene	ND		1	5.0	1.7	ug/L	10/05/2011 1723
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	10/05/2011 1723
Naphthalene	ND		1	5.0	1.7	ug/L	10/05/2011 1723
Toluene	ND		1	5.0	1.7	ug/L	10/05/2011 1723
Xylenes (total)	ND		1	5.0	1.7	ug/L	10/05/2011 1723

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: MQ69165-002
Batch: 69165
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	45		1	91	70-130	10/05/2011 1512
1,2-Dichloroethane	50	50		1	100	70-130	10/05/2011 1512
Ethylbenzene	50	47		1	95	70-130	10/05/2011 1512
Methyl tertiary butyl ether (MTBE)	50	51		1	102	70-130	10/05/2011 1512
Naphthalene	50	54		1	109	70-130	10/05/2011 1512
Toluene	50	47		1	94	70-130	10/05/2011 1512
Xylenes (total)	100	99		1	99	70-130	10/05/2011 1512

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69165-001
Batch: 69165
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	6.7	ug/L	10/05/2011 1723
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/05/2011 1723
tert-Butyl formate (TBF)	ND		1	5.0	1.0	ug/L	10/05/2011 1723
Diisopropyl ether (IPE)	ND		1	5.0	0.40	ug/L	10/05/2011 1723
3,3-Dimethyl-1-butanol	ND		1	20	1.0	ug/L	10/05/2011 1723
Ethanol	ND		1	100	33	ug/L	10/05/2011 1723
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.20	ug/L	10/05/2011 1723
tert-butyl alcohol (TBA)	ND		1	20	6.7	ug/L	10/05/2011 1723

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: MQ69165-002
Batch: 69165
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1000		1	103	70-130	10/05/2011 1512
tert-Amyl methyl ether (TAME)	50	50		1	100	70-130	10/05/2011 1512
tert-Butyl formate (TBF)	250	320		1	130	70-130	10/05/2011 1512
Diisopropyl ether (IPE)	50	48		1	96	70-130	10/05/2011 1512
3,3-Dimethyl-1-butanol	1000	1000		1	100	70-130	10/05/2011 1512
Ethanol	5000	5300		1	106	70-130	10/05/2011 1512
Ethyl-tert-butyl ether (ETBE)	50	51		1	101	70-130	10/05/2011 1512
tert-butyl alcohol (TBA)	1000	970		1	97	70-130	10/05/2011 1512

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69227-001
Batch: 69227
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	5.0	0.20	ug/L	10/06/2011 1331
1,2-Dichloroethane	ND		1	5.0	0.30	ug/L	10/06/2011 1331
Ethylbenzene	ND		1	5.0	1.7	ug/L	10/06/2011 1331
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	10/06/2011 1331
Naphthalene	ND		1	5.0	1.7	ug/L	10/06/2011 1331
Toluene	ND		1	5.0	1.7	ug/L	10/06/2011 1331
Xylenes (total)	ND		1	5.0	1.7	ug/L	10/06/2011 1331

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: MQ69227-002
Batch: 69227
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	47		1	94	70-130	10/06/2011 1206
1,2-Dichloroethane	50	42		1	85	70-130	10/06/2011 1206
Ethylbenzene	50	46		1	93	70-130	10/06/2011 1206
Methyl tertiary butyl ether (MTBE)	50	46		1	92	70-130	10/06/2011 1206
Naphthalene	50	54		1	107	70-130	10/06/2011 1206
Toluene	50	45		1	91	70-130	10/06/2011 1206
Xylenes (total)	100	95		1	95	70-130	10/06/2011 1206

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: MQ69227-003
Batch: 69227
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	47		1	93	0.90	70-130	20	10/06/2011 1227
1,2-Dichloroethane	50	43		1	86	1.6	70-130	20	10/06/2011 1227
Ethylbenzene	50	47		1	94	1.7	70-130	20	10/06/2011 1227
Methyl tertiary butyl ether (MTBE)	50	47		1	93	1.1	70-130	20	10/06/2011 1227
Naphthalene	50	52		1	104	3.4	70-130	20	10/06/2011 1227
Toluene	50	46		1	92	1.4	70-130	20	10/06/2011 1227
Xylenes (total)	100	96		1	96	0.95	70-130	20	10/06/2011 1227

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69227-001
Batch: 69227
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	6.7	ug/L	10/06/2011 1331
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/06/2011 1331
tert-Butyl formate (TBF)	ND		1	5.0	1.0	ug/L	10/06/2011 1331
Diisopropyl ether (IPE)	ND		1	5.0	0.40	ug/L	10/06/2011 1331
3,3-Dimethyl-1-butanol	**1.0**	**J**	**1**	**20**	**1.0**	**ug/L**	**10/06/2011 1331**
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.20	ug/L	10/06/2011 1331
tert-butyl alcohol (TBA)	ND		1	20	6.7	ug/L	10/06/2011 1331

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: MQ69227-002
Batch: 69227
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1000		1	101	70-130	10/06/2011 1206
tert-Amyl methyl ether (TAME)	50	45		1	90	70-130	10/06/2011 1206
tert-Butyl formate (TBF)	250	280		1	111	70-130	10/06/2011 1206
Diisopropyl ether (IPE)	50	43		1	87	70-130	10/06/2011 1206
3,3-Dimethyl-1-butanol	1000	1100		1	107	70-130	10/06/2011 1206
Ethyl-tert-butyl ether (ETBE)	50	43		1	86	70-130	10/06/2011 1206
tert-butyl alcohol (TBA)	1000	1000		1	102	70-130	10/06/2011 1206

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: MQ69227-003
Batch: 69227
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	990		1	99	1.7	70-130	20	10/06/2011 1227
tert-Amyl methyl ether (TAME)	50	46		1	92	2.3	70-130	20	10/06/2011 1227
tert-Butyl formate (TBF)	250	290		1	114	2.4	70-130	20	10/06/2011 1227
Diisopropyl ether (IPE)	50	45		1	90	3.7	70-130	20	10/06/2011 1227
3,3-Dimethyl-1-butanol	1000	1100		1	107	0.018	70-130	20	10/06/2011 1227
Ethyl-tert-butyl ether (ETBE)	50	44		1	88	1.7	70-130	20	10/06/2011 1227
tert-butyl alcohol (TBA)	1000	970		1	97	4.9	70-130	20	10/06/2011 1227

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		102	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69237-001
Batch: 69237
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	5.0	0.20	ug/L	10/06/2011 1148
1,2-Dichloroethane	ND		1	5.0	0.30	ug/L	10/06/2011 1148
Ethylbenzene	ND		1	5.0	1.7	ug/L	10/06/2011 1148
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	10/06/2011 1148
Naphthalene	ND		1	5.0	1.7	ug/L	10/06/2011 1148
Toluene	ND		1	5.0	1.7	ug/L	10/06/2011 1148
Xylenes (total)	ND		1	5.0	1.7	ug/L	10/06/2011 1148

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		89	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: MQ69237-002
Batch: 69237
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	42		1	83	70-130	10/06/2011 1017
1,2-Dichloroethane	50	46		1	93	70-130	10/06/2011 1017
Ethylbenzene	50	49		1	98	70-130	10/06/2011 1017
Methyl tertiary butyl ether (MTBE)	50	46		1	92	70-130	10/06/2011 1017
Naphthalene	50	42		1	84	70-130	10/06/2011 1017
Toluene	50	44		1	87	70-130	10/06/2011 1017
Xylenes (total)	100	99		1	99	70-130	10/06/2011 1017

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		90	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69237-001
Batch: 69237
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	6.7	ug/L	10/06/2011 1148
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/06/2011 1148
tert-Butyl formate (TBF)	ND		1	5.0	1.0	ug/L	10/06/2011 1148
Diisopropyl ether (IPE)	ND		1	5.0	0.40	ug/L	10/06/2011 1148
3,3-Dimethyl-1-butanol	ND		1	20	1.0	ug/L	10/06/2011 1148
Ethanol	ND		1	100	33	ug/L	10/06/2011 1148
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.20	ug/L	10/06/2011 1148
tert-butyl alcohol (TBA)	ND		1	20	6.7	ug/L	10/06/2011 1148

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		89	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: MQ69237-002
Batch: 69237
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	900		1	90	70-130	10/06/2011 1017
tert-Amyl methyl ether (TAME)	50	47		1	95	70-130	10/06/2011 1017
tert-Butyl formate (TBF)	250	320		1	129	70-130	10/06/2011 1017
Diisopropyl ether (IPE)	50	43		1	87	70-130	10/06/2011 1017
3,3-Dimethyl-1-butanol	1000	830		1	83	70-130	10/06/2011 1017
Ethanol	5000	4900		1	97	70-130	10/06/2011 1017
Ethyl-tert-butyl ether (ETBE)	50	44		1	88	70-130	10/06/2011 1017
tert-butyl alcohol (TBA)	1000	890		1	89	70-130	10/06/2011 1017

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		90	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: MQ69546-001
Batch: 69546
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ethanol	**76**	**J**	**1**	**100**	**33**	**ug/L**	**10/12/2011 0819**

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: MQ69546-002
Batch: 69546
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ethanol	5000	4200		1	84	70-130	10/12/2011 0654

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MB

Sample ID: MQ69288-001
Batch: 69288
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/07/2011 1050

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	10/10/2011 0951

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		95	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: MQ69288-002
Batch: 69288
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/07/2011 1050

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.26		1	106	60-140	10/10/2011 1013

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		97	57-137

EDB & DBCP by Microextraction - MS

Sample ID: MJ04045-001MS
Batch: 69288
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/07/2011 1050

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	18	0.25	16	N	1	246	60-140	10/10/2011 1057

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		119	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MSD

Sample ID: MJ04045-001MD
Batch: 69288
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/07/2011 1050

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	18	0.25	16	N	1	174	1.1	60-140	20	10/10/2011 1119

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		114	57-137

EDB & DBCP by Microextraction - MB

Sample ID: MQ69295-001
Batch: 69295
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/07/2011 1050

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	10/10/2011 1908

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		108	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: MQ69295-002
Batch: 69295
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/07/2011 1050

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.27		1	108	60-140	10/10/2011 1930

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		105	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MS

Sample ID: MJ04045-021MS
Batch: 69295
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/07/2011 1050

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.38	0.24	0.61		1	60	60-140	10/10/2011 2015

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		126	57-137

EDB & DBCP by Microextraction - MSD

Sample ID: MJ04045-021MD
Batch: 69295
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/07/2011 1050

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.38	0.24	0.68		1	90	11	60-140	20	10/10/2011 2038

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		133	57-137

EDB & DBCP by Microextraction - MB

Sample ID: MQ69468-001
Batch: 69468
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/11/2011 1557

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	10/12/2011 0343

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		101	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - LCS

Sample ID: MQ69468-002
Batch: 69468
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/11/2011 1557

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.29		1	116	60-140	10/12/2011 0405

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		106	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY **Chain of Custody Record** Number 04472

Client: MECI	Report to Contact: B. Shane	Sampler (Printed Name): Kyle Pudney	Cooler No: 14267
Address: 235-B Dooley Rd	Telephone No. / Fax No. / Email: 803-808-2043	Waybill No:	Page: 1 of 5
City: Lexington / State: SC / Zip Code: 29073	Preservative: 1. Unpres 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH		Number of Containers / Bottle (See Instructions on back) / Preservative
Project Name: Smith's Grocery			Lot No. MJ07.45
Project Number	P.O Number		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: BTEX, Naphthalene (8260B)	1,2 DCA	8 oxygenates	Ethanol	EDB (8011)	Remarks / Cooler ID
MW-1R	10/3	11:30	G	X					X	X	X	X	X	
MW-2		11:00												4 VOA ONLY
MW-3		11:40												5 VOA ONLY
MW-4R		11:35												
~~MW-5~~		DRY												DRY
~~MW-6~~		DRY												DRY
~~MW-7~~		DRY												DRY
MW-8		16:25												
MW-9R	10/3	12:20	G	X					X	X	X	X	X	
~~MW-10~~		DRY												DRY

Turn Around Time Required (Prior lab approval required for expedited TAT): ☑ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify):

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time
1. Relinquished by / Samples received by	10/4/14	1220
2. Relinquished by		
3. Relinquished by		
4. Relinquished by	10/4/14	1615

	Date	Time
1. Received by	10/4/14	1220
2. Received by		
3. Received by		
4. Laboratory Received by	10/4/14	1715

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check): ☑ Yes ☐ No ☐ Ice Pack — Receipt Temp: 1.0 °C — Temp. Blank: ☐ Y / ☐ N

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 04469

Client: MECI	Report to Contact: B. Shaw	Sampler (Printed Name): Kyle Pudney	Quote No.
Address: 215-B Dooley Rd	Telephone No. / Fax No. / Email: 803-808-2943	Waybill No.	Page: 2 of 5
City: Lexington	State: SC	Zip Code: 29073	Preservative: 1. Ungres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCl; 3. H2SO4 6. Na Thio.
Project Name: Smith's Grocery			Lot No. MJ0405
Project Number	P.O Number		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW DW WW S Other	Analysis: BTEX/MTBE (8260B)	1,2 DCA	8 oxygenates	Ethanol	EDB (8011)	Number of Containers	Bottle (See instructions on back)	Preservative	Remarks / Cooler ID
~~MW-11~~		DRY											DRY
MW-12	10/3	13:15	G	GW	X	X	X	X	X	3	VOA	ONLY	3 VOA ONLY
MW-13		14:30											
~~MW-14~~		DRY											DRY
~~MW-15~~		DRY											DRY
MW-16		12:40											
~~MW-17~~		DRY											DRY
~~MW-18~~		DRY											DRY
MW-19		13:00											
MW-20	10/3	12:25	G	GW	X	X	X	X	X				

Turn Around Time Required (Prior lab approval required for expedited TAT): ☒ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time
1. Relinquished by (Field Sampler):	10/4/11	1230
2. Relinquished by:		
3. Relinquished by:		
4. Relinquished by:	10/4/11	1415

	Date	Time
1. Received by:	10/4/11	1230
2. Received by:		
3. Received by:		
4. Laboratory Received by:	10/4/11	1415

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check): ☑ Yes ☐ No ☐ Ice Pack — Receipt Temp: 2.0 °C — Temp. Blank: ☐ Y / ☑ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com
Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY *Chain of Custody Record*

Number 04470

Client: MECI	Report to Contact: B. Shane	Sampler (Printed Name): Kyle Pudney	Quote No.
Address: 235-B Dooley Rd.	Telephone No. / Fax No. / Email: 803-799-2093	Waybill No.	Page: 3 of 5
City: Lexington	State: SC	Zip Code: 29073	Number of Containers
Project Name: Smith's Grocery	Project Number	P.O Number	Bottle (See instructions on back)
Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH			Preservative
			Lot No. NJ64445

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: BTEX/MTBE (8260B)	1,2 DCA	Oxygenates	Ethanol	EDB (504)	Remarks / Cooler ID
TW-1	10/3	10:55	G	X					X	X	X	X	X	
TW-2		10:55												
TW-3		13:45												
IW-2		11:05												
IW-3		11:15												
IW-4		11:25												
IW-5		11:20												
IW-6		12:05												
IW-8		12:00												
IW-9	10/3	11:50	G	X					X	X	X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐Non Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time
1. Relinquished by / Sampler	10/4/11	1230
2. Relinquished by	Date	Time
3. Relinquished by	Date	Time
4. Relinquished by	Date 10/4/11	Time 1615

	Date	Time
1. Received by	10/4/11	1230
2. Received by	Date	Time
3. Received by	Date	Time
4. Laboratory Received by	Date 10/4/11	Time 1615

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle): ☐Yes ☐No ☐Ice Pack
Receipt Temp: 1.0 °C
Temp. Blank: ☐Y ☐N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com
Level I Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY *Chain of Custody Record*

Number 04471

Client: MECI	Report to Contact: B. Shealy	Sampler (Printed Name): Kyle Pudney	Quote No.
Address: 235-B Dooley Rd.	Telephone No. / Fax No. / Email: 803-808-2043	Waybill No.	Page: 4 of 5
City: Lexington State: SC Zip Code: 29072	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H_2SO_4 4. HNO_3 5. HCl 6. Na Thio. 7. NaOH		Number of Containers
Project Name: Smiths Grocery			Bottle (See Instructions on back)
Project Number	P.O Number		Preservative
			Lot No. MJ04045

Sample ID / Description (Comments for each sample may be completed on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	CW	WW	S	Other	Analysis: BTEX/MTBE/TMBE (8260B)	1,2 DCA	% Oxygenates	Ethanol	EDB (8011)	Remarks / Cooler ID
IW-10	10/3	13:20	G	X					X	X	X	X	X	
IW-11		DRY												DRY
IW-16		DRY												DRY
WSW-[redacted] (Pre)		13:05												
WSW-[redacted] (Post)		13:05												
WSW-Hill (Pre)		13:10												
WSW-Hill (Post)		13:10												
WSW-[redacted] Smith		12:11												
WSW-Creek		14:25												
IW-18	10/3	13:50	G	X					X	X	X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time
1. Relinquished by Sampler	10/4/16	1230
2. Relinquished by		
3. Relinquished by		
4. Relinquished by	10/4/16	1610

	Date	Time
1. Received by	10/4/16	1230
2. Received by		
3. Received by		
4. Laboratory Received by	10/4/16	1615

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☑ Yes ☐ No ☐ Ice Pack
Receipt Temp: 1.0 °C
Temp. Blank ☐ Y / ☑ N

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY **Chain of Custody Record** Number 04108

Client: MECI	Report to Contact: B. Shane	Sampler (Printed Name): Kyle Padney	Quote No.
Address: 235-B Dooley Rd.	Telephone No. / Fax No. / Email: 803-808-2043	Waybill No.	Page 5 of 5
City: Lexington / State: SC / Zip Code: 29073	Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		Number of Containers / Bottle (See Instructions on back) / Preservative
Project Name: Smiths Grocery			Lot No. MJ0000
Project Number	P.O Number	Matrix: G=Grab C=Composite; GW DW WW S Other	Analysis: BTEX, MTBE, naphthalene (8260B); 1,2 DCA; 8 oxygenates; Ethanol; EDB (8011)

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	Grab	Composite	GW	DW	WW	S	Other	BTEX, MTBE, naphthalene (8260B)	1,2 DCA	8 oxygenates	Ethanol	EDB (8011)	Remarks / Cooler ID
IW-19	10/3	13:30	G		X					X	X	X	X	X	
IW-20		17:25													
MW-8 Dup.		10:25													
IW-3 Dup.		11:15													
Field Blank		14:00													
Trip Blank	10/3	14:00	G		X					X	X	X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify) 1. Requested by / Sample

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time
1. Relinquished by	10/4/14	1230
2. Relinquished by		
3. Relinquished by		
4. Relinquished by	10/4/14	1611

	Date	Time
1. Received by	10/4/14	1230
2. Received by		
3. Received by		
4. Laboratory Received by	10/4/14	1613

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☐Yes ☐No ☐Ice Pack — Receipt Temp. 1.0 °C — Temp. Blank ☐Y ☐N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com
Level I Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

FIELD DATA INFORMATION SHEETS

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 10/3/2011

Field Personnel: John Bryant, Kyle Pudney, Gavin Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-1

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Free Product (DFP)			feet
Depth to Ground Water (DGW)	37.34		feet
Total Well Depth (TWD)	61		feet
Length of the water column (LWC=TWD-DGW)		23.66	feet
1 casing volume (CV=LWC X C)= _____ X	0.163	3.86	gallons
3 casing volume (3 X CV)=	3	11.57	gallons

Total Volume of Water Purged Before Sampling 12 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	10:40	10:45	10:50	10:55				
pH (s.u.)	5.67	5.42	5.30	5.25				
Specific Conductivity (µmhos/cm)	327.6	307.9	308.1	305.7				
Water Temperature (°C)	21.1	19.3	19.0	19.1				
Dissolved Oxygen	1.77	2.52	2.70	2.56				
PID readings, if required								

Remarks: Sample Time: 10:55

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 10/3/2011

Field Personnel: John Bryant, Kyle Pudney, Gavin Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-2

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	37.40			feet
Total Well Depth (TWD)	88			feet
Length of the water column (LWC=TWD-DGW)			50.6	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	8.25	gallons
3 casing volume (3 X CV)=		3	24.74	gallons

Total Volume of Water Purged Before Sampling 17 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	10:40	10:49	10:55					
pH (s.u.)	8.14	7.38	7.42					
Specific Conductivity (µmhos/cm)	143.0	348.9	352.1					
Water Temperature (°C)	20.0	19.0	18.8					
Dissolved Oxygen	4.68	3.71	3.62					
PID readings, if required								

Remarks: Sample Time: 10:55 Parameters with in 10%

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 10/3/2011

Field Personnel: John Bryant, Kyle Pudney, Gavin Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-3

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Free Product (DFP)			feet
Depth to Ground Water (DGW)	42.24		feet
Total Well Depth (TWD)	71		feet
Length of the water column (LWC=TWD-DGW)		28.76	feet
1 casing volume (CV=LWC X C)= ____ X	0.163	4.69	gallons
3 casing volume (3 X CV)=	3	14.06	gallons

Total Volume of Water Purged Before Sampling 7 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:40	13:45						
pH (s.u.)	5.89	5.42						
Specific Conductivity (µmhos/cm)	53.8	63.2						
Water Temperature (°C)	18.8	18.6						
Dissolved Oxygen	1.10	1.46						
PID readings, if required								

Remarks: Sample Time: 13:45 Dry @ 7.0 Gallons

WASTE DISPOSAL MANIFEST

Midlands
Environmental
Consultants, Inc.

October 13, 2011

Re: Treatment of Purge Water
Smith Grocery
York, South Carolina
SCDHEC Site ID Number 09322
MECI Project Number 11-3516

To Whom It May Concern;

Midlands Environmental Consultants, Inc. is providing the following letter as certification that treatment of the referenced purge water complied with the conditions of "Proposed Conditions for Use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater", as described in the following:

Applicability:

Groundwater treated was obtained as a result development of wells and sampling.

Conditions:

1. The purge/bail water from all wells is mixed before usage of the Activated Carbon Unit.
2. No free-product was detected in any of the purge water drums.
3. Analytical results of from well sampling show average concentrations of petroleum hydrocarbon constituents less than 5000 parts per billion (ppb) Benzene and less than 20,000 ppb total BTEX.
4. The existing carbon pack will be replaced/reactivated every 5,000 gallons.
5. Record of usage is maintained by Contractor.
6. Any and all recommendations and conditions issued by the Manufacturer have been adhered to.
7. Any and all recommendations and conditions (even on a site by site basis) issued by the SCDHEC must be adhered to.

All purge waters were treated on-site using an up-flow treatment drum loaded with 30 pounds of activated carbon. Carbon will be loaded to a maximum of 3 pounds of total organic compounds or 5,000 gallons of development/purge water, whichever occurs first.

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

A total of 36.0 gallons were treated on October 03, 2011 at the referenced site.

Midlands Environmental also tracks cumulative organic compounds adsorbed on the activated carbon to ensure the capacity of carbon mass is not over-charged. This data is available upon request.

Should you have any questions or comments, please contact the undersigned.

Sincerely,
Midlands Environmental Consultants, Inc.

Courtney M. Sanders
Staff Biologist

Midlands
Environmental
Consultants, Inc.

October 27, 2011

UST
NOV 0 3 2011
PROGRAM

Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Report of Granular Activation Carbon (GAC) Unit Filter Change
Smith's Grocery
S.C. Highway 49
York, South Carolina
SCDHEC Site ID# 09322, CA # 42511
MECI Project Number 11-3643
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

On behalf of Ms. Lois Smith, Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached Report of Granular Activation Carbon (GAC) Unit Filter Change for the referenced site. This report describes assessment activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

PROJECT INFORMATION

The subject site (Smith's Grocery) is located near the intersection of S.C. Highway 49 and Southern Pines Road, York, York County, South Carolina (see Figure 1). The site consists of an approximately 2.00 acre parcel of land (see Figure 2), and currently occupied by a convenience store. The site formerly maintained one 6,000 gallon gasoline UST and one 8,000 gallon gasoline UST. The South Carolina Department of Health and Environmental Control (SCDHEC) reported release of petroleum product from two single walled underground storage tanks (UST) at the subject site in June of 1993, which was confirmed in September of 1996.

The above project information is based on SCDHEC files.

UST
55 tech
DOCKETING

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

FIELD EXPLORATION

Field exploration conducted at the site include:

- Granular Activated Carbon (GAC) Unit Filter Change.

GRANULAR ACTIVATED CARBON (GAC) UNIT FILTER CHANGE AND REPAIR

Analytical results from the October 3, 2011 sampling event indicate that "break through" is occurring on the GAC units installed on both WSW-Swift and WSW-Hill. These analytical results indicated Benzene concentrations at 1.2J micrograms per liter and 1,2 DCA concentrations at 1.2J micrograms per liter in the Post-GAC samples obtained from WSW-Swift. Furthermore, analytical results from the Post-GAC samples obtained from WSW-Hill indicated Benzene concentrations at 3.4J micrograms per liter, 1,2 DCA concentrations at 1.0J micrograms per liter, and EDB concentration at 0.035 micrograms per liter.

On October 26, 2011, MECI personnel mobilized to the subject site to change the GAC filters on two water supply wells (WSW-Swift and WSW-Hill). Both GAC filters were changed in accordance with SCDHEC regulations and the manufacturers (EcoWater Systems) guidelines. The spent gravel/carbon media was removed from both GAC units and the inside the carbon vessels were thoroughly cleaned. Both GAC units were refilled with 24 lbs of gravel (covering the bottom distributor) and completed with an approximate two cubic feet of new liquid phase activated carbon or until there was an approximate 12" inches of freeboard space between the top of activated carbon and the top distributor. After the filter change, each unit was allowed to properly backwash and the electronic component was reset to reflect appropriate time/backwash cycle (3 day -1,000 gallon cycle).

Prior to the October 26, 2011 GAC filter change, the most recent GAC unit filter change was completed on August 9, 2011. Based on time frame between the August 9, 2011 GAC filter change and the analytical results obtained during the October 3, 2011 sampling event, MECI recommends changing the GAC unit filters on a two month schedule.

Midlands Environmental appreciates the opportunity to offer our professional environmental services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

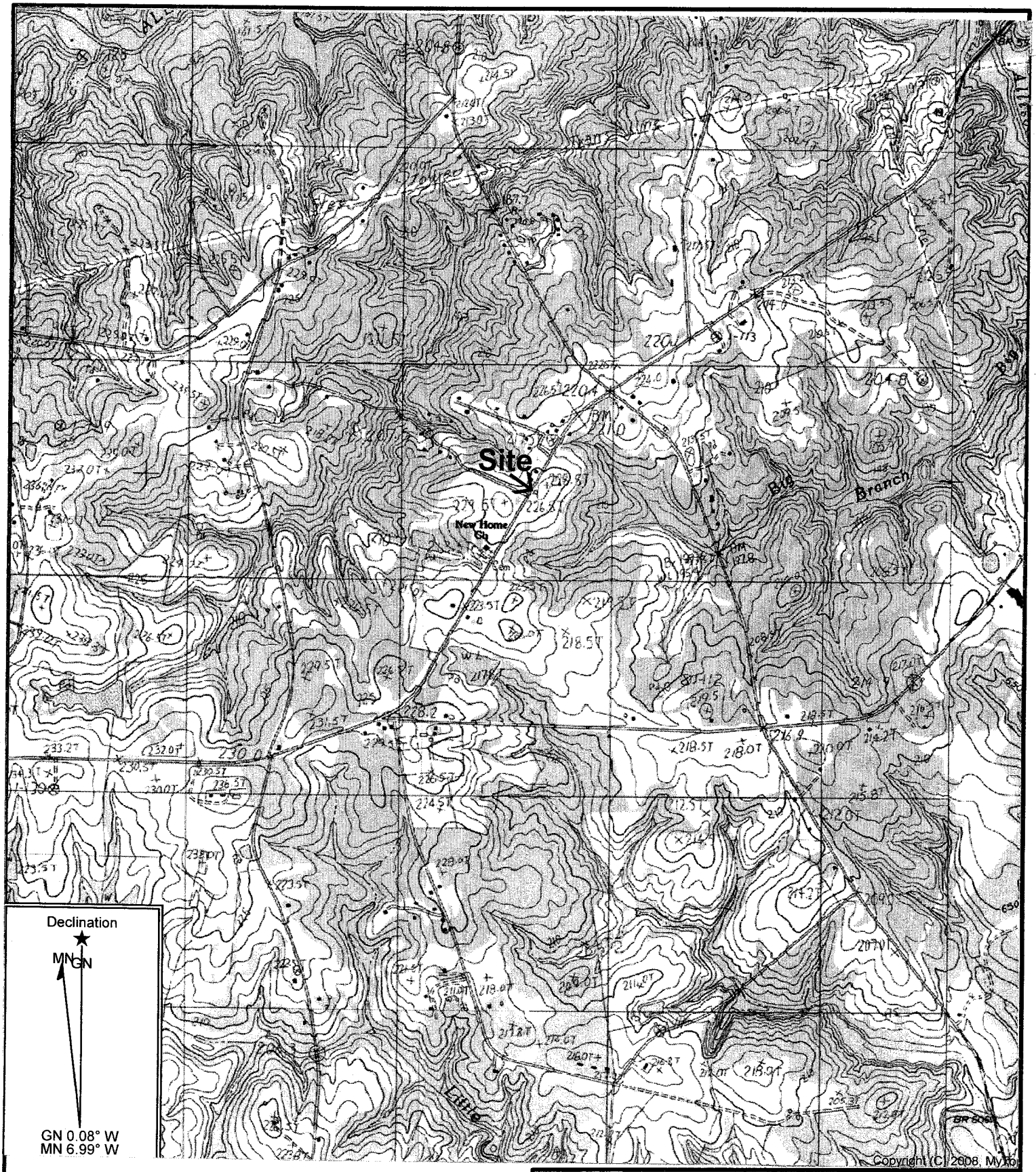
Sincerely,
Midlands Environmental Consultants, Inc.

Courtney M. Sanders
Staff Biologist

Jeff L. Coleman
Senior Scientist

Attachments

FIGURES



Copyright (C) 2008, MyTop

GRAPHIC SCALE

0 1000 2000 4000

1IN = 2000FT

Reference: Clover, South Carolina
USGS 7.5 Min. Quad
Countour Interval – 3 Meters

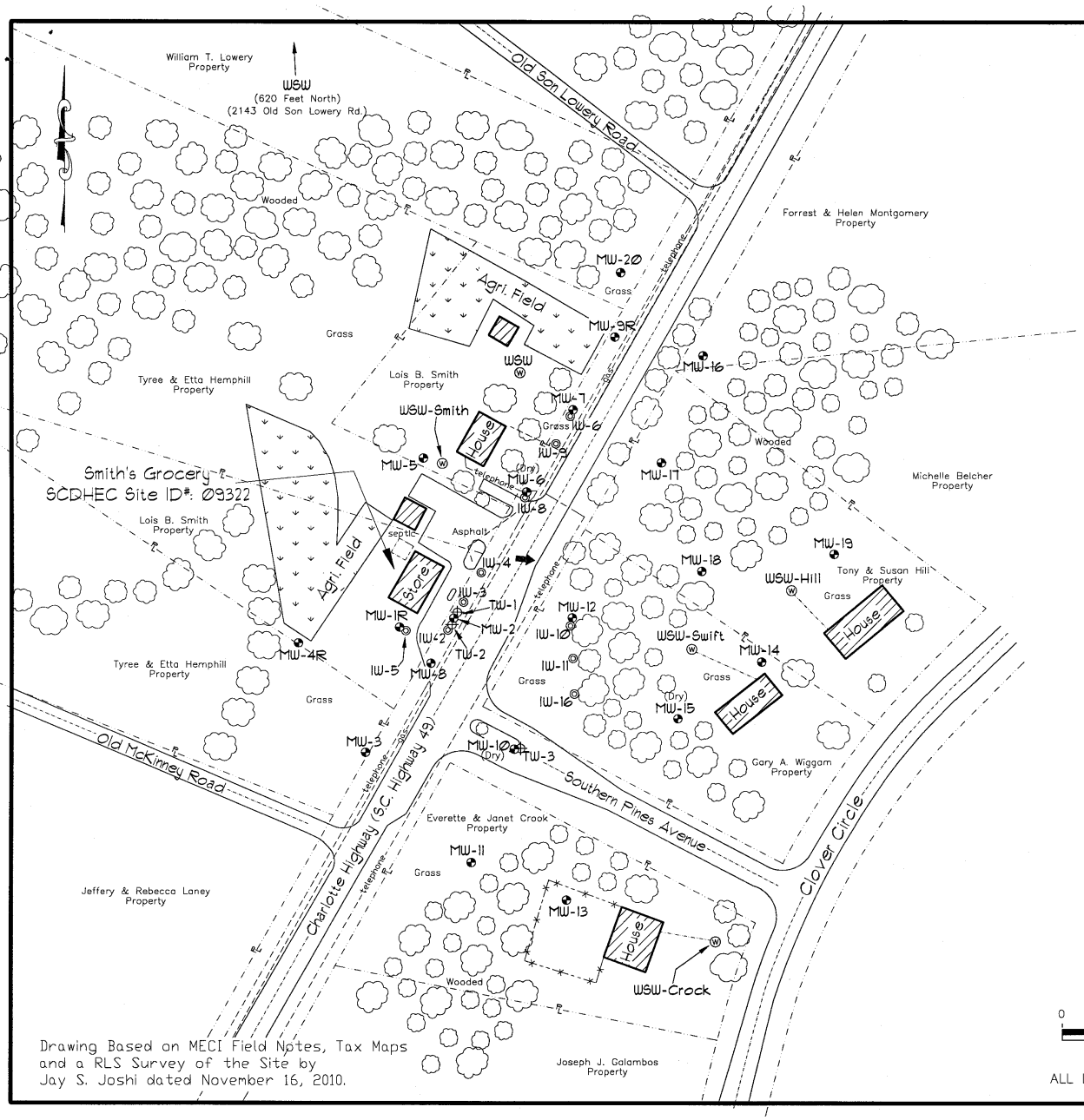
Midlands Environmental Consultants, Inc.

Site Location

Smith's Grocery
South Carolina Highway 49, Clover, SC
SCDHEC Site ID# 09322

Figure 1

MECI 11-3643



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Buried Sewer
- Under Ground Telephone
- Fence

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3643
DATE October 27, 2011
FIGURE 2

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

NOV 29 20

UST
56 tech
DOCKETING

Re: QAPP Contractor Addendum Directive for Additional Assessment
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Groundwater Sampling Report received October 26, 2011
York County

Dear Mrs. Smith:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (SCDHEC) reviewed the referenced report. The report indicates presence of chemicals of concern in the groundwater and the extent of the plume is not defined.

In accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, sampling of the existing monitoring wells, replacement of dry monitoring wells, and the installation of additional monitoring wells as outlined in the UST Quality Assurance Program Plan (QAPP) is necessary. The additional assessment must be conducted in accordance with the UST Management Division QAPP and must be conducted in compliance with all applicable regulations. A copy of SCDHEC QAPP for the Underground Storage Tank Division is available at http://www.dhec.sc.gov/environment/lwm.

Please have your contractor complete and submit the QAPP Contractor Addendum and Cost Agreement within thirty (30) days of the date of this letter. The cost agreement should include sampling of all water supply wells within 1,000 feet of this facility. Every component may not be necessary to complete the above scope of work. The State Underground Petroleum Environmental Response Bank (SUPERB) Account allowable cost for each component is included on the Assessment Component Cost Agreement Form. **Please note that approval from the Department must be issued before work begins.**

On all correspondence regarding this site, please reference UST Permit #09322. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6397, fax me at (803) 896-6245, or e-mail me at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

cc: Bryan Shane, Midlands Environmental Consultants, Inc., PO Box 854, Lexington, SC, 29071 (w/ enc.)
Technical File (w/ enc.)

Midlands Environmental Consultants, Inc.

January 5, 2012

UST
JAN 0 9 2012
PROGRAM

Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

UST
DOCKETING

Subject: QAPP Contractor Addendum – Revision 0
Smith's Grocery
SC Highway 49
York, South Carolina
SCDHEC Site ID Number 09322
MECI Project Number 11-3700
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached QAPP Contractor Addendum for the referenced site.

On December 7, 2011, MECI personnel performed a site visit to the subject site to evaluate site conditions, locate water supply wells and identify potential problems for future sampling activities.

If you have any question or comments please feel free to contact us at 803-808-2043.

Sincerely,
Midlands Environmental Consultants, Inc.

Courtney M. Sanders
Staff Biologist

Brendon P. Kelly
Project Scientist

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SC DHEC UST Programmatic QAPP
For
Smith's Grocery, SCDHEC Site ID# 09322

SC Highway 49, York, South Carolina

Prepared by:
Jeff L. Coleman
Senior Scientist
Midlands Environmental Consultants, Inc.
(Certified Site Rehabilitation Contractor UCC-0009)
235-B Dooley Road
Lexington, SC 29073
(803)808-2043

Date: January 5, 2012

Approvals

Debra Thoma SC DHEC Project Manager	_____ Signature	Date_____
Brendon P. Kelly Contractor QA Manager	_____ Signature	Date 1/9/12
Bryan T. Shane, P.G. Site Rehabilitation Contractor	_____ Signature	Date 1-9-12
Michael Woodrum Laboratory Director	_____ Signature	Date 1/5/12

A2 Table of Contents

A1 Title and Approval Page 1
A2 Table of Contents 2
A3 Distribution List 3
Table 1A Addendum Distribution List 3
A4 Project Organization 3
Table 2A Addendum Role Identification and Contact Information 4
Figure 1A Organizational Chart 4
A5 Problem Definition/Background 4
A6 Project/Task Description 5
A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs) 5
A8 Training and Certificates 6
Table 3A Required Training and Licenses 6
A9 Documents and Records 7
Table 4A Record Identification, Storage, and Disposal 8
Section B Measurement/Data Acquisition 8
B1 Sampling Process/Experimental Design 8
Table 5A Sampling Activities 8
B2 Sampling Methods 8
Table 6A Field Corrective Action 10
B3 Sample Handling and Custody 10
B4 Analytical Methods 11
Table 7A Analytical SOPs and Referenced Methods 12
Table 8A SOP Abbreviation Key 12
Table 9A Corrective Action Procedures 13
Table 10A Sample Disposal Procedures 14
B5 Quality Control Requirements: 14
B6 Field Instrument and Equipment Testing, Inspection and Maintenance 14
Table 11A Instrument and Equipment Maintenance 15
Table 12A Instrument and Equipment Inspection 16
B7 Instrument Calibration and Frequency 16
Table 13A Instrument Calibration Criteria and Corrective Action 18
B8 Inspection/Acceptance Requirements for Supplies and Consumables 18
Table 14A List of Consumables and Acceptance Criteria 19
B9 Data Acquisition Requirements (Non-Direct Measurements) 19
Table 15A Non-Direct Measurements 19
B10 Data Management 19
Section C Assessment and Oversight 20
C1 Assessment and Response Actions 20
C2 Reports to Management 21
Section D Data Validation and Usability 21

A3 Distribution List

Name	Title	Organization/Address	Telephone Number	Fax Number	Email Address
Debra Thoma	SC DHEC Technical Project Manager	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6397	803-896-6245	thomadl@dhec.sc.gov
Bryan T. Shane, P.G.	Site Rehabilitation Contractor	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bts@meci.net
Brendon P. Kelly	Quality Assurance Officer	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bpk@meci.net
Courtney M. Sanders	Field Manager	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net
Michael Woodrum	Laboratory Director	Shealy Environmental Services,Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	mwoodrum@shealylab.com
	Well Services/Driller				

Table 1A Addendum Distribution List

A4 Project Organization

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
Project Manager	Debra Thoma	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6397	803-896-6245	thomadl@dhec.sc.gov
Site Rehabilitation Contractor	Bryan T. Shane, P.G.	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bts@meci.net
Quality Assurance Officer	Brendon P. Kelly	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bpk@meci.net
Field Manager	Courtney M. Sanders	Midlands Environmental Consultants, Inc. 235-B Dooley Road	803-808-2043	803-808-2048	cms@meci.net

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
		Lexington, SC 29073			
Analytical Laboratory Director	Michael Woodrum	Shealy Environmental Services,Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	mwoodrum@shealylab.com
Soil Boring and Monitoring Well Driller					
Project Verifier	Courtney M. Sanders or Brendon P. Kelly	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net

Table 2A Addendum Role Identification and Contact Information

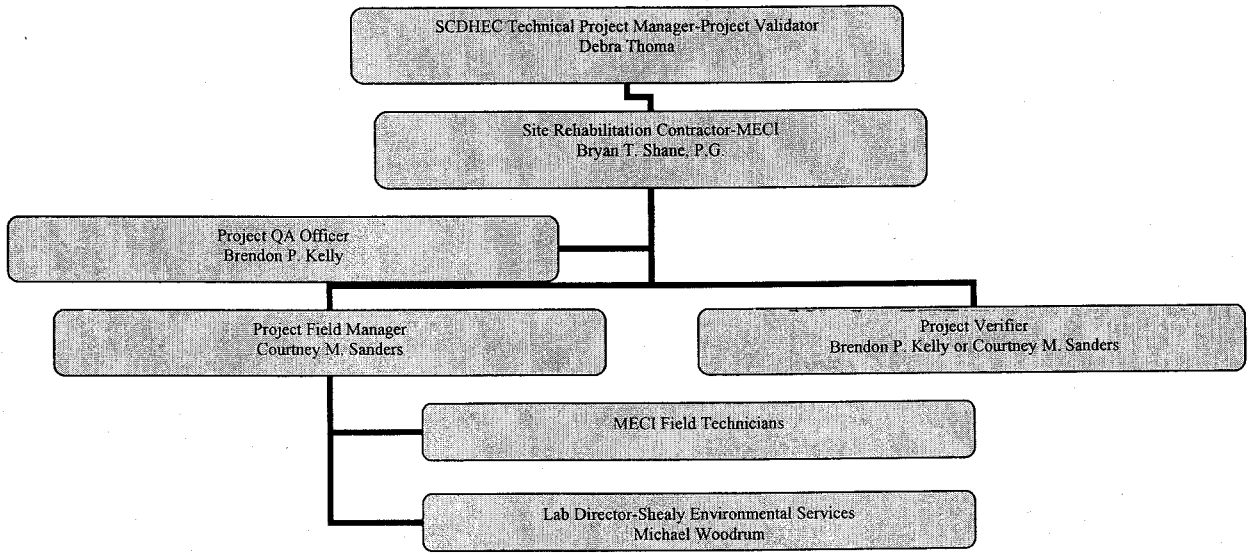


Figure 1A Organizational Chart

A5 Problem Definition/Background

Discuss the background (as much as is known) of the site and appropriate historical information, and why this site is being assessed.

The subject site (Smith's Grocery) is located near the intersection of S.C. Highway 49 and Southern Pines Road, York, York County, South Carolina (see Figure 1). The site consists of an approximately 2.00 acre parcel of land (see Figure 2), and currently occupied by a convenience store. The site formerly maintained one 6,000 gallon gasoline UST and one 8,000 gallon gasoline UST. The South Carolina Department of Health and Environmental Control (SCDHEC) reported release of petroleum product from two single walled underground storage tanks (UST) at the subject site in June of 1993, which was confirmed in September of 1996.

Previous sampling events show petroleum contamination in WSW-Hill and WSW-Swift. These water supply wells have been fitted with granulated activated carbon (GAC) units, but break through has been documented. In addition to the four known water supply wells (WSW-Smith, WSW-Crock, WSW-Hill & WSW-Swift), twenty-six (26) additional water supply wells were identified during our site visit.

Please answer the following: Does this project fall under UST or Brownfields area?

Underground Storage Tank Division

A6 Project/Task Description

1. ***Summarize what is known about the work to be done. This can be a short sentence indicating what the Scope of this project is (see Master QAPP Section A6).***

Due to known breakthrough in the GAC units on WSW-Hill and WSW-Smith, MECI proposes changing the carbon in these units. Additionally, to gather more information for an additional assessment at the subject site, MECI proposes sampling all known water supply wells located within 1,000 feet of the subject site. This sampling event will help determine if any other water supply wells have been impacted, and if they have, will help define the area that requires additional assessment at the subject site.

2. ***The work will begin within*** fourteen (14) days of receipt of approved QAPP contractors addendum ***after cost approval and sampling should be complete by*** twenty-one (21) days of receipt of approved QAPP contractors addendum.

3. ***Are there are time or resource constraints? Include those factors that may interfere with the tentative schedule.***

Factors that may prevent schedule work will be, but not limited to, inclement weather, equipment malfunction, and machine failure.

A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs)

The subject site (Smith's Grocery) is located near the intersection of S.C. Highway 49 and Southern Pines Road, York, York County, South Carolina. The proposed work will be conducted on numerous properties surrounding the subject site. (Please see attached Tax Map for WSW information)

A8 Training and Certificates

Required training and licenses:

Title/Job	Name	Training Required	Date training received	Type of License	License Number
Principal Geologist	Bryan T. Shane, P.G.	Professional Geologist	10/30/1993	State of South Carolina	1102
Senior Scientist	Jeff Coleman	OSHA 40 hr HAZWOPER	7/27/2007	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	7/27/2011	N/A	N/A
Project Scientist	Brendon Kelly	OSHA 40 hr HAZWOPER	8/21/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Geologist	John Bryant	OSHA 40 hr HAZWOPER	4/17/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/14/2010	N/A	N/A
Field Technician	Brian Owen	OSHA 40 hr HAZWOPER	8/21/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Biologist	Courtney Sanders	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Biologist	Kyle Pudney	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Biologist	Chris Lashley	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Biologist	Gavin Globensky	OSHA 40 hr HAZWOPER	7/29/2011	N/A	N/A
Staff Biologist	Ryan Ariail	OSHA 40 hr HAZWOPER	9/23/2011	N/A	N/A
Lab Manager	Michael Woodrum	***	***	Lab Certification	SC 32010

Table 3A Required Training and Licenses

Brendon P. Kelly of Midlands Environmental Consultants, Inc. is responsible to ensuring that personnel participating in this project receive the proper training. All training records will be stored in the following location:235-B Dooley Road, Lexington, SC 29073.

It is understood that training records will be produced if requested by SC DHEC.

The Following Laboratory(ies) will be used for this Project:

Commercial Lab(s)

Full Name of the Laboratory___Shealy Environmental Services, Inc.____
Name of Lab Director_____Michael Woodrum_____
SC DHEC Certification Number_____32010_____
Parameters this Lab will analyze for this project:

BTEX, Napth, MTBE, 8-Oxygenates (EPA Method 8260-B), and EDB (EPA Method 8011).

Please note: SC DHEC may require that the contractor submit some or all of the Laboratory's SOPs as part of this QAPP.

A9 Documents and Records

Personnel will receive the most current version of the QAPP Addendum via: (Check all that apply)

____US Mail ____Courier _X_ Hand delivered

Other (please specify):_____E-mailed electronic copies___

Record	Produced By	Hardcopy/ Electronic	Storage Location For how long?	Archival
Instrument Raw Data	Target, Thermospec, or Iteva software	Hardcopy and Electronic	Hardcopy: Offsite storage for 7 yrs Electronic: Two external storage device backups – one offsite, one onsite storage for 10 yrs	Yes
Final Reports	LIMS	Electronic	Electronic: Two external storage device backups – one offsite, one onsite storage for 10 years	Yes
Field Work	Field Staff	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
Chain of Custody	Field Staff	Hardcopy	MECI office: 235B Dooley Road /	Yes

Record	Produced By	Hardcopy/ Electronic	Storage Location For how long?	Archival
			Min. 5 years	
QAPP Addendum	Brendon Kelly	Hardcopy & Electronic	MECI office: 235B Dooley Road / Min. 5 years	Yes
Internal QC record	Brendon Kelly	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
Sampling Report	Brendon Kelly	Hardcopy & Electronic	MECI office: 235B Dooley Road / Min. 5 years	Yes

Table 4A Record Identification, Storage, and Disposal

Section B Measurement/Data Acquisition

B1 Sampling Process/Experimental Design

Item	Start Date	End Date	Comments
Site Reconnaissance	12/7/11	12/7/11	Already Completed
QAPP preparation	1/5/12	1/5/12	In progress
QAPP approval	1/6/12	1/27/12	Assuming three week turnaround
Water Supply Well Sampling	1/30/12	2/6/12	Sampled within 1 week of QAPP approval
Report Preparation	2/7/12	2/28/12	Three weeks to prepare/submit report

Table 5A Sampling Activities

B2 Sampling Methods

Please note: The contractor must follow sampling protocols as given in the UST QAPP.

***Estimate* the number of samples of each matrix that are expected to be collected:**

Soil _____

Ground Water from monitoring wells _____0____

From Drinking/Irrigation water wells _____40____

Field Duplicate Collection _____2____

Field Blank Collection _____1____

Trip Blank _____1____

From surface water features _____0____

Total number of Water samples _____44____

Notes:
During the December 7, 2011 site visit, thirty-eight (38) water supply wells were located (WSW-Swift & WSW-Hill have GAC units, and will be sampled pre- and post- GAC).

Samples will be analyzed by Shealy Environmental Services, Inc. for BTEX, Napth, MTBE, 8-Oxygenates (8260B), and EDB (8011).

For the sample matrices indicated above, please describe how samples will be collected and the equipment needed.

Water Supply Well (WSW) and Surface Water Sampling

-Before sampling any WSW, an attempt should be made to speak with the owner of the well, to inform them of the work requested by SCDHEC.
-WSW's should be sampled at the well head, or as close to the well head as possible. If it is not possible to obtain the sample from the well head, field notes should record exactly were the sample was taken (spigot on side of well house, spigot on home, etc.)
-The WSW should be purged prior to sampling by allowing the WSW to run until the holding tank has emptied or the well pump turns on. Wearing Nitrile gloves, the sample should be placed in approved, laboratory provided sampling containers. Following sample collection, the samples are immediately placed in laboratory provided coolers, pre-filled with wet ice obtained from the MECI office.
-One field duplicate will be taken for every twenty (20) monitoring wells/water supply wells sampled at a site. This blank is a duplicate sample taken from water supply well WSW-4, and is sampled in accordance with MECI Standard Operating Procedures.
-One field blank will be prepared for each day a site is sampled. A field blank is prepared using lab provided DI water placed into laboratory provided sample containers.
-One trip blank per cooler used in sampling will be used at each site. The trip blank is prepared by the laboratory.
-Once a sample has been taken, a sample time will be recorded in the field notes, along with any information about monitoring well condition that should be brought to the attention of the project manager.

Will Sampling Equipment have to be cleaned and decontaminated or is everything disposable?

All equipment, excluding electronic water level indicators and field probes, is disposable.

If sampling equipment must be cleaned please give a detailed description of how this is done and the disposal of by-products from the cleaning and decontamination.

Prior to usage of non-disposable equipment, it is decontaminated with isopropanol applied by a Teflon squeeze bottle and rinsed with analyte free water. This rinse water is collected and run through a portable GAC (granulated activated carbon) unit.

Identify any equipment and support facilities needed. This may include such things as Fed-ex to ship the samples, a Geoprobe, field analysis done by another contractor (who must be certified), and electricity to run sampling equipment.

All samples will be shipped to the lab via courier or overnight shipping company. Please see MECI Monitoring Well Sampling SOP for sample shipping procedures.

Address the actions to be taken when problems occur in the field, and the person responsible for taking corrective action and how the corrective action will be documented.

Failure	Response	Documentation	Individual Responsible
Water level indicator not working properly	Attempt to clean probe, change battery, use back-up indicator if need be.	Record on field sheets, notify office staff. Take indicator out of rotation until problem identified and corrected.	Field Staff, Field Manager
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
Wells not located	Use metal detector, measure from known points, contact project manager for additional information.	Record method used to attempt to locate the well on field sheets, and possibly reasoning for the well to be missing	Field Staff

Table 6A Field Corrective Action

B3 Sample Handling and Custody

1. ***How will the samples get from the Site to the Lab to ensure holding requirements are met?***

Following sample collection, the samples are immediately place in a laboratory provided cooler, pre-filled with wet ice obtained from the MECI office. Samples are transported to the MECI office once a sampling event is complete. A Chain of Custody (CoC) is filled out following the sampling event by the field staff. See attached CoC. If a lab provided courier is scheduled to visit the MECI offices the day following a sampling event, sampling coolers are repacked with wet ice, and left at the office for pick-up the following morning. If no courier is schedule to visit the MECI office the day following a sampling event, all sampling coolers are repacked with ice and are dropped off at a lab approved shipping company for overnight delivery to the lab.

2. ***How will the contactors cool the samples and keep the samples cool?***

All samples are kept on wet ice, obtained from MECI office.

3. ***How will the lab determine the temperature of the samples upon receipt? Will they be using a temperature blank?***

A calibrated thermometer and temperature blank will be used to document sample temperature. The temperature blank is immediately checked by the sample receiving technician upon arrival at the laboratory.

4. ***Where will the samples be stored in the Lab once they are received?***

All samples are stored in clean refrigeration units monitored and maintained at 4 degrees C + or – 2 degrees. Volatile organic samples are stored separately form all other samples.

5. ***Describe the chain of custody procedure and attach a copy of each chain of custody that will be used. If a Chain of Custody SOP exists from the Lab and the Contractor is willing to adhere to it, then this may be attached.***

A chain of custody (COC) will be filled out for each sampling event at each project site. COC to be signed by MECI and Shealy Environmental technician at time physical transfer of samples occurs to courier. Shealy uses the following COC procedures to protect sample integrity following pickup by their courier: A full time Sample Receiving Technician receives all samples and completes a Sample Receipt Checklist (SRC), which will identify any anomalies, if any exist the Sample Receiving Technician or Project Manager must resolve the deviation internally and/or notify the client to resolve the anomaly

B4 Analytical Methods

1. ***Identify the SOPs which will be used to analyze the samples, the method which the SOP references and the equipment or instrumentation that is needed:***

Parameter	SOP ID*	Method Referenced	Equipment	Comments
BTEX+Naph+MTBE+Oxygentaes	S-VO-002	8260B	GC/MS	
PAH's	S-SV-021	8270D	GC/MS	
EDB	S-SV-012	8011	GC	
Lead,T.	S-IM-022	6010C	ICP	
Ferrous Iron	S-IN-009	SM 3500-FED	Spectrophotometer	
Nitrate	S-IN-042	353.2	Auto-analyzer/Lachate	
Sulfate	S-IN-010	300.0	Ion Chromatograph	
Methane	S-VO-004	RSK-175	GC	
TOC	S-IN-030	Walkley-Black	N/A	
DRO - TPH	S-SV-001	8015C	GC	
pH	MECI SOP 4.3.6	*	YSI 63	
Conductivity	MECI SOP 4.3.6	*	YSI 63	
Dissolved Oxygen	MECI SOP 4.3.6	*	YSI 550A	
Temperature	MECI SOP 4.3.6	*	YSI 550A	

Table 7A Analytical SOPs and Referenced Methods

- **This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.**

Abbreviation	Lab Identification of this SOP	Full Name of the SOP
S-VO-002	S-VO-002	GC/MS VOLATILES ANALYSIS BASED ON EPA METHODS 8260B AND 624 PREPARED BY EPA METHODS 5030B, 5035 AND 3585
S-SV-021	S-SV-021	GC/MS ANALYSIS BASED ON EPA METHOD 8270D PREPARED BY EPA METHODS 3520C, 3550C AND 3580A
S-SV-012	S-SV-012	GC/ECD ANALYSIS OF EDB AND DBCP BASED ON METHOD 8011 & 504.1
S-IM-022	S-IM-022	INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPECTROSCOPY-PECTROMETRIC METHOD for TRACE ELEMENT ANALYSES METHOD 6010C
S-IN-009	S-IN-009	FERROUS IRON (PHENANTHROLINE METHOD) STANDARD METHOD 3500-Fe D
S-IN-042	S-IN-042	NITRATE+NITRITE NITROGEN BY EPA METHOD 353.2, NITRATE NITROGEN BY 353.2 SUBTRACTION, AND NITRITE NITROGEN BY EPA METHOD 353.2
S-IN-010	S-IN-010	INORGANIC ANIONS BY ION CHROMATOGRAPHY EPA METHOD 300.0 and SW-846 9056 and 9056A
S-VO-004	S-VO-004	STANDARD OPERATING PROCEDURE GC ANALYSIS BASED ON METHOD RSKSOP-175
S-IN-030	S-IN-030	TOTAL ORGANIC CARBON (TOC) WALKLEY-BLACK PROCEDURE
S-SV-001	S-SV-001	GC/FID DIESEL RANGE ORGANICS ANALYSIS BASED ON METHOD 8015B and/or 8015C PREPARED BY EPA METHODS 3520C, 3550C and 3580A
MECI SOP 4.3.6	MECI SOP 4.3.6	Sampling Standard operating procedures

Table 8A SOP Abbreviation Key

2. Identify procedures to follow when failures occur, identify the individual responsible for corrective action and appropriate documentation:

Failure	Response	Documented Where?	Individual Responsible
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
COC or Sample Receiving	Call Client	Sample Receiving Checklist (SRC)	PM – Kelly Maberry kmaberry@shealylab.com

issues			
Analytical errors	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum mwoodrum@shealylab.com
QA/QC Failure	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum mwoodrum@shealylab.com QA/QC Officer – Jami Savje Jsavje@shealylab.com
On time delivery	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum mwoodrum@shealylab.com QA/QC Officer – Jami Savje Jsavje@shealylab.com

Table 9A Corrective Action Procedures

3. Identify sample disposal procedures.

Analysis	Matrix	Schedule for disposal	Method for disposal	Comments
BTEX+Naph+MTBE+Oxygenates	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
PAH's	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
EDB	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Lead	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous	

			waste.	
Ferrous Iron	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Nitrate,Sulfate	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Methane	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
All	Water	On-Site	Portable Granulated Activated Carbon (GAC) Unit	All waste water produced from sampling and decontamination activities will be run through a GAC unit

Table 10A Sample Disposal Procedures

4. Provide SOPs for the Kerr Method or the Ferrous Iron Method if these are parameters for this study. This can be attached or written here. If attached please note that it is an attachment and where it is located (if applicable).

B5 Quality Control Requirements:

All QC will follow the requirements laid out in Section B5 of the UST Programmatic QAPP.

B6 Field Instrument and Equipment Testing, Inspection and Maintenance

1. Identify all field and laboratory equipment needing periodic maintenance, the schedule for this, and the person responsible. Note the availability and location of spare parts.

Instrument	Serial Number	Type of Maintenance	Frequency	Parts	Person responsible

				needed/Location	
Volatiles Mass Spec	ALL	Change traps, clean ion source, replace filaments	Periodic	Laboratory	MSV Analyst
Semivolatile Mass Specc	ALL	Injection port maintenance, ion source maintenance, column replacement	Periodic	Laboratory	MSSV Analyst
ECD GC	ALL	Injection port maintenance, column replacement	Periodic	Laboratory	GC Analyst
Dionex IC	ALL	Replace auto sampler filter, tubing, line filter, sample Line and Waste Line, as needed. Check Reagent levels, flow rate, waste line.	Periodic	Laboratory	IC Analyst
ICP	ALL	Clean Sample introduction system , auto sampler, torch, Change spray chamber, torch tubing, tubing	Periodic	Laboratory	ICP Analyst
Leeman Mercury Analyzer	ALL	Clean GLS, Change Pump tubing, Nafion Dryer, Lamp	Periodic	Laboratory	Mercury Analyst
Flow Injection Analysis – Lachat 8000	ALL	Replace sample and reagent lines, replace light source, re-wrap heating coil, replace column	Periodic/As Needed	Laboratory	Nitrate Analyst
YSI 63	All	Replace probe tip	Yearly	Order from YSI	B. Kelly
YSI 63	All	Replace batteries	As Needed	In stock at office	Field Staff
YSI 63	All	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
YSI 63	All	Check buffer solutions for expiration	Weekly	In stock at office	B. Kelly
YSI 550A	All	Replace membrane	4 to 8 weeks	In stock at office	Field Staff
YSI 550A	All	Replace batteries	As Needed	In stock at office	Field Staff
YSI 550A	All	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff

Table 11A Instrument and Equipment Maintenance

2. Identify the testing criteria for each lab or field instrument that is used to ensure the equipment is performing properly. Indicate how deficiencies, if found, will be resolved, re-inspections performed, and effectiveness of corrective action determined and documented. Give the person responsible for this

Instrument/Equipment & Serial Number	Type of Inspection	Requirement	Individual Responsible	Resolution of Deficiencies
Volatiles Mass Spec	Daily calibration check	Method Requirements	MSV Analyst	Recalibration or instrument maintenance
Semi-volatiles Mass Spec	Daily calibration check	Method Requirements	MSSV Analyst	Recalibration or instrument maintenance
ECD GC	Daily calibration check	Method Requirements	GC Analyst	Recalibration or instrument maintenance
Dionex IC	Daily calibration check	Method Requirements	Nitrate Analyst	Recalibration or instrument maintenance
ICP	Daily calibration check	Method Requirements	ICP Analyst	Recalibration or instrument maintenance
Leeman Mercury Analyzer	Daily calibration check	Method Requirements	Mercury Analyst	Recalibration or instrument maintenance
Flow Injection Analysis – Lachat 8000	Daily and continuing calibration check	See calibration criteria	INM Analyst	Recalibration or instrument maintenance
YSI 63	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
YSI 550A	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer

Table 12A Instrument and Equipment Inspection

B7 Instrument Calibration and Frequency

1. Identify equipment, tools, and instruments for field or lab work that should be calibrated and the frequency.
2. Describe how the calibrations should be performed and documented, indicating test criteria and standards or certified equipment.

3. Identify how deficiencies should be resolved and documented. Identify the person responsible for corrective action.

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Volatiles Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by continuous calibration verification standard	Method Criteria	Detailed in SOP	MSV Analyst	S-VO-002
Semi-volatile Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	MSSV Analyst	S-SV-021
GC ECD	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	GC Analyst	S-SV-012
Dionex IC	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	IC Analyst	S-IN-010
ICP	Minimum of 3 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	ICP Analyst	S-IM-022
Cetac Mercury Analyzer	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	Mercury Analyst	S-IM-006
Lacaht QuickChem 8000	Minimum of 5 calibration standards	Daily or when indicated by calibration verification standard	Method Criteria	Detailed in SOP	Nitrate Analyst	S-IN-042
YSI 63	pH Calibration	Daily	+/- 0.2 pH units	clean/replace probe tip, recalibrate	Field Staff	6a & 6b
YSI 63	Conductivity Calibration	As directed by manufacturer	+/- 10 uS	clean/replace probe tip, recalibrate	Field Staff	6a & 6b
YSI 550A	DO calibration	Daily	+/- 0.25 mg/l	clean/replace probe tip, recalibrate	Field Staff	6a & 6b
YSI 550A	Temperature Calibration	Daily	+/- 1 °C	clean/replace probe tip, recalibrate	Field Staff	6a & 6b
Electronic Water Level	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Indicator						
Oil/Water Interface probe	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***

Table 13A Instrument Calibration Criteria and Corrective Action

*** This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.**

B8 Inspection/Acceptance Requirements for Supplies and Consumables

1. Identify critical supplies and consumables for field and laboratory, noting supply source, acceptance criteria, and procedures for tracking, storing and retrieving these materials.
2. Identify the individual(s) responsible for this.

Item	Vendor	Acceptance criteria	Handling/Storage Conditions	Person responsible for inspection and tracking.
Laboratory Chemicals	Fisher,VWR	Certificates of analysis and laboratory testing	Laboratory storage	Receiving and laboratory personnel
Laboratory standards	O2Si, Restek, High Purity, VHG, Supelco	Certificates of analysis and laboratory verifications	Vendor specific storage conditions	Laboratory Analysts
Sample Containers	Daniels Scientific, QEC	Certificates of analysis and laboratory testing	Bottle storage area	Sample receiving personnel
Clear, Disposable polyethylene Bailers	Preferred Pump	Individual sleeves intact, ball valve operational	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
Nylon Rope	Preferred Pump	Covered with plastic	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
Nitrile Gloves	Preferred Pump	Unopened box, no holes	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
40 mL HCL preserved amber vials	Shealy Environmental Services	Custody seal intact	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
250 mL HNO3 preserved metals vials	Shealy Environmental Services	Custody seal intact	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
Coolers	Shealy Environmental Services	Intact	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
pH Buffer	TRS Environmental, Enviroequipment	Within expiration date	Stored in calibration room	B. Kelly, Field Staff
Conductivity Standard	TRS Environmental, Enviroequipment	Within expiration date	Stored in calibration room	B. Kelly, Field Staff

DO Membranes	YSI, Enviroequipment	Clean, in box	Stored in calibration room	B. Kelly, Field Staff
Batteries	Any Store	Not previously used	Stored in calibration room	B. Kelly, Field Staff

Table 14A List of Consumables and Acceptance Criteria

B9 Data Acquisition Requirements (Non-Direct Measurements)

1. Identify data sources, for example, computer databases or literature files, or models that should be accessed or used.
2. Describe the intended use of this information and the rationale for their selection, i.e., its relevance to project.
3. Indicate the acceptance criteria for these data sources and/or models.

Data Source	Used for	Justification for use in this project	Comments
Small scope assessment sampling and monitoring well installation reports	Historic groundwater and CoC concentration data. Lithology and well construction data from previous MWI's	Establish the type of drilling rig required, time for sampling and any other potential problems that may be encountered.	Previous assessment reports will be used to determine the amount of carbon required to change the GAC unit.

Table 15A Non-Direct Measurements

4. Identify key resources/support facilities needed.

There are no non-direct measurements in this project

B10 Data Management

1. Describe the data management scheme from field to final use and storage.

Following sample collection and chain of custody production, samples are shipped to the lab. Field work from the field staff is reviewed by the MECI project manager, and converted into digital form. All data entry is subsequently checked to validate the data entry. The original copies of the field work are stored in MECI files for a minimum of 5 years. Digital copies of the work are stored on the MECI server, which is backed up weekly, and stored for a minimum of 5 years. The digital copy of the field work is presented to SCDHEC with the final report.

2. How does the lab and field staff ensure that no unauthorized changes are made to the chain of custody, sampling notebooks, laboratory notebooks and computer records?

The laboratory maintains comprehensive Quality Control and Training Programs. All sample receipt data, sample log-in, and analytical data is peer reviewed, including review for inappropriate changes. Data management, review procedures and the Quality Systems Program are documented in the laboratory's Quality Manual and Standard Operating Procedures. The Quality Assurance Department oversees adherence to and review of these programs.

All MECI field work is produced using ink-pens. Any attempt to alter field data, after sampling is complete, can be readily identified. MECI keeps a carbon copy of the chain of custody after it is shipped to the lab. This copy is kept with the field work. If any change to the CoC are suspected, this original carbon copy can be use to identify potential changes.

3. How does the lab ensure that there are no errors in samples records including times when sample information is compiled, data calculated and/or transmitted?

Sample data acquisition software is reviewed periodically. The LIMS database is backed up daily and is able to be restored in the event of a system failure. These procedures are documented in laboratory SOP S-AD-003, LIMS. The IT Manager is responsible for these systems and procedures."

4. How will the data be archived once the report is produced? How can it be retrieved? (This applies to both electronic and hard copies).

Laboratory Hardcopy data stored off site is logged, maintained and archived by the Quality Assurance Department. Laboratory Electronic Data Reports are maintained through IT back up under the responsibility of the IT Systems Manager.

MECI keeps all field work and paper copies of reports in its in-house filing system. All paper copies are stored for a minimum of 5 years. Any file can be retrieved easily by going to the correct filing cabinet/box.

All electronic copies of reports generated are kept on the MECI server. This server is backed-up on a weekly basis. Any file stored on the MECI server can be retrieved instantly, by accessing the server. All electronic files are stored for a minimum of 5 years on the server.

Section C Assessment and Oversight

C1 Assessment and Response Actions

1. *The Contractor is supposed to observe field personnel daily during sampling activities to ensure samples are collected and handled properly and report problems to DHEC within 24 hours. . Please state who is responsible for doing this and what observations will be made. Will this person have the authority to stop work if severe problems are seen?*

Field audits can be conducted on any field personnel at any time. MECI field audits can be conducted by the Field Manger, who will be responsible for ensuring that field personnel adhere to the QAPP. If during a random field audit, severe problems are found, work will be stopped by the field manager and the QA officer contacted to determine corrective action. All problems must be corrected prior to any additional

work being performed. Should it be requested, an On-site Field Audit can be scheduled with the SCDHEC project manager.

2. *The SCDHEC UST QAPP states that the Lab will receive an Offsite Technical System Audit. For this project, what assessments will be done on the Commercial Lab(s) that are being used—other than their certification audit? When or how often are these done? Who will the results be given to and who has the ability to stop work if problems are severe?*

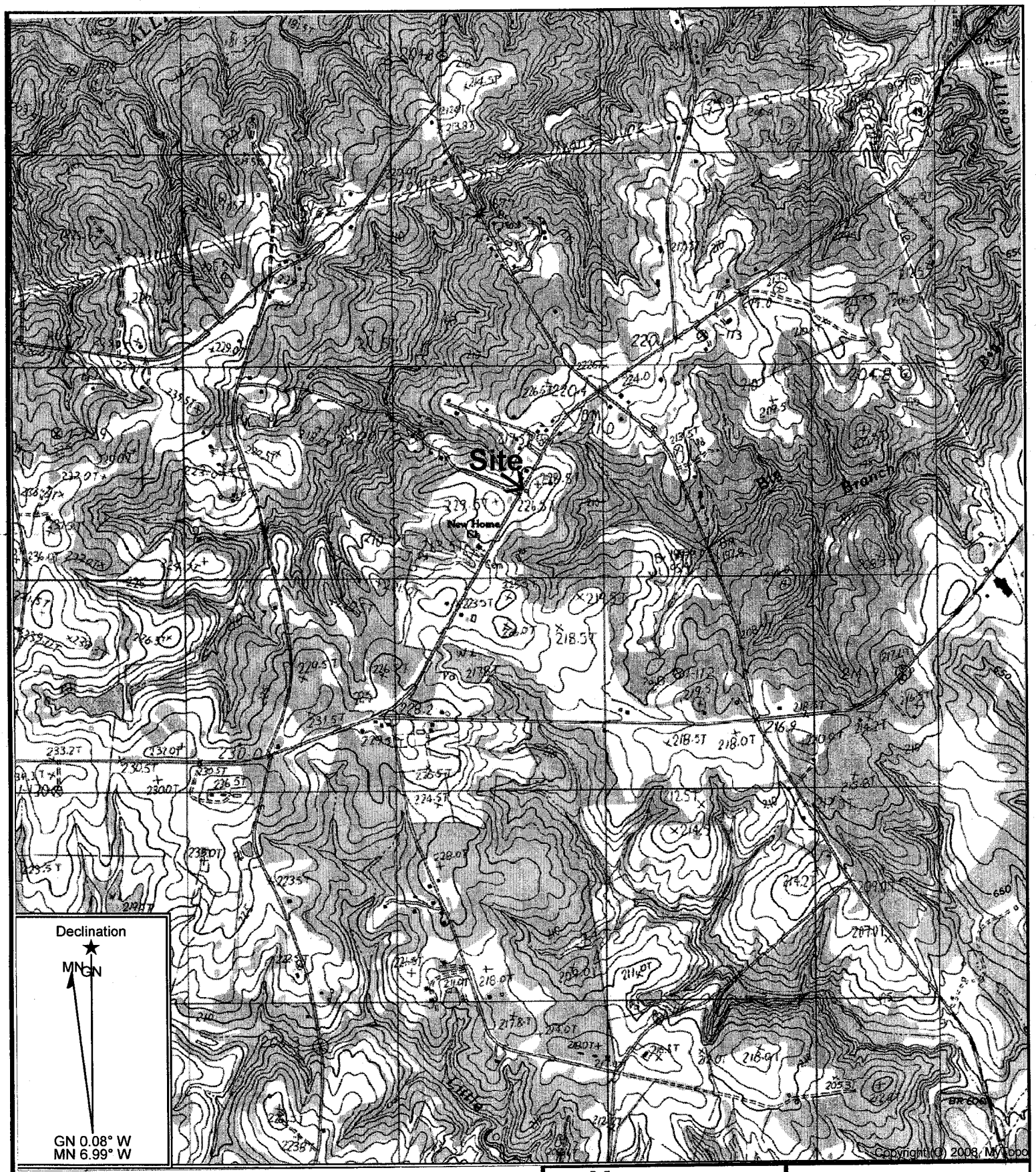
The laboratory participates in annual Proficiency Testing through an approved vendor, Wibby Environmental. Proficiency Testing results are provided to the Office of Environmental Laboratory Certification.

C2 Reports to Management

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

Section D Data Validation and Usability

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).



GRAPHIC SCALE

0 1000 2000 4000

1IN = 2000FT

Reference: Clover, South Carolina
USGS 7.5 Min. Quad
Countour Interval – 3 Meters

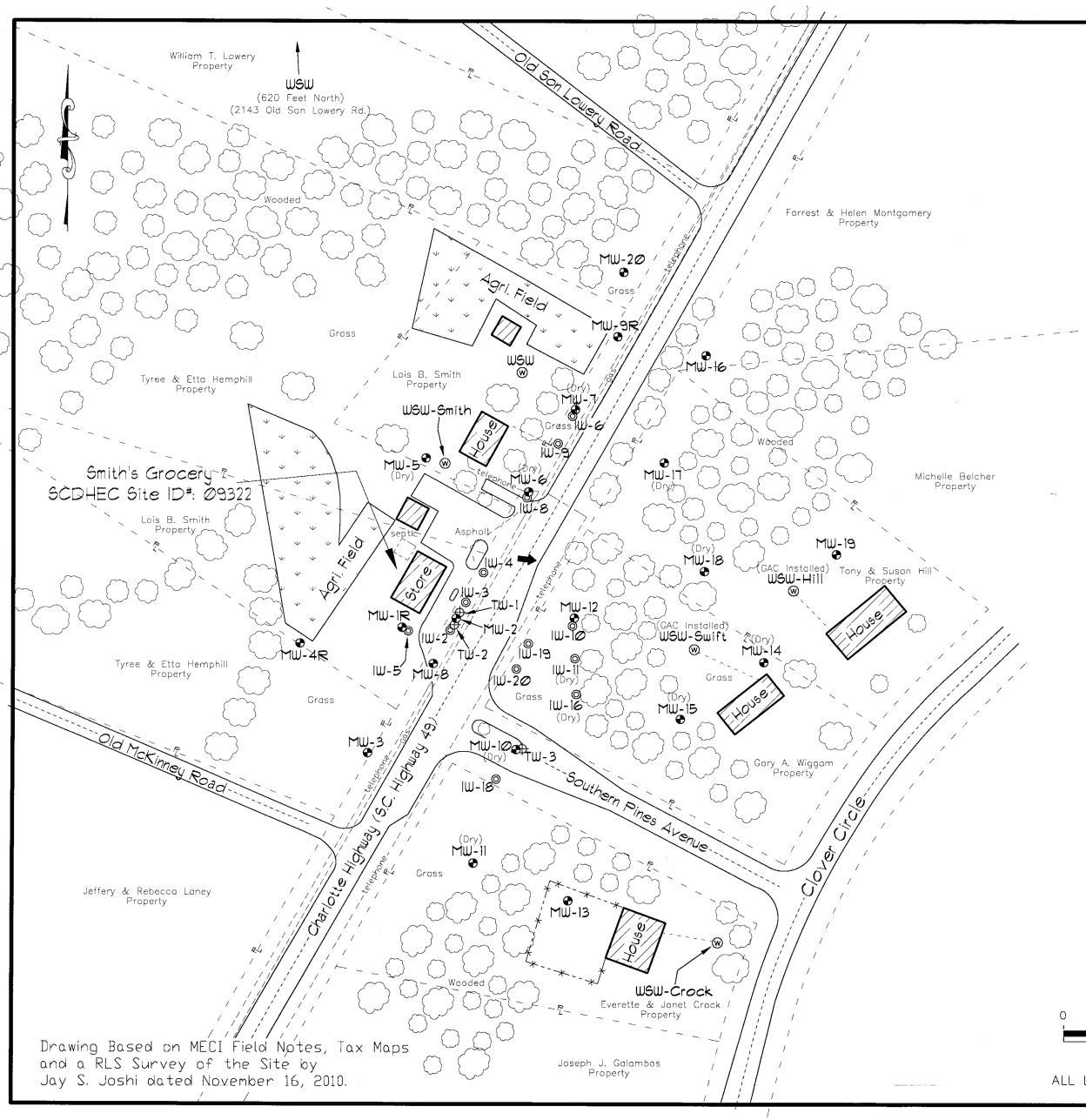
Midlands Environmental Consultants, Inc.

Site Location

Smith's Grocery
South Carolina Highway 49, Clover, SC
SCDHEC Site ID# 09322

Figure 1

MECI 11-3700



Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Buried Sewer
- Under Ground Telephone
- Fence

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3700
DATE January 5, 2012
FIGURE 2

Tax Data Obtained from York County GIS Department

Tax Map Data

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3700
DATE January 5, 2012
Figure 3A

ID	Tax Map #	Owner
A	4560000043 Site WSW-1	Lois B. Smith 3176 Charlotte Highway York, SC 29745
B	4890401024 WSW-2 GAC Unit	Gary A. Wiggam 3043 Clover Circle York, SC 29745
C	4890401023 WSW-3 GAC Unit	Susan W. & Tony H. Hill 3049 Clover Circle York, SC 29745
D	4890401022 WSW-4	Michelle Belcher 2101 Pinewild Court York, SC 29745
E	4890401019 WSW-5	Henry Ray Emser 2106 Pinewild Court York, SC 29745
F	4890401018 WSW-6	Clyde W. & Iris R. Dooley 2100 Pinewild Court York, SC 29745
G	4890401017 WSW-7	Susan K. Trear & John A. Okain 3071 Clover Circle York, SC 29745
H	4890401016 WSW-8	Lewis F. & Lana D. Hefner III 3077 Clover Circle York, SC 29745
I	4890401015 WSW-9	Richard J. Bedner Jr. 3085 Clover Circle York, SC 29745
J	4890401013 WSW-10	Paul & Irene Caltagirone 3140 Tallamore Lane York, SC 29745
K	4890401012 WSW-11	Robert C. & Jetta L. Baumgardner 3130 Tallamore Lane York, SC 29745
L	4890401011 WSW-12	Victor & Evelyn Bresg 3124 Tallamore Lane York, SC 29745
M	4890401010 WSW-13	Albert B. Small 3118 Tallamore Lane York, SC 29745
N	4890401009 WSW-14	Richard W. & Vicie L. Judy 3112 Tallamore Lane York, SC 29745
O	4890401008 WSW-15	William L. & Leah H. Youngblood 3106 Tallamore Lane York, SC 29745
P	4890401007 WSW-16	Scott A. Reed 3100 Tallamore Lane York, SC 29745
Q	4890401006 WSW-17	Steve A. & Layliona T. Edison 3001 Clover Circle York, SC 29745
R	4890401005 WSW-18	Jeff C. & Marcy A. Buck 3011 Clover Circle York, SC 29745
S	4890401004 WSW-19	Ramon L. Guzman 3017 Clover Circle York, SC 29745
T	4890401003 WSW-20	Kevin A. & Ursula A. Shuler 3023 Clover Circle York, SC 29745
U	4890401002 WSW-21	Joseph J. Galambos 3029 Clover Circle York, SC 29745
V	4890401001 WSW-22	Everette D. & Janet E. Crook 3035 Clover Circle York, SC 29745
W	4890401027 WSW-23	Michael V. McCarter 3032 Clover Circle York, SC 29745
X	4890401028 WSW-24	Christopher D. Jeter 3040 Clover Circle York, SC 29745
Y	4890401029 WSW-25	Kenny L. Tamara L. Beasley 3050 Clover Circle York, SC 29745
Z	4890401030 WSW-26	Michael D. & Leann R. Lowrey 3060 Clover Circle York, SC 29745
AA	4890401031 WSW-27	Joseph C. Elaine D. Biggers 3070 Clover Circle York, SC 29745
BB	4890401032 WSW-28	Robert B. & Jacie Braden 3129 Tallamore Lane York, SC 29745
CC	4890401033 WSW-29	William D. & Betty L. Tyndall 3121 Tallamore Lane York, SC 29745
DD	4890401025 WSW-30	James K. & Catherine G. North 3016 Clover Circle York, SC 29745
EE	4890401026 WSW-31	Debra L. Goransson 3022 Clover Circle York, SC 29745
FF	4530101002 WSW-32	Jeffery V. & Rebecca Laney 2111 Old McKinney Road York, SC 29745
GG	4540000024 WSW-33	John E. & Sally Schimepfinig 2131 Old McKinney Road York, SC 29745
HH	4560000003 WSW-34	Frontis T. & Etta H. Hemphill 2146 Old McKinney Road York, SC 29745
II	4560000007 WSW-35	William & Daisy Lowery 2143 Old Son Lowery Road York, SC 29745
JJ	4560000008 WSW-36	Frontis Tyree Hemphill 2140 Old Son Lowery Road York, SC 29745
KK	4560000040 WSW-37	
LL	4560000010 WSW-38	Forest L. & Helen W. Montgomery 3243 Charlotte Higway York, SC 29745

Tax Data Obtained from York County GIS Department

Tax Map Data

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3700
DATE January 5, 2012
Figure 3B

Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 12602

Client	Report to Contact	Sampler (Printed Name)	Quote No.
Address	Telephone No. / Fax No. / Email	Waybill No.	Page ___ of ___
City / State / Zip Code	Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		
Project Name			
Project Number	P.O Number		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis	Number of Containers	Bottle (See Instructions on back)	Preservative	Lot No.	Remarks / Cooler ID

Turn Around Time Required (Prior lab approval required for expedited TAT)
☐ Standard ☐ Rush (Please Specify)

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler			1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory Received by		

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack
Receipt Temp. _____ °C
Temp. Blank ☐ Y / ☐ N

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

JAN 2 0 2012

Re: Groundwater Sampling Directive
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322; CA#42585
Release reported June 30, 1993
Site-Specific QAPP Contractor Addendum & Cost Agreement received January 9, 2012
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced addendum submitted on your behalf by Midlands Environmental Consultants, Inc (MECI). The groundwater sampling event should be conducted in accordance with the UST Quality Assurance Division Plan and must be conducted in compliance with all applicable regulations. A copy of SCDHEC QAPP for the UST Management Division is available at http://www.scdhec.gov/environment/lwm/html/ust.htm.

Groundwater sampling activities at the site should begin immediately upon receipt of this letter. Cost agreement number 42585 has been approved for the amount shown on the enclosed cost agreement form. Samples should be analyzed for BTEXMN, DCA, Oxygenates, and EDB.

The Groundwater Sampling Report, contractor checklist, and invoice are due within 90 days from the date of this letter. The report (a signed .pdf copy on CD is preferred) submitted at the completion of these activities should include information as required in Section A9 of the UST Program QAPP.

MECI can submit an invoice for direct payment from State Underground Petroleum Environmental Response Bank (SUPERB) Account for preapproved costs. By law, the SUPERB Account cannot compensate any costs that are not pre-approved. Please note that applicable South Carolina certification requirements regarding laboratory services and report preparation must be satisfied. If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available. The UST Management Division, because of unnecessary dilution, cannot make decisions if the reporting limit of individual petroleum CoC exceeds Risk-Based Screening Levels (RBSLs). The UST Management Division encourages the use of 'J' values as necessary so the appropriate action can be determined for a release. Note that the Division may deny payment for any non-detect analysis where the reporting limit exceeds the RBSL. The Division cannot make closure decisions based on elevated reporting limits and the SUPERB Account will not reimburse for erroneously elevated detection limits.

Please note that Sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that nc costs will be allowed unless prior approval from the Department is obtained. If for any reason additional tasks will be completed, these additional tasks and the associated costs must be pre-approved by the Department for the costs to be paid. The SCDHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, SCDHEC reserves the right to question and/or reject costs if deemed unreasonable and to audit project

records at any time during the project or after completion of work. All work must be conducted by well drillers, laboratories, and contractors that are licensed by the state of South Carolina and SCDHEC.

The Department grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the COC concentrations, based on laboratory analysis, are below Risk Based Screening Levels (RBSLs), please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence regarding this site, please reference UST Permit #09322. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6397, fax me at (803) 896-6245, or e-mail me at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Approved Cost Agreement (ACA)
Signed Site Specific QAPP Contractor Addendum Approval Page (copy)

cc: Bryan Shane, Midlands Environmental Consultants, Inc., PO Box 854, Lexington, SC, 29071 (w/ enc.)
Technical File (w/ enc.)

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SC DHEC UST Programmatic QAPP
For
Smith's Grocery, SCDHEC Site ID# 09322

SC Highway 49, York, South Carolina

Prepared by:
Jeff L. Coleman
Senior Scientist
Midlands Environmental Consultants, Inc.
(Certified Site Rehabilitation Contractor UCC-0009)
235-B Dooley Road
Lexington, SC 29073
(803)808-2043

Date: January 5, 2012

Approvals

Debra Thoma SC DHEC Project Manager	Debra L Thoma Signature	Date 1/18/12
Brendon P. Kelly Contractor QA Manager	 Signature	Date 1/9/12
Bryan T. Shane, P.G. Site Rehabilitation Contractor	 Signature	Date 1-9-12
Michael Woodrum Laboratory Director	 Signature	Date 1/5/12

Approved Cost Agreement 42585

Facility: 09322 SMITHS GROCERY

THOMADL

PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
01 PLAN						
		B	TAX MAPS	1.0000	50.00	50.00
		C	TIER II/COMP. PLAN/QAPP APP B	1.0000	525.00	525.00
04 MOB/DEMOB						
		B	PERSONNEL	3.0000	290.00	870.00
10 SAMPLE COLLECTION						
		C	WATER SUPPLY	40.0000	30.00	1,200.00
		D	GROUNDWATER NO-PURGE	2.0000	35.00	70.00
		H	FIELD BLANK	1.0000	5.00	5.00
11 ANALYSES						
	GW GROUNDWATER	A	BTEX+NAPTH+MTBE	44.0000	100.00	4,400.00
		F	EDB	44.0000	55.00	2,420.00
19 RPT/PROJECT MNGT & COORDINATIO						
		PCT	PERCENT	0.1500	10,440.00	1,566.00
24 GAC SYSTEM						
		C	FILTER REPLACEMENT/REMOVAL	2.0000	450.00	900.00
				Total Amount		12,006.00

Midlands Environmental Consultants, Inc.

February 28, 2012

Ms. Debra Thoma Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: QAPP Contractor Addendum – Revision 0
Smith's Grocery
York, South Carolina
SCDHEC Site ID Number 09322
MECI Project Number 12-3850
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached QAPP Contractor Addendum for the referenced site.

On December 7, 2011, MECI personnel performed a site visit to the subject site to evaluate site conditions, locate monitoring wells, obtain drilling access and identify potential problems for future assessment activities.

If you have any question or comments please feel free to contact us at 803-808-2043.

Sincerely,
Midlands Environmental Consultants, Inc.

Courtney M. Sanders
Staff Biologist

Jeff L. Coleman
Senior Scientist

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SC DHEC UST Programmatic QAPP
For
Smith's Grocery, SCDHEC Site ID# 09322

3176 Charlotte Highway, York, South Carolina

Prepared by:
Jeff L. Coleman
Senior Scientist
Midlands Environmental Consultants, Inc.
(Certified Site Rehabilitation Contractor UCC-0009)
235-B Dooley Road
Lexington, SC 29073
(803)808-2043

Date: February 28, 2012

Approvals

Debra Thoma SC DHEC Project Manager	_____ Signature	Date_____
Bryan T. Shane, P.G. Site Rehabilitation Contractor	B.T. Shane Signature	Date 2-29-12
Brendon P. Kelly Contractor QA Manager	_____ Signature	Date 3/2/12
Michael Woodrum Laboratory Director	Michael W. Woodrum Signature	Date 2/28/12

A2 Table of Contents

A1 Title and Approval Page 1
A2 Table of Contents 2
A3 Distribution List 3
Table 1A Addendum Distribution List 3
A4 Project Organization 3
Table 2A Addendum Role Identification and Contact Information 4
Figure 1A Organizational Chart 4
A5 Problem Definition/Background 5
A6 Project/Task Description 6
A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs) 6
A8 Training and Certificates 7
Table 3A Required Training and Licenses 8
A9 Documents and Records 8
Table 4A Record Identification, Storage, and Disposal 9
Section B Measurement/Data Acquisition 9
B1 Sampling Process/Experimental Design 9
Table 5A Sampling Activities 9
B2 Sampling Methods 10
Table 6A Field Corrective Action 14
B3 Sample Handling and Custody 14
B4 Analytical Methods 15
Table 7A Analytical SOPs and Referenced Methods 15
Table 8A SOP Abbreviation Key 16
Table 9A Corrective Action Procedures 17
Table 10A Disposal Procedures 18
B5 Quality Control Requirements: 18
B6 Field Instrument and Equipment Testing, Inspection and Maintenance 18
Table 11A Instrument and Equipment Maintenance 19
Table 12A Instrument and Equipment Inspection 20
B7 Instrument Calibration and Frequency 20
Table 13A Instrument Calibration Criteria and Corrective Action 21
B8 Inspection/Acceptance Requirements for Supplies and Consumables 22
Table 14A List of Consumables and Acceptance Criteria 22
B9 Data Acquisition Requirements (Non-Direct Measurements) 22
Table 15A Non-Direct Measurements 23
B10 Data Management 23
Section C Assessment and Oversight 24
C1 Assessment and Response Actions 24
C2 Reports to Management 25
Section D Data Validation and Usability 25

A3 Distribution List

Name	Title	Organization/Address	Telephone Number	Fax Number	Email Address
Debra Thoma	SC DHEC Technical Project Manager	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6397	803-896-6245	thomadl@dhec.sc.gov
Bryan T. Shane, P.G.	Site Rehabilitation Contractor	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bts@meci.net
Brendon P. Kelly	Quality Assurance Officer	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bpk@meci.net
John C. Bryant	Field Manager	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	jcb@meci.net
Michael Woodrum	Laboratory Director	Shealy Environmental Services, Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	mwoodrum@shealylab.com
Tommy Bolyard	Well Services/Driller	EDPS 17538 Greenhill Road Charlotte, NC 28278	704-607-7529	803-548-2233	EDPS@comporium.net

Table 1A Addendum Distribution List

A4 Project Organization

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
Project Manager	Debra Thoma	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6397	803-896-6245	thomadl@dhec.sc.gov
Site Rehabilitation Contractor	Bryan T. Shane, P.G.	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bts@meci.net
Quality Assurance Officer	Brendon P. Kelly	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bpk@meci.net
Field Manager	John C. Bryant	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	jcb@meci.net
Analytical Laboratory Director	Michael Woodrum	Shealy Environmental Services, Inc. 106 Vantage Point Dr.	803-791-9700	803-791-9111	mwoodrum@shealylab.com

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
		West Columbia, SC 29172			
Soil Boring and Monitoring Well Driller	Tommy Bolyard	EDPS 17538 Greenhill Road Charlotte, NC 28278	704-607-7529	803-548-2233	EDPS@comporium.net
Registered Land Surveyor	Jay S. Joshi	Construction Support Services, Inc. 1318 RL Coward Road Hopkins, SC 29061	803-776-9909	803-776-2688	jsjoshi@constructionsupportsc.com
Disposal Facility	Carol Weldon	Waste Management, Inc. Richland Landfill 1047 Highway Church Road Elgin, SC 29045	803-744-3346	866-904-7194	Not Available
Project Verifier	Courtney M. Sanders or Brendon P. Kelly	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net

Table 2A Addendum Role Identification and Contact Information

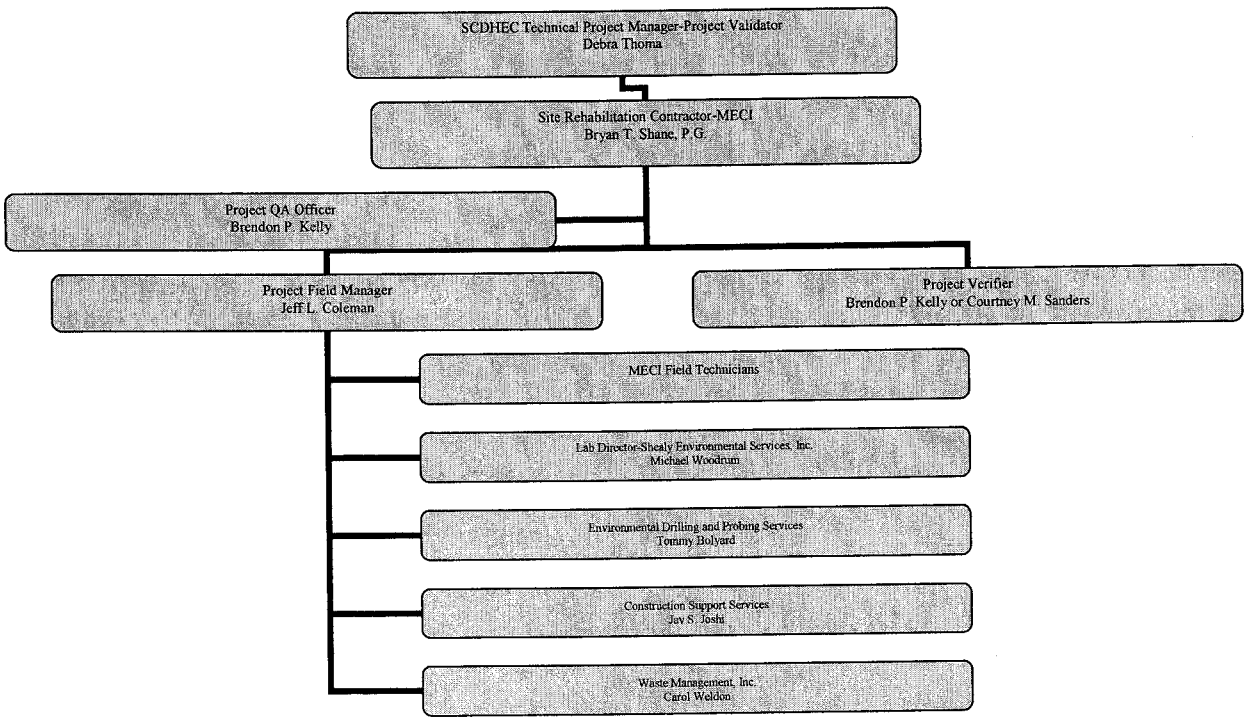


Figure 1A Organizational Chart

Project Manager (Debra Thoma) – The project manager is responsible for direct oversight of contractors conducting assessment and site rehabilitation of releases at UST sites.

Site Rehabilitation Contractor (Bryan T. Shane, P.G.) – The Site Rehabilitation Contractor is an independent contractor responsible for managing and coordinating field and office activities needed for assessments or cleanup.

-Final Review of all work produced for a scope of work.
-Final say on technical interpretation of data.

Quality Assurance Officer (Brendon P. Kelly) – The Quality Assurance Officer is responsible for the oversight of all quality assurance activities associated with projects performed by the Site Rehabilitation Contractor.

-In charge of producing and maintaining the QAPPA for MECI.
-Reviews (and Audits, if necessary) all work produced in conjunction with a scope of work.
-Quality control of data entry and report preparation.

Field Manager (Jeff L. Coleman) –The field manager will oversee all work done on any given project.

-Assign, direct and oversee all field personnel working on each project.
-Responsible for coordinating with the SCDHEC project manager, should any problems or clarifications arise.
-Responsible for all reporting done in conjunction with field work.

Project Verifier (Courtney M. Sanders) – The project verifier is responsible for verifying the quality of data produced during a scope of work. This includes review of field work and laboratory reports for potential quality issues.

Well Driller (Tommy Bolyard) – The well driller is responsible for installing monitoring wells according to South Carolina Well Standards, R.61-71. The well driller is a subcontractor for MECI.

Field Technicians (various employees) – Responsible for all field activities for a given scope of work.

-Conduct all initial site visit, and record findings
-Conduct all field activities associated with a scope of work. All work will be conducted according to the MECI SOP. Will be responsible for reporting any potential problems are inconsistencies found during assessment activities.
-Completes the chain of custody upon completion of sampling event and delivers samples to lab or office for later lab pick-up

A5 Problem Definition/Background

Discuss the background (as much as is known) of the site and appropriate historical information, and why this site is being assessed.

The subject site (Smith's Grocery) is located at 3176 Charlotte Highway, York, York County, South Carolina. The subject site previously maintained one 6,000 gallon gasoline underground storage tank (UST) and one 8,000 gallon gasoline UST. These UST's were abandoned by removal from ground in

March of 1996. The South Carolina Department of Health and Environmental Control (SCDHEC) reported a release of petroleum product from these UST's in June of 1993 and confirmed the release in September of 1996. The subject site is currently rated a Class 1D.

Following a comprehensive sampling event conducted by MECI in October of 2011, it was determined that additional assessment would be required at the site to adequately define the contaminant plume. The additional assessment will include replacement of dry monitoring wells, field screening to determine the extent of the contaminant plume, and installation of additional permanent monitoring wells.

Please answer the following: Does this project fall under UST or Brownfields area?

Underground Storage Tank Division

A6 Project/Task Description

1. ***Summarize what is known about the work to be done. This can be a short sentence indicating what the Scope of this project is (see Master QAPP Section A6).***

Additional assessment will be conducted at the subject site to define the contaminant plume. This assessment will include replacement of dry monitoring wells, field screening and installation of additional permanent monitoring wells. MECI proposes a three phase process to define the contaminant plume. First, MECI proposes conducting fractured rock field screening at the subject site to determine the appropriate fracture zone in which contamination is flowing within the rock interface. Do accomplish this, MECI proposes inserting a down-hole camera in both WSW-Swift and in WSW-Hill. Based on the results of the down-hole camera, MECI proposes conducting additional field screening/fractured rock field screening inside the existing plume and down-gradient of the WSW-Swift and WSW-Hill. Based on the results of the additional fractured rock, additional "Deep" monitoring wells will be installed. Please see the attached Figure 3 for proposed field screening points and monitoring well locations. Theses proposed locations are based only on current information, and will most likely change once field screening activities have been initiated.

Following field screening and monitoring well installation a comprehensive survey will be conducted to locate newly installed monitoring wells and additional water supply wells located in the area.

2. ***The work will begin within*** fourteen (14) days of receipt of approved QAPP contractors addendum ***after cost approval and the scope of work should be complete by*** one hundred and twenty (120) days of receipt of approved QAPP contractors addendum.

3. ***Are there are time or resource constraints? Include those factors that may interfere with the tentative schedule.***

Factors that may prevent schedule work will be, but not limited to, inclement weather, equipment malfunction, and machine failure.

A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs)

The subject site (Smith's Grocery) is located at 3176 Charlotte Highway, York, York County, South Carolina. Assessment will be conducted on the subject property, and on properties located North and East of the subject site. Prior to work being conducted, property access will be obtained by MECI personnel to enter these properties and conduct assessment activities.

A8 Training and Certificates

Required training and licenses:

Title/Job	Name	Training Required	Date training received	Type of License	License Number
Principal Geologist	Bryan T. Shane, P.G.	Professional Geologist	10/30/1993	State of South Carolina	1102
Senior Scientist	Jeff Coleman	OSHA 40 hr HAZWOPER	7/27/2007	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	Scheduled 7/27/11	N/A	N/A
Project Scientist	Brendon Kelly	OSHA 40 hr HAZWOPER	8/21/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Geologist	John Bryant	OSHA 40 hr HAZWOPER	4/17/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/14/2010	N/A	N/A
Field Technician	Brian Owen	OSHA 40 hr HAZWOPER	8/21/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Biologist	Courtney Sanders	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Biologist	Kyle Pudney	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Biologist	Chris Lashley	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Biologist	Gavin Globensky	OSHA 40 hr HAZWOPER	7/29/2011	N/A	N/A
Staff	Ryan Ariail	OSHA 40 hr	9/23/2011	N/A	N/A

Title/Job	Name	Training Required	Date training received	Type of License	License Number
Biologist		HAZWOPER			
Lab Manager	Michael Woodrum	***	***	Lab Certification	SC 32010
Drilling Services	Tommy Bolyard - EDPS	SC Drillers Certification	8/24/2004	B	01846

Table 3A Required Training and Licenses

Brendon P. Kelly of Midlands Environmental Consultants, Inc. is responsible to ensuring that personnel participating in this project receive the proper training. All training records will be stored in the following location:235-B Dooley Road, Lexington, SC 29073.

It is understood that training records will be produced if requested by SC DHEC.

The Following Laboratory(ies) will be used for this Project:

Commercial Lab(s)

Full Name of the Laboratory___Shealy Environmental Services, Inc.____
Name of Lab Director_____Michael Woodrum_____
SC DHEC Certification Number_____32010_____
Parameters this Lab will analyze for this project:

BTEX, Napth, MTBE, 1,2 DCA, 8-Oxygenates (EPA Method 8260-B), and EDB (EPA Method 8011).

Full Name of the Laboratory___Schnabel Engineering____
Name of Lab Director_____Mickey Edwards_____
SC DHEC Certification Number_____N/A_____
Parameters this Lab will analyze for this project:

Grain size distribution test will be performed by Schnabel Engineering in accordance with ASTM Method D-422.

Please note: SC DHEC may require that the contractor submit some or all of the Laboratory's SOPs as part of this QAPP.

A9 Documents and Records

Personnel will receive the most current version of the QAPP Addendum via:
(Check all that apply)

____US Mail ____Courier __X__ Hand delivered

Other (please specify):_____E-mailed electronic copies____

Record	Produced By	Hardcopy/ Electronic	Storage Location For how long?	Archival
Instrument Raw Data	Target, Thermospec, or Iteva software	Hardcopy and Electronic	Hardcopy: Offsite storage for 7 yrs Electronic: Two external storage device backups – one offsite, one onsite storage for 10 yrs	Yes
Final Reports	LIMS	Electronic	Electronic: Two external storage device backups – one offsite, one onsite storage for 10 years	Yes
Field Work	Field Staff	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
Chain of Custody	Field Staff	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
QAPP Addendum	Brendon Kelly	Hardcopy & Electronic	MECI office: 235B Dooley Road / Min. 5 years	Yes
Internal QC record	Brendon Kelly	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
Sampling Report	Brendon Kelly	Hardcopy & Electronic	MECI office: 235B Dooley Road / Min. 5 years	Yes

Table 4A Record Identification, Storage, and Disposal

Section B Measurement/Data Acquisition

B1 Sampling Process/Experimental Design

Item	Start Date	End Date	Comments
Site Reconnaissance	12/7/11	12/7/11	Already Completed
QAPP preparation	2/28/12	2/28/12	In progress
QAPP approval	2/28/12	3/20/12	Assuming three week turnaround
PUPs Request	3/20/12	3/23/12	72 hours for active PUPS ticket
Field Screening	3/23/12	4/23/12	One Month to complete field screening
Monitoring well Installation	4/23/12	5/14/12	Three weeks to complete drilling activities
Monitoring well Sampling	5/14/12	5/21/12	Sampled within 1 week of monitoring well installation
Report Preparation	5/21/12	6/11/12	Three weeks to prepare/submit report

Table 5A Sampling Activities

B2 Sampling Methods

Please note: The contractor must follow sampling protocols as given in the UST QAPP.

***Estimate* the number of samples of each matrix that are expected to be collected:**

Soil	2
Ground Water from monitoring wells	43
From Drinking/Irrigation water wells	32
Field Duplicate Collection	4
Field Blank Collection	3
Trip Blank	3
From surface water features	0
Total number of Water samples	85

Notes:
During the December 7, 2011 site visit, thirty-four (34) monitoring and injection wells were located. Additionally, thirty-two water supply wells (including GAC unit samples) were located and determined to be operational within 1,000 feet of the subject site. Of the monitoring wells located, 9 were determined to be dry during the previous sampling event and will be replaced. Eight (8) additional monitoring wells are currently proposed to be installed.

Samples will be analyzed by Shealy Environmental Services, Inc. for BTEX, Napth, MTBE, 1,2 DCA, (8260B), and EDB (8011).

For the sample matrices indicated above, please describe how samples will be collected and the equipment needed.

Monitoring Well Sampling

Water Level Measurement

-MECI personnel utilize Electronic Water Level Indicators for Water Level Measurements. Each sampling crew carries an electronic water level indicator for use on downgradient monitoring wells

and an Oil/Water Interface probe for use on source area wells or wells that have historically contained measurable free phase petroleum product.

-Prior to usage, the indicator is decontaminated with isopropanol applied by a Teflon squeeze bottle and rinsed with analyte free water. This rinse water is collected and run through a portable GAC (granulated activated carbon) unit.

-The indicator is slowly lowered into the water table, and the water level is recorded to the nearest 0.01 feet.

-When free phase petroleum product is encountered, the Oil-Water Interface probe is slowly lowered into the monitoring well until product is encountered; this measurement is recorded to the nearest 0.01 feet. The meter is then lowered through the product until water is encountered. The probe is then pulled back up through the well until product is encountered again; this measurement is recorded to the nearest 0.01 feet.

-If the total depth of a monitoring well is required, after a groundwater level is recorded, the indicator probe is lowered until the bottom of the monitoring well is encountered. This depth is recorded to the nearest 0.01 feet. Following a total depth measurement, the entire length of probe tape is decontaminated with isopropanol and rinsed with analyte free water.

-All measurements will be taken from the top of the well casing.

Monitoring Well Purging

-Where necessary, monitoring wells will be purged prior to sampling if: the well screen does not bracket the watertable, if a screened interval is not known, purging is specifically asked for by the SCDHEC project manager, or a monitoring well has not previously been sampled.

-Purging will be completed utilizing a prepackaged, clear, disposable polyethylene bailer and nylon rope. Following purging/sampling of a well, the bailer and rope will be properly disposed.

-A new set of Nitrile gloves will be worn at each monitoring well, and at any time samples are handled.

-Prior to purging, the water level of the well will be determined using an electronic water level indicator. The water level, total well depth and well diameter will be used to determine the amount of water standing in the water column. The following table presents gallons of water per foot of water column in selected diameters of wells:

Well Diameter (inches)	Gallons of Water/Foot	Well Diameter (inches)	Gallons of Water/Foot
1	0.047	8	2.611
2	0.163	10	4.08
4	0.653	12	5.875
6	1.469		

-The length of the water column multiplied by the gallons of water per foot will provide the number of gallons in one well volume of water.

-Purging will continue until three well volumes of water are evacuated, or where field measurements of pH, Specific Conductivity (uS) and Temperature (°C) have stabilized to within 10% of previous values or until all accessible well water is evacuated (purged dry). Field measurements of these parameters will be taken and recorded in field notes, prior to purging and after each well volume of water has been purged.

-When purging a well with a diameter larger than 2", a submersible Redi-Flo2 pump can be used.

-Prior to usage, the pump assembly will be cleaned using a laboratory grade detergent and rinsed with analyte free water.

-The pump is lowered into the water column utilizing an attached nylon rope. DO NOT LOWER THE PUMP USING THE ELECTRICAL CORD OR HOSE.

-Once the pump has been lowered to the desired depth, the nylon rope is securely attached to an anchor at the ground surface (i.e. metal stake, truck bumper, etc). The power cord is attached to the speed controller which is attached to the generator.

-Slowly increase the speed of the controller until a desired flow rate is achieved. The pump should not be allowed to run dry.

-Purge water will be treated on-site utilizing a GAC unit.

Monitoring Well Sampling

-No-purge sampling will be conducted in previously sampled monitoring wells if: the water level is within the screened interval of the well or specifically asked for by the SCDHEC project manager.

-Immediately prior to sampling, laboratory provided labels will be placed on all sample vials and containers. These labels will include the site name, sample ID, analysis to be completed, date and time.

-Sampling will be conducted utilizing prepackaged, clear, disposable polyethylene bailers and nylon rope. Following sampling of a well, the bailer and rope will be properly disposed. A new set of Nitrile gloves will be worn at each monitoring well, and at any time samples are handled.

-The bailer is lowered into the well until it encounters the watertable, the bailer is then allowed to fill with water and is extracted from the well. Samples are placed in laboratory provided and approved sampling containers. Following sample collection, the samples are immediately placed in laboratory provided coolers, pre-filled with wet ice obtained from the MECI office.

-When requested by the SCDHEC project manager, passive diffusion bags (PDB) can be used to obtain no purge samples from discreet intervals within a water column or from wells were it is not possible to treat purge water on-site (i.e. DNAPL contamination).

-Prior to installation of a PDB, all equipment used should be washed with isopropanol and rinsed with analyte free water (weights, PDB clamps, etc.).

-Wearing Nitrile gloves, the PDB is filled with analyte free water, sealed with a PDB clamp according to the manufacturer and attached to a nylon rope. The PDB is then lowered into the well to a specified depth.

-After a minimum of two weeks in the well, the PDB is removed from the well and a sample taken using a disposable, prepackaged, sealed sampling straw to puncture the bag and fill sample vials.

-Once the samples are taken, they are to be immediately placed in laboratory provided coolers, pre-filled with wet ice obtained from the MECI office.

-One field duplicate will be taken for every twenty (20) monitoring wells sampled at a site. This blank is a duplicate sample taken from a monitoring well near the source area, and is sampled in accordance with MECI Standard Operating Procedures.

-One field blank will be prepared for each day a site is sampled. A field blank is prepared using lab provided DI water placed into laboratory provided sample containers.

-One trip blank per cooler used in sampling will be used at each site. The trip blank is prepared by the laboratory.

-Once a sample has been taken, a sample time will be recorded in the field notes, along with any information about monitoring well condition that should be brought to the attention of the project manager.

Water Supply Well (WSW) and Surface Water Sampling

-Before sampling any WSW, an attempt should be made to speak with the owner of the well, to inform them of the work requested by SCDHEC.
-WSW's should be sampled at the well head, or as close to the well head as possible. If it is not possible to obtain the sample from the well head, field notes should record exactly were the sample was taken (spigot on side of well house, spigot on home, etc.)
-The WSW should be purged prior to sampling by allowing the WSW to run until the holding tank has emptied or the well pump turns on. Wearing Nitrile gloves, the sample should be placed in approved, laboratory provided sampling containers. Following sample collection, the samples are immediately placed in laboratory provided coolers, pre-filled with wet ice obtained from the MECI office.
-Surface waters will be sampled near the location requested on the SCDHEC provided map. When sampling a moving water body, an attempt should be made to obtain the sample from an area of lower flow. Wearing Nitrile gloves, the sample will be collected and placed in approved, laboratory provided sampling containers. Following sample collection, the samples are immediately placed in laboratory proved coolers, pre-filled with wet ice obtained from the MECI office.

Will Sampling Equipment have to be cleaned and decontaminated or is everything disposable?

All equipment, excluding electronic water level indicators and field probes, is disposable.

If sampling equipment must be cleaned please give a detailed description of how this is done and the disposal of by-products from the cleaning and decontamination.

Prior to usage of non-disposable equipment, it is decontaminated with isopropanol applied by a Teflon squeeze bottle and rinsed with analyte free water. This rinse water is collected and run through a portable GAC (granulated activated carbon) unit.

Identify any equipment and support facilities needed. This may include such things as Fed-ex to ship the samples, a Geoprobe, field analysis done by another contractor (who must be certified), and electricity to run sampling equipment.

EDPS will mobilize a combination auger/air-rotary drilling rig to the subject site. All drilling activities will be performed under the supervision of a South Carolina Certified Well Driller and MECI field personnel.

All samples will be shipped to the lab via lab courier or delivered directly to the lab by MECI personnel.

Address the actions to be taken when problems occur in the field, and the person responsible for taking corrective action and how the corrective action will be documented.

Failure	Response	Documentation	Individual Responsible
Water level indicator not working properly	Attempt to clean probe, change battery, use back-up indicator if need be.	Record on field sheets, notify office staff. Take indicator out of rotation until problem identified and corrected.	Field Staff, Field Manager
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
Wells not located	Use metal detector, measure from known points, contact project manager for additional information.	Record method used to attempt to locate the well on field sheets, and possibly reasoning for the well to be missing	Field Staff

Table 6A Field Corrective Action

B3 Sample Handling and Custody

1. ***How will the samples get from the Site to the Lab to ensure holding requirements are met?***

Following sample collection, the samples are immediately place in a laboratory provided cooler, pre-filled with wet ice obtained from the MECI office. Samples are transported to the MECI office once a sampling event is complete. A Chain of Custody (CoC) is filled out following the sampling event by the field staff. See attached CoC. If a lab provided courier is scheduled to visit the MECI offices the day following a sampling event, sampling coolers are repacked with wet ice, and left at the office for pick-up the following morning. If no courier is schedule to visit the MECI office the day following a sampling event, all sampling coolers are repacked with ice and are dropped off at a lab approved shipping company for overnight delivery to the lab.

2. ***How will the contactors cool the samples and keep the samples cool?***

All samples are kept on wet ice, obtained from MECI office.

3. ***How will the lab determine the temperature of the samples upon receipt? Will they be using a temperature blank?***

A calibrated thermometer and temperature blank will be used to document sample temperature. The temperature blank is immediately checked by the sample receiving technician upon arrival at the laboratory.

4. ***Where will the samples be stored in the Lab once they are received?***

All samples are stored in clean refrigeration units monitored and maintained at 4 degrees C + or – 2 degrees. Volatile organic samples are stored separately form all other samples.

5. ***Describe the chain of custody procedure and attach a copy of each chain of custody that will be used. If a Chain of Custody SOP exists from the Lab and the Contractor is willing to adhere to it, then this may be attached.***

A chain of custody (COC) will be filled out for each sampling event at each project site. COC to be signed by MECI and Shealy Environmental technician at time physical transfer of samples occurs to courier. Shealy uses the following COC procedures to protect sample integrity following pickup by their courier: A full time Sample Receiving Technician receives all samples and completes a Sample Receipt Checklist (SRC), which will identify any anomalies, if any exist the Sample Receiving Technician or Project Manager must resolve the deviation internally and/or notify the client to resolve the anomaly.

B4 Analytical Methods

1. *Identify the SOPs which will be used to analyze the samples, the method which the SOP references and the equipment or instrumentation that is needed:*

Parameter	SOP ID*	Method Referenced	Equipment	Comments
BTEX+Naph+MTBE+Oxygentaes	S-VO-002	8260B	GC/MS	
PAH's	S-SV-021	8270D	GC/MS	
EDB	S-SV-012	8011	GC	
Lead,T.	S-IM-022	6010C	ICP	
Ferrous Iron	S-IN-009	SM 3500-FED	Spectrophotometer	
Nitrate	S-IN-042	353.2	Auto-analyzer/Lachate	
Sulfate	S-IN-010	300.0	Ion Chromatograph	
Methane	S-VO-004	RSK-175	GC	
TOC	S-IN-030	Walkley-Black	N/A	
DRO - TPH	S-SV-001	8015C	GC	
pH	Standard	MECI SOP 4.3.6	YSI 63	Place probe in sample and allow to equilibrate before recording reading
Conductivity	Standard	MECI SOP 4.3.6	YSI 63	
Dissolved Oxygen	Standard	MECI SOP 4.3.6	YSI 550A	
Temperature	Standard	MECI SOP 4.3.6	YSI 550A	

Table 7A Analytical SOPs and Referenced Methods

- **This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.**

Abbreviation	Lab Identification of this SOP	Full Name of the SOP
S-VO-002	S-VO-002	GC/MS VOLATILES ANALYSIS BASED ON EPA METHODS 8260B AND 624 PREPARED BY EPA METHODS 5030B, 5035 AND 3585
S-SV-021	S-SV-021	GC/MS ANALYSIS BASED ON EPA METHOD 8270D PREPARED BY EPA METHODS 3520C, 3550C AND 3580A
S-SV-012	S-SV-012	GC/ECD ANALYSIS OF EDB AND DBCP BASED ON METHOD 8011 & 504.1
S-IM-022	S-IM-022	INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPECTROSCOPY-PECTROMETRIC METHOD for TRACE ELEMENT ANALYSES

		METHOD 6010C
S-IN-009	S-IN-009	FERROUS IRON (PHENANTHROLINE METHOD) STANDARD METHOD 3500-Fe D
S-IN-042	S-IN-042	NITRATE+NITRITE NITROGEN BY EPA METHOD 353.2, NITRATE NITROGEN BY 353.2 SUBTRACTION, AND NITRITE NITROGEN BY EPA METHOD 353.2
S-IN-010	S-IN-010	INORGANIC ANIONS BY ION CHROMATOGRAPHY EPA METHOD 300.0 and SW-846 9056 and 9056A
S-VO-004	S-VO-004	STANDARD OPERATING PROCEDURE GC ANALYSIS BASED ON METHOD RSKSOP-175
S-IN-030	S-IN-030	TOTAL ORGANIC CARBON (TOC) WALKLEY-BLACK PROCEDURE
S-SV-001	S-SV-001	GC/FID DIESEL RANGE ORGANICS ANALYSIS BASED ON METHOD 8015B and/or 8015C PREPARED BY EPA METHODS 3520C, 3550C and 3580A
MECI SOP 4.3.6	MECI SOP 4.3.6	Sampling Standard operating procedures

Table 8A SOP Abbreviation Key

2. Identify procedures to follow when failures occur, identify the individual responsible for corrective action and appropriate documentation:

Failure	Response	Documented Where?	Individual Responsible
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
COC or Sample Receiving issues	Call Client	Sample Receiving Checklist (SRC)	PM – Kelly Maberry kmaberry@shealylab.com
Analytical errors	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum mwoodrum@shealylab.com
QA/QC Failure	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum mwoodrum@shealylab.com QA/QC Officer – Jami Savje Jsavje@shealylab.com
On time delivery	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum mwoodrum@shealylab.com QA/QC Officer – Jami Savje Jsavje@shealylab.com

Table 9A Corrective Action Procedures

3. Identify sample disposal procedures.

Analysis	Matrix	Schedule for disposal	Method for disposal	Comments
BTEX+Naph+MTBE+Oxygenates	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
PAH's	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
EDB	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Lead	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Ferrous Iron	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Nitrate,Sulfate	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	

Methane	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
All	Water	On-Site	Portable Granulated Activated Carbon (GAC) Unit	All waste water produced from sampling and decontamination activities will be run through a GAC unit

Table 10A Disposal Procedures

4. Provide SOPs for the Kerr Method or the Ferrous Iron Method if these are parameters for this study. This can be attached or written here. If attached please note that it is an attachment and where it is located (if applicable).

B5 Quality Control Requirements:

All QC will follow the requirements laid out in Section B5 of the UST Programmatic QAPP.

B6 Field Instrument and Equipment Testing, Inspection and Maintenance

1. Identify all field and laboratory equipment needing periodic maintenance, the schedule for this, and the person responsible. Note the availability and location of spare parts.

Instrument	Serial Number	Type of Maintenance	Frequency	Parts needed/Location	Person responsible
Volatiles Mass Spec	ALL	Change traps, clean ion source, replace filaments	Periodic	Laboratory	MSV Analyst
Semivolatile Mass Specc	ALL	Injection port maintenance, ion source maintenance, column replacement	Periodic	Laboratory	MSSV Analyst
ECD GC	ALL	Injection port maintenance, column replacement	Periodic	Laboratory	GC Analyst
Dionex IC	ALL	Replace auto sampler filter, tubing, line filter, sample Line and Waste	Periodic	Laboratory	IC Analyst

		Line, as needed. Check Reagent levels, flow rate, waste line.			
ICP	ALL	Clean Sample introduction system , auto sampler, torch, Change spray chamber, torch tubing, tubing	Periodic	Laboratory	ICP Analyst
Leeman Mercury Analyzer	ALL	Clean GLS, Change Pump tubing, Nafion Dryer, Lamp	Periodic	Laboratory	Mercury Analyst
Flow Injection Analysis – Lachat 8000	ALL	Replace sample and reagent lines, replace light source, re-wrap heating coil, replace column	Periodic/As Needed	Laboratory	Nitrate Analyst
YSI 63	09C 101302, 10K 101895, 07M 100905	Replace probe tip	Yearly	Order from YSI	B. Kelly
YSI 63	09C 101302, 10K 101895, 07M 100905	Replace batteries	As Needed	In stock at office	Field Staff
YSI 63	09C 101302, 10K 101895, 07M 100905	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
YSI 63	09C 101302, 10K 101895, 07M 100905	Check buffer solutions for expiration	Weekly	In stock at office	B. Kelly
YSI 550A	04L 2026AK, 08B 101407, 04A 0912AI	Replace membrane	4 to 8 weeks	In stock at office	Field Staff
YSI 550A	04L 2026AK, 08B 101407, 04A 0912AI	Replace batteries	As Needed	In stock at office	Field Staff
YSI 550A	04L 2026AK, 08B 101407, 04A 0912AI	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff

Table 11A Instrument and Equipment Maintenance

2. Identify the testing criteria for each lab or field instrument that is used to ensure the equipment is performing properly. Indicate how deficiencies, if found, will be resolved, re-inspections performed, and effectiveness of corrective action determined and documented. Give the person responsible for this

Instrument/Equipment & Serial Number	Type of Inspection	Requirement	Individual Responsible	Resolution of Deficiencies
Volatiles Mass Spec	Daily calibration check	Method Requirements	MSV Analyst	Recalibration or instrument maintenance
Semi-volatiles Mass Spec	Daily calibration	Method Requirements	MSSV	Recalibration or

	check		Analyst	instrument maintenance
ECD GC	Daily calibration check	Method Requirements	GC Analyst	Recalibration or instrument maintenance
Dionex IC	Daily calibration check	Method Requirements	Nitrate Analyst	Recalibration or instrument maintenance
ICP	Daily calibration check	Method Requirements	ICP Analyst	Recalibration or instrument maintenance
Leeman Mercury Analyzer	Daily calibration check	Method Requirements	Mercury Analyst	Recalibration or instrument maintenance
Flow Injection Analysis – Lachat 8000	Daily and continuing calibration check	See calibration criteria	INM Analyst	Recalibration or instrument maintenance
YSI 63 - 09C 101302, 10K 101895, 07M 100905	Daily calibration check	pH within 0.20 of pH 7.00 standard buffer, conductivity within 10% of standard	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
YSI 550A - 04L 2026AK, 08B 101407, 04A 0912AI	Daily calibration check	Temperature within +/- 1°C vs. mercury thermometer, dissolved oxygen within 0.25 mg/l	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer

Table 12A Instrument and Equipment Inspection

B7 Instrument Calibration and Frequency

1. Identify equipment, tools, and instruments for field or lab work that should be calibrated and the frequency.
2. Describe how the calibrations should be performed and documented, indicating test criteria and standards or certified equipment.
3. Identify how deficiencies should be resolved and documented. Identify the person responsible for corrective action.

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Volatiles Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by continuous calibration verification standard	Method Criteria	Detailed in SOP	MSV Analyst	S-VO-002

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Semi-volatile Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	MSSV Analyst	S-SV-021
GC ECD	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	GC Analyst	S-SV-012
Dionex IC	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	IC Analyst	S-IN-010
ICP	Minimum of 3 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	ICP Analyst	S-IM-022
Cetac Mercury Analyzer	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	Mercury Analyst	S-IM-006
Lacaht QuickChem 8000	Minimum of 5 calibration standards	Daily or when indicated by calibration verification standard	Method Criteria	Detailed in SOP	Nitrate Analyst	S-IN-042
YSI 63	pH Calibration	Daily	+/- 0.2 pH units	clean/replace probe tip, recalibrate	Field Staff	4.3.6
YSI 63	Conductivity Calibration	As directed by manufacturer	+/- 10 uS	clean/replace probe tip, recalibrate	Field Staff	4.3.6
YSI 550A	DO calibration	Daily	+/- 0.25 mg/l	clean/replace probe tip, recalibrate	Field Staff	4.3.6
YSI 550A	Temperature Calibration	Daily	+/- 1 °C	clean/replace probe tip, recalibrate	Field Staff	4.3.6
Electronic Water Level Indicator	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***
Oil/Water Interface probe	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***

Table 13A Instrument Calibration Criteria and Corrective Action

*** This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.**

B8 Inspection/Acceptance Requirements for Supplies and Consumables

1. Identify critical supplies and consumables for field and laboratory, noting supply source, acceptance criteria, and procedures for tracking, storing and retrieving these materials.
2. Identify the individual(s) responsible for this.

Item	Vendor	Acceptance criteria	Handling/Storage Conditions	Person responsible for inspection and tracking.
Laboratory Chemicals	Fisher,VWR	Certificates of analysis and laboratory testing	Laboratory storage	Receiving and laboratory personnel
Laboratory standards	O2Si, Restek, High Purity, VHG, Supelco	Certificates of analysis and laboratory verifications	Vendor specific storage conditions	Laboratory Analysts
Sample Containers	Daniels Scientific, QEC	Certificates of analysis and laboratory testing	Bottle storage area	Sample receiving personnel
Clear, Disposable polyethylene Bailers	Preferred Pump	Individual sleeves intact, ball valve operational	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
Nylon Rope	Preferred Pump	Covered with plastic	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
Nitrile Gloves	Preferred Pump	Unopened box, no holes	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
40 mL HCL preserved amber vials	Shealy Environmental Services	Custody seal intact	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
250 mL HNO3 preserved metals vials	Shealy Environmental Services	Custody seal intact	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
Coolers	Shealy Environmental Services	Intact	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
pH Buffer	TRS Environmental, Enviroequipment	Within expiration date	Stored in calibration room	B. Kelly, Field Staff
Conductivity Standard	TRS Environmental, Enviroequipment	Within expiration date	Stored in calibration room	B. Kelly, Field Staff
DO Membranes	YSI, Enviroequipment	Clean, in box	Stored in calibration room	B. Kelly, Field Staff
Batteries	Any Store	Not previously used	Stored in calibration room	B. Kelly, Field Staff

Table 14A List of Consumables and Acceptance Criteria

B9 Data Acquisition Requirements (Non-Direct Measurements)

1. Identify data sources, for example, computer databases or literature files, or models that should be accessed or used.
2. Describe the intended use of this information and the rationale for their selection, i.e., its relevance to project.
3. Indicate the acceptance criteria for these data sources and/or models.

Data Source	Used for	Justification for use in this project	Comments
Tier 1 and Tier 2 sampling and monitoring well installation reports	Historic groundwater and CoC concentration data. Lithology and well construction data from previous MWI's	Establish the type of drilling rig required, time for sampling and any other potential problems that may be encountered.	1903 forms from previous monitoring well installations will be used to estimate depth of the outer casing for the new double cased well.

Table 15A Non-Direct Measurements

4. Identify key resources/support facilities needed.

B10 Data Management

1. Describe the data management scheme from field to final use and storage.

Following sample collection and chain of custody production, samples are shipped to the lab. Field work from the field staff is reviewed by the MECI project manager, and converted into digital form. All data entry is subsequently checked to validate the data entry. The original copies of the field work are stored in MECI files for a minimum of 5 years. Digital copies of the work are stored on the MECI server, which is backed up weekly, and stored for a minimum of 5 years. The digital copy of the field work is presented to SCDHEC with the final report.

2. How does the lab and field staff ensure that no unauthorized changes are made to the chain of custody, sampling notebooks, laboratory notebooks and computer records?

The laboratory maintains comprehensive Quality Control and Training Programs. All sample receipt data, sample log-in, and analytical data is peer reviewed, including review for inappropriate changes. Data management, review procedures and the Quality Systems Program are documented in the laboratory's Quality Manual and Standard Operating Procedures. The Quality Assurance Department oversees adherence to and review of these programs.

All MECI field work is produced using ink-pens. Any attempt to alter field data, after sampling is complete, can be readily identified. MECI keeps a carbon copy of the chain of custody after it is shipped to the lab. This copy is kept with the field work. If any change to the CoC are suspected, this original carbon copy can be use to identify potential changes.

3. How does the lab ensure that there are no errors in samples records including times when sample information is compiled, data calculated and/or transmitted?

Sample data acquisition software is reviewed periodically. The LIMS database is backed up daily and is able to be restored in the event of a system failure. These procedures are documented in laboratory SOP S-AD-003, LIMS. The IT Manager is responsible for these systems and procedures."

4. How will the data be archived once the report is produced? How can it be retrieved? (This applies to both electronic and hard copies).

Laboratory Hardcopy data stored off site is logged, maintained and archived by the Quality Assurance Department. Laboratory Electronic Data Reports are maintained through IT back up under the responsibility of the IT Systems Manager.

MECI keeps all field work and paper copies of reports in its in-house filing system. All paper copies are stored for a minimum of 5 years. Any file can be retrieved easily by going to the correct filing cabinet/box.

All electronic copies of reports generated are kept on the MECI server. This server is backed-up on a weekly basis. Any file stored on the MECI server can be retrieved instantly, by accessing the server. All electronic files are stored for a minimum of 5 years on the server.

Section C Assessment and Oversight

C1 Assessment and Response Actions

1. *The Contractor is supposed to observe field personnel daily during sampling activities to ensure samples are collected and handled properly and report problems to DHEC within 24 hours. . Please state who is responsible for doing this and what observations will be made. Will this person have the authority to stop work if severe problems are seen?*

Field audits can be conducted on any field personnel at any time. MECI field audits can be conducted by the Field Manger, who will be responsible for ensuring that field personnel adhere to the QAPP. If during a random field audit, severe problems are found, work will be stopped by the field manager and the QA officer contacted to determine corrective action. All problems must be corrected prior to any additional work being performed. Should it be requested, an On-site Field Audit can be scheduled with the SCDHEC project manager.

2. *The SCDHEC UST QAPP states that the Lab will receive an Offsite Technical System Audit. For this project, what assessments will be done on the Commercial Lab(s) that are being used—other than their certification audit? When or how often are these done? Who will the results be given to and who has the ability to stop work if problems are severe?*

The laboratory participates in annual Proficiency Testing through an approved vendor, Wibby Environmental. Proficiency Testing results are provided to the Office of Environmental Laboratory Certification.

C2 Reports to Management

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

Section D Data Validation and Usability

All field and laboratory data will be checked and verified by the project verifier (Brendon Kelly) prior to submission to SCDHEC.

CoC is shipped with the samples to the lab, and a copy is kept by MECI in the work folder.

4.3.5.2.A lab provided transport blank will be stored in each cooler for transport to the laboratory.

4.3.5.3.Samples will be transported to the laboratory by shipment with a lab provided courier or with a lab approved shipping company. If a courier is scheduled to visit the MECI offices the day following a sampling event, sampling coolers will be repacked with wet ice, and left at the office for pick-up. If no courier is scheduled to visit the MECI office the day following a sampling event, all sampling coolers are to be dropped off at the lab or at an approved shipping company for overnight delivery to the lab immediately following the sampling event.

4.3.6. Field Measurements and Instrument Calibration

4.3.6.1.Prior-to all sampling events equipment for field measurements should be calibrated. MECI utilizes YSI550A meters for DO (mg/L) and temperature readings (^{o}C) and YSI63 meters for pH and conductivity (uS) readings. These meters are calibrated according to the manufacturers instructions (please see attached calibration instructions)

4.3.6.2.Calibration readings will be recorded on field notes, and should be within +/- 1°C for temperature, +/- 0.2 pH units of 7.00 buffer for pH and within 10% of 100 uS buffer for conductivity.

4.3.6.3.MECI utilizes a 60 cm calibrated turbidity tube for turbidity measurements. The tube is marked with a 60 cm tape that has been calibrated into Nephelometric Turbidity Units (NTU). Turbidity is measured by filling the Turbidity Tube with purge water. The water is drained from the bottom of the tube while the user looks towards to bottom of the tube. Once the Secchi disk pattern at the bottom of the tube is visible, the drain tube is closed, and a reading is taken according to the amount of purge water remaining in the tube.

4.3.6.4.Field Measurements are taken by fully submerging the probes from the YSI550A and YSI63 into water taken from the well. Readings are allowed to equilibrate, then the measurement is recorded.

4.3.6.5.Meters are to be stored in waterproof cases inside of the office when not in use, to prevent possible exposure damage.

4.4. Aquifer Characterization

Aquifer specific data will be collected using methods appropriate to the local geology of the facility. MECI will primarily utilize slug tests to obtain specific aquifer data. This data, combined with sieve analysis and hydrometer data will be utilized in aquifer calculations.

4.4.1. Slug Test

A normal characterization for a Tier II assessment will require slug tests on two watertable bracketing monitoring wells and one deep monitoring well. Other scopes of work will require a varying number of slug tests.

4.4.1.1.Slug tests will be completed utilizing prepackaged, clear, disposable polyethylene bailers, nylon rope, stop-watch and previously decontaminated electronic water level indicator.

4.4.1.2.Prior to starting the Slug test, a static groundwater measurement will be taken.

4.4.1.3.Water is removed from the well until the water level in the well has been reduced at least one foot.

4.4.1.4.The stopwatch is started as soon as the last bail of water is removed from the well.

4.4.1.5.The water level indicator is lowered into the well and groundwater elevation readings are taken at 15-second intervals for the first two minutes. This interval can be expanded as the test continues.

4.4.1.6.Water level measurements are taken until the water level in the well has returned to within 90 percent of the static level, or one hour has elapsed.

D H E C

PROMOTE PROTECT PROSPER

South Carolina Department of Health and Environmental Control

ASSESSMENT COMPONENT COST AGREEMENT
SOUTH CAROLINA
Department of Health and Environmental Control
Underground Storage Tank Management Division
State Underground Petroleum Environmental Response Bank Account

Facility Name: Smith's Grocery

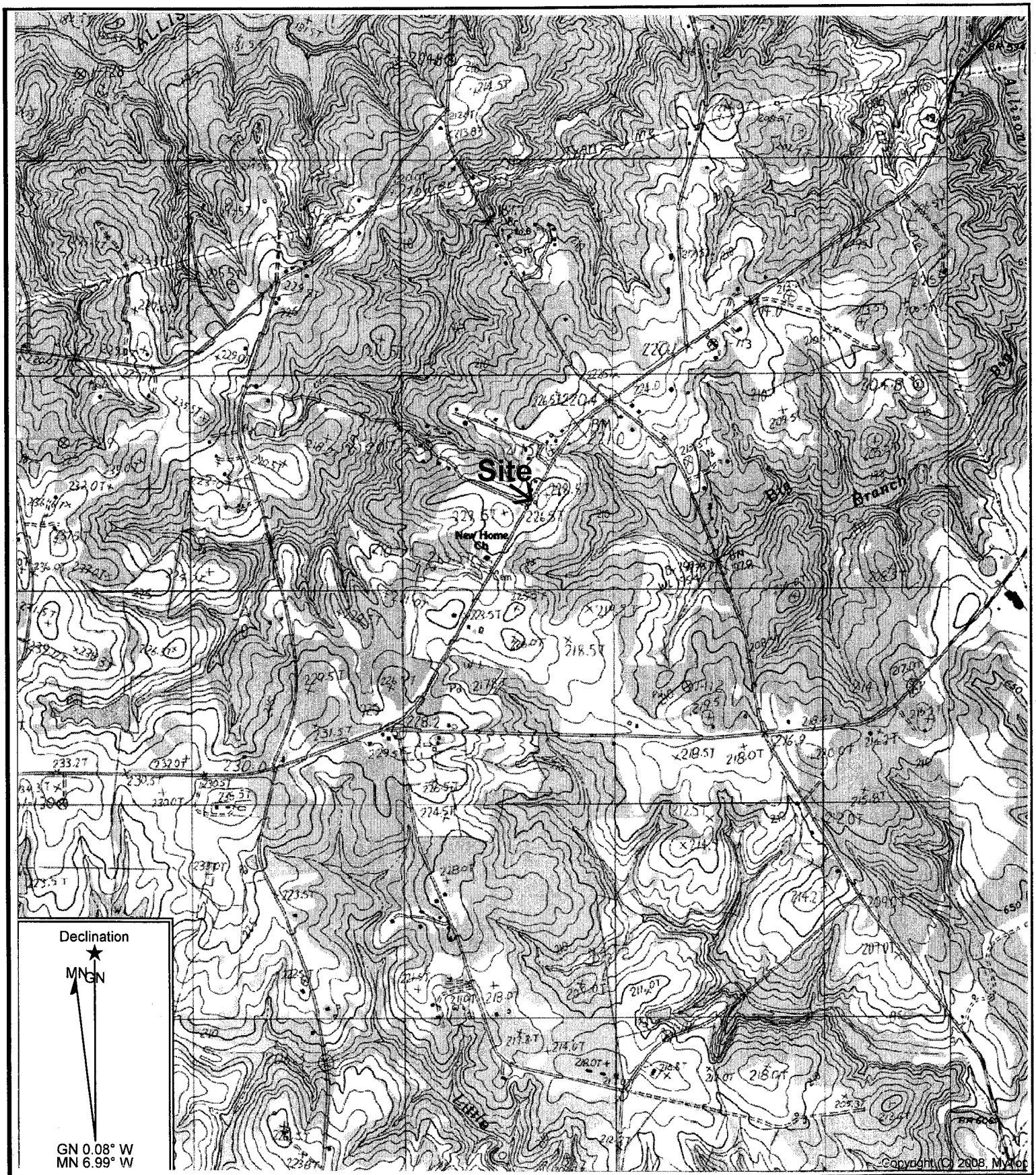
UST Permit #: 09322 **Cost Agreement #:** N/A

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1. **Plan***				
B. Tax Map		x	$50.00	$0.00
C. Tier II or Comp. Plan /QAPP Appendix B	1	x	$525.00	$525.00
2. **Receptor Survey ***		x	$500.00	$0.00
3. **Survey (500 x 500 feet)**				
A. Comprehensive Survey	3	x	$1,000.00	$3,000.00
B. Subsurface Geophysical Survey				
1. < 10 meters below grade		x	$2,750.00	$0.00
2. > 10 meters below grade		x	$3,250.00	$0.00
C. Geophysical UST or Drum Survey		x	$1,125.00	$0.00
4. **Mob/Demob (Each)**				
A. Equipment	2	x	$575.00	$1,150.00
B. Personnel	5	x	$290.00	$1,450.00
C. Adverse Terrain Vehicle to install wells		x	$575.00	$0.00
5. **Soil Borings (hand auger)* (Feet)**		feet x	$14.00	$0.00
6. **Soil Borings (drilled) & Field Screening *** Rate includes collection of water sample or soil sample, and lab or other analyses				
A. Standard	800	feet x	$17.00	$13,600.00
C. Fractured Rock	1200	feet x	$27.50	$33,000.00
7. **Soil Leachability Model (Each)**		each x	$200.00	$0.00
8. **Abandonment* (per foot)**				
A. 2" diameter or less	800	feet x	$5.00	$4,000.00
B. Greater than 2" to 6" diameter	800	feet x	$5.50	$4,400.00
C. Dug/Bored well (up to 6 foot diameter)		feet x	$18.00	$0.00
9. **Well Installation* (per foot)**				
A. Water Table (hand augered)		feet x	$20.00	$0.00
B. Water Table (drill rig)	550	feet x	$38.00	$20,900.00
C. Telescoping/ Pit Cased		feet x	$58.00	$0.00
D. Rock Drilling	1200	feet x	$58.00	$69,600.00
E. 2" Rock Coring		feet x	$45.00	$0.00
G. Rock Multi-sampling ports/screens		feet x	$47.20	$0.00
H. Recovery Well (4 inch diameter)		each x	$45.00	$0.00
I. Pushed Pre-packed screen (1.25 diameter)		each x	$18.50	$0.00
J. Rotosonic (2 inch diameter)		each x	$45.00	$0.00
10. **Groundwater Sample Collection / Gauge Depth to Water or Product (Each)**				
A. Groundwater Purge	47	wells x	$55.00	$2,585.00
B. Air or Vapors		samples x	$90.00	$0.00
C. Water Supply	32	samples x	$30.00	$960.00
D. Groundwater No Purge or Duplicate		samples x	$35.00	$0.00
E. Gauge Well only		per well x	$20.00	$0.00
F. Sample Below Product		wells x	$50.00	$0.00
G. Pasive Diffusion Bag		each x	$40.00	$0.00
H. Field Blank	3	each x	$5.00	$15.00

11. Laboratory Analyses-Groundwater (Each Sample)					
A1. BTEX+Naphth.+ Oxyg's+ 1,2 DCA + Ethanol	85	samples x	$100.00		$8,500.00
AA. Lead, Filtered		samples x	$46.00		$0.00
B1. Rush EPA Method 8260B (All of item A.)		samples x	$143.00		$0.00
C1. Trimethal, Butyl, and Isopropyl Benzenes		samples x	$40.00		$0.00
D. PAH's		samples x	$120.00		$0.00
E. Lead, Unfiltered		samples x	$20.00		$0.00
F. EDB by EPA 8011	85	samples x	$55.00		$4,675.00
FF. EDB by EPA Method 8011 Rush		samples x	$75.00		$0.00
G. 8 RCRA Metals		samples x	$140.00		$0.00
H. TPH (9070)		samples x	$55.00		$0.00
I. pH		samples x	$10.00		$0.00
J. BOD		samples x	$40.00		$0.00
P1. Ethanol		samples x	$21.50		$0.00
11. **Analyses-Soil (Each Sample)**					
Q. BTEX + Naphth.		samples x	$100.00		$0.00
R. PAH's		samples x	$120.00		$0.00
S. 8 RCRA Metals		samples x	$150.00		$0.00
T. Oil & Grease (9071)		samples x	$60.00		$0.00
U. TPH-DRO (3550B/8015B)		samples x	$65.00		$0.00
V. TPH- GRO (5030B/8015B)		samples x	$65.00		$0.00
W. Grain size/hydrometer	2	samples x	$99.00		$198.00
X. Total Organic Carbon		samples x	$35.00		$0.00
11. **Analyses-Air (Each Sample)**					
Y. BTEX + Naphthalene		samples x	$247.50		$0.00
11. **Analyses-Free Phase Product (Each Sample)**					
Z. Hydrocarbon Fuel Identification		samples x	$620.00		$0.00
12. **Aquifer Characterization***					
A. Pumping Test		hours x	$120.00		$0.00
B. Slug Test*	2	tests x	$150.00		$300.00
C. Fractured Rock		tests x	$500.00		$0.00
13. **Free Product Recovery Rate Test* (Each)**		tests x	$120.00		$0.00
14. **Fate/Transport Modeling**					
A. Mathematical Model		each x	$300.00		$0.00
B. Computer Model		each x	$500.00		$0.00
15. **Risk Evaluation**					
A. Tier I Risk Evaluation		x	$300.00		$0.00
B. Tier II Risk Evaluation		x	$500.00		$0.00
16. **Subsequent Survey***		x	$300.00		$0.00
17. **Disposal* (gallons or tons)**					
A. Wastewater	200	gallons x	$0.80		$160.00
B1. Free Product		gallons x	$0.85		$0.00
C. Soil Treatment/Disposal	10	tons x	$72.50		$725.00
D. Drilling fluids		gallons x	$0.80		$0.00
18. **Miscellaneous (attach receipts)**					
		x			$0.00
		x			$0.00
		x			$0.00
20. **Tier I Assessment (Use DHEC 3665 form)**		x			$0.00
21. **IGWA (Use DHEC 3666 form)**		x			$0.00
22. **Corrective Action (Use DHEC 3667 form)**		x			$0.00

23. **Aggressive Fluid & Vapor Recovery (AFVR)**					
A. 8-hour Event*		each x	$3,000.00		$0.00
B. AFVR per-hour Continuance		per hour x	$204.00		$0.00
C. Off-gas treatment per-hour Continuance		per hour x	$35.00		$0.00
24. **Granulated Activated Carbon (GAC) filter system installation & service:**					
A. New GAC System Installation*		each x	$2,500.00		$0.00
B1. Refurbished GAC Sys. Install*		each x	$1,180.00		$0.00
C. Filter replacement/removal*		each x	$450.00		$0.00
D1. GAC System removal, cleaning, & refurbishment*		each x	$720.00		$0.00
E. GAC System housing		each x	$450.00		$0.00
F. In-line particulate filter		each x	$150.00		$0.00
G. Additional piping & fittings		feet x	$4.00		$0.00
25. **Well Repair**					
A. Additional Copies of the Report Delivered		each x	$32.50		$0.00
B. Repair 2x2 MW pad		each x	$100.00		$0.00
C. Repair 4x4 MW pad		each x	$150.00		$0.00
D. Repair well vault		each x	$225.00		$0.00
F. Replace well cover bolts		each x	$10.00		$0.00
G. Replace locking well cap & lock		each x	$15.00		$0.00
H. Replace/Repair stick-up		each x	$137.50		$0.00
I. Convert Flush-mount to Stick-up		each x	$175.00		$0.00
J. Convert Stick-up to Flush-mount		each x	$125.00		$0.00
K. Replace missing/illegible well ID plate		each x	$22.50		$0.00
Report Prep & Project Management	15%	x	$169,743.00		$25,461.45
TOTAL					$195,204.45

*The appropriate mobilization cost can be added to complete these tasks, as necessary



GRAPHIC SCALE

0 1000 2000 4000

1IN = 2000FT

Reference: Clover, South Carolina
USGS 7.5 Min. Quad
Countour Interval – 3 Meters

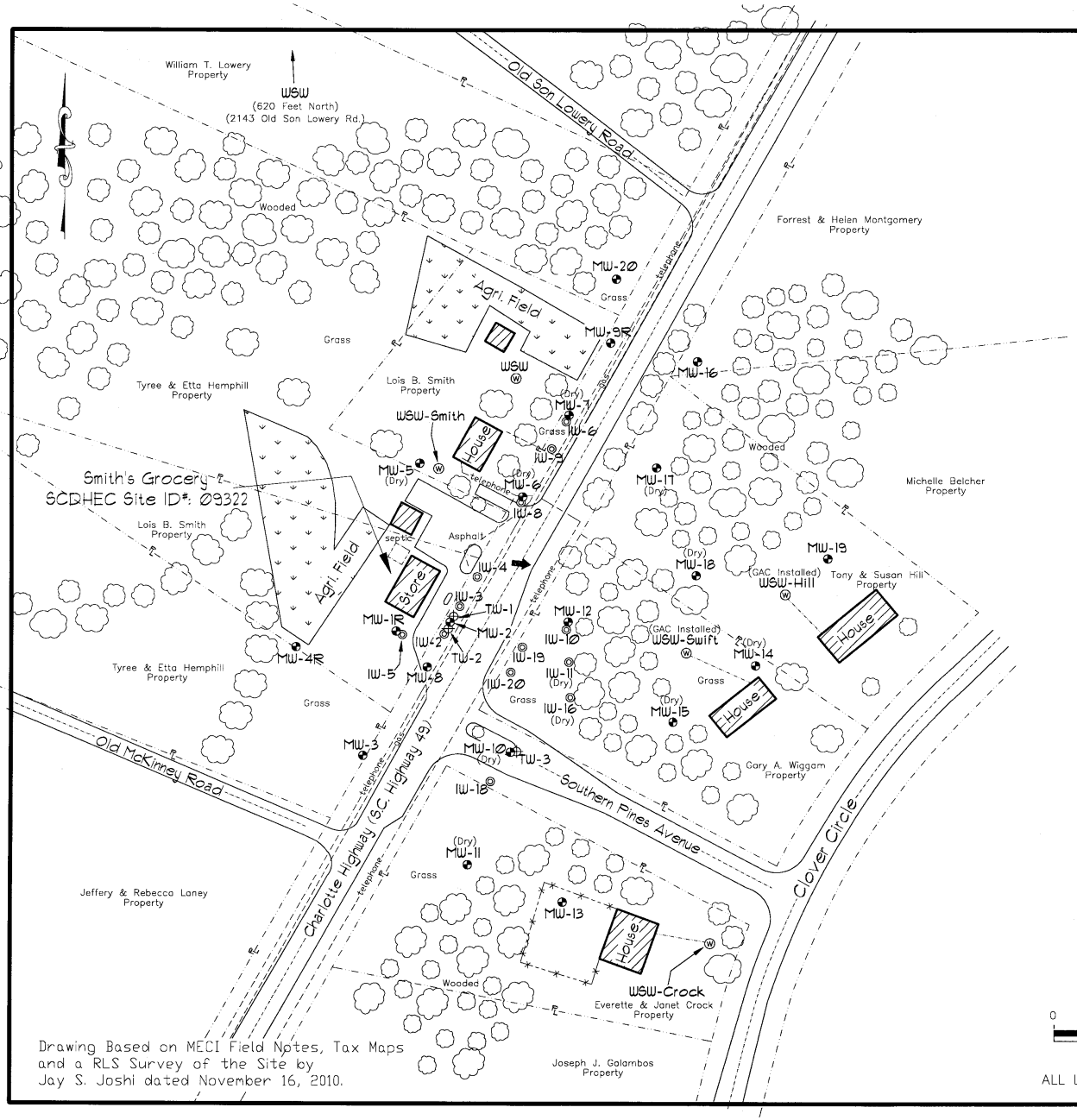
Midlands Environmental Consultants, Inc.

Site Location

Smith's Grocery
South Carolina Highway 49, Clover, SC
SCDHEC Site ID# 09322

Figure 1

MECI 12-3850



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Buried Sewer
- Under Ground Telephone
- Fence

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

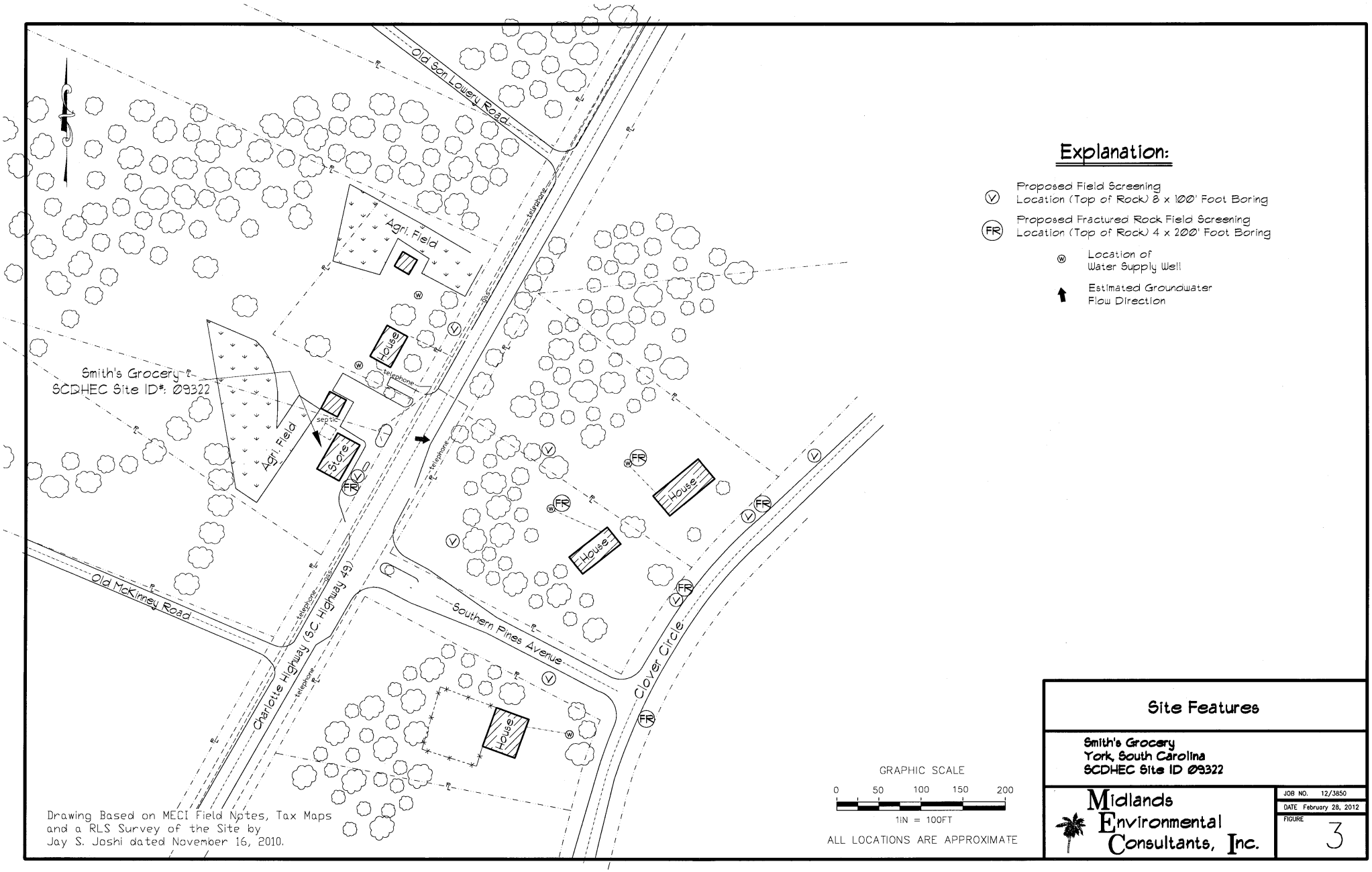
ALL LOCATIONS ARE APPROXIMATE

Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12/3850
DATE February 28, 2012
FIGURE 2

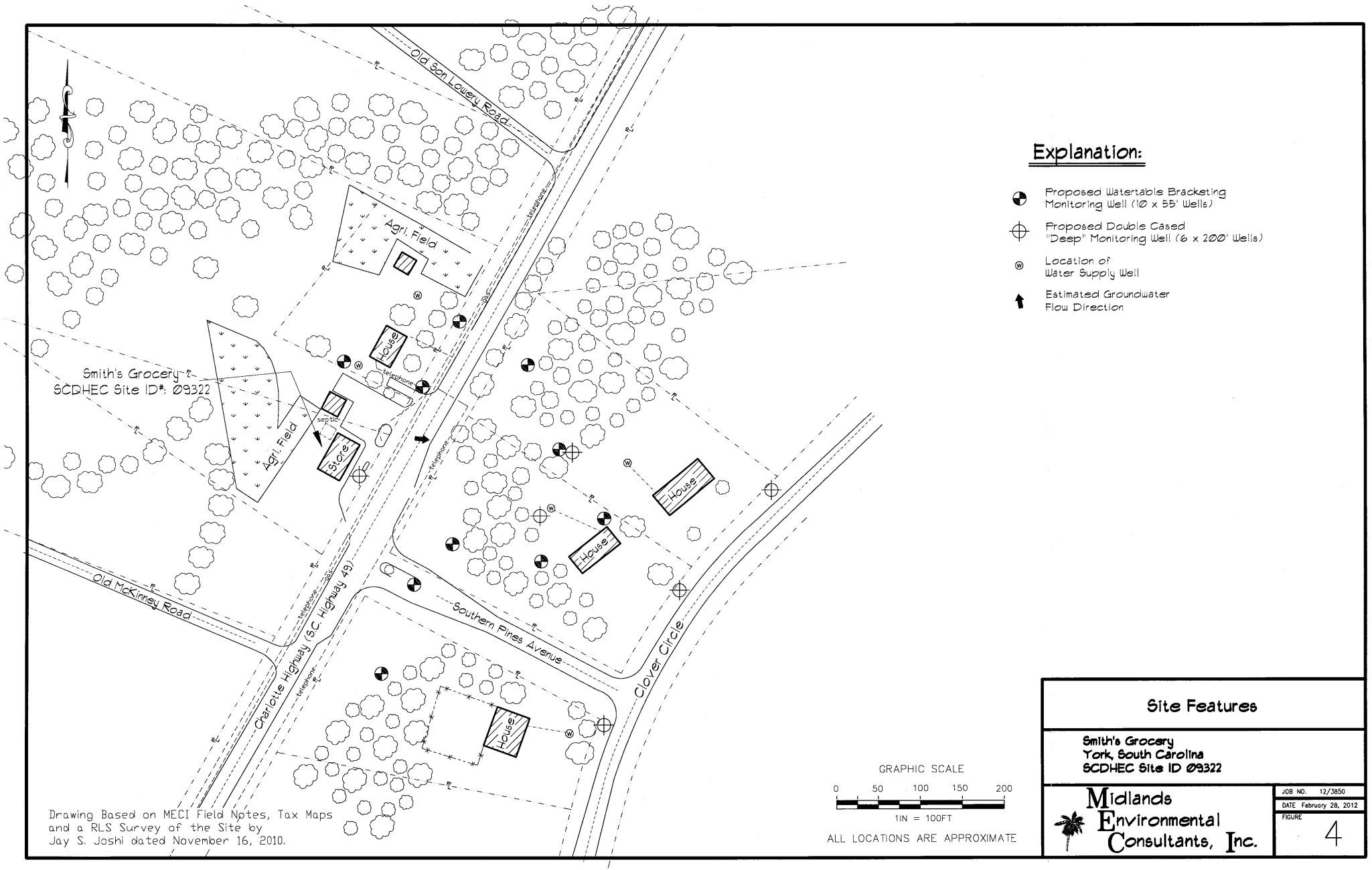


Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12/3850
DATE February 28, 2012
FIGURE 3



Explanation:

- Proposed Watertable Bracketing Monitoring Well (10 x 55' Wells)
- Proposed Double Cased "Deep" Monitoring Well (6 x 200' Wells)
- Location of Water Supply Well
- Estimated Groundwater Flow Direction

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12/3850
DATE February 28, 2012
FIGURE 4

SHEALY

Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 12602

Client	Report to Contact	Sampler (Printed Name)	Quote No.
Address	Telephone No. / Fax No. / Email	Waybill No.	Page of
City / State / Zip Code	Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		Number of Containers / Bottle (See Instructions on back) / Preservative / Lot No.
Project Name			
Project Number	P.O Number		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis	Remarks / Cooler ID

Turn Around Time Required (Prior lab approval required for expedited TAT)
☐ Standard ☐ Rush (Please Specify)

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler			1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory Received by		

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack
Receipt Temp. _____ °C
Temp. Blank ☐ Y / ☐ N

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

MAR 1 3 2012

UST 60Yeah DOCKETING

Re: Assessment Directive/QAPP Approval
Smith's Grocery, 3176 Charlotte Hwy , York, SC
UST Permit #09322; CA#43397; UMW-24493
Release reported June 30, 1993
Site-Specific QAPP Contractor Addendum & Cost Agreement received March 5, 2012
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced addendum submitted on your behalf by Midlands Environmental Consultants, Inc. The additional assessment should be conducted in accordance with the UST Quality Assurance Program Plan (QAPP) and in compliance with all applicable regulations. A copy of SCDHEC QAPP for the UST Management Division is available at http://www.scdhec.gov/environment/lwm/html/ust.htm.

Assessment activities at the site should begin immediately upon receipt of this letter. Cost agreement number 43397 has been approved for the amount shown on the enclosed cost agreement form for installation of up to fourteen temporary, eight monitoring wells plus sampling the entire monitoring well network/the newly installed monitoring wells to define the horizontal and vertical extent of dissolved CoC. Please be aware that the July 1, 2011 State Underground Petroleum Environmental Response Bank (SUPERB) Allowable Costs sheet states that "If the vertical and horizontal extent of chemicals of concern is not fully defined by the tier report, the Department may not approve additional future mobilizations for additional screening or well installation." Screening points that are converted to a permanent monitoring well will be reimbursed at the approved well installation rate. **Please contact the Department prior to well installation for concurrence regarding the final well locations. All shallow wells are to be installed with screen intervals that bracket the water table.** Shallow wells should have a 10-foot screen. **The SUPERB Account cannot reimburse costs for any shallow well with a screen that does not properly bracket the water table.**

A groundwater sample from any water supply wells within 1,000 feet of the facility should be collected and analyzed for BTEX, MtBE, naphthalene, 8 oxygenates, 1,2 DCA, and EDB. Groundwater samples from existing groundwater monitoring wells with screens that bracket the water table do not need to be purged before a sample is collected. Groundwater samples from the newly installed wells/ existing monitoring well network should be collected and analyzed for BTEX, MtBE, naphthalene, 8 oxygenates, 1,2 DCA, and EDB. Analyses should be in accordance with Appendix E of the QAPP For the Underground Storage Tank Management Division to include duplicate samples, field and trip blanks.

The Assessment Report, contractor checklist, and invoice are due within 90 days from the date of this letter. The report (a signed .pdf copy on CD is preferred) submitted at the completion of these activities should include information outlined in the UST Quality Assurance Program Plan (QAPP).

Midlands Environmental Consultants, Inc. can submit an invoice for direct payment from State Underground Petroleum Environmental Response Bank (SUPERB) Account for preapproved costs. An interim well drilling invoice may be submitted for this scope of work. By law, the SUPERB Account cannot compensate any costs that are not pre-approved. Please note

that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available. The UST Management Division, because of unnecessary dilution, cannot make decisions if the reporting limit of individual petroleum CoC exceeds Risk-Based Screening Levels (RBSLs). The UST Management Division encourages the use of 'J' values as necessary so the appropriate action can be determined for a release. Note that the Division may deny payment for any non-detect analysis where the reporting limit exceeds the RBSL.

The UST Management Division requires that laboratories be certified through the SCDHEC Office of Environmental Laboratory Certification for the oxygenate compounds.

Please note that you and/or your contractor are responsible for obtaining all off-site access agreements and/or encroachment permits necessary for this scope of work.

The Department grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the CoC concentrations based on laboratory analysis are below RBSLs, please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence regarding this site, please reference UST Permit #09322. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6397, fax me at (803) 896-6245, or e-mail me at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Approved Cost Agreement (ACA)
Signed Site Specific QAPP Contractor Addendum Approval Page (copy)

cc: Bryan Shane, Midlands Environmental Consultants, Inc., PO Box 854, Lexington, SC, 29071 (w/ enc.)
Technical File (w/ enc.)

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

Monitoring Well Approval

Approval is hereby granted to:	Midlands Environmental Consultants Inc.
Facility:	Smith's Grocery, 3176 Charlotte Hwy , York
UST Permit Number:	09322
County:	York

This approval is for the installation of up to fourteen temporary monitoring wells and eight groundwater monitoring wells. The monitoring wells are to be installed in the approved locations. The monitoring wells are to be installed following the South Carolina Well Standards, R.61-71 and the applicable guidance documents.

Please note that R.61-71 requires the following:

1. All wells shall be drilled, constructed and abandoned by a South Carolina certified well driller per R.61-71.D.1.

2. All monitoring wells shall be labeled as required by R.61-71.H.2.c.

3. A Water Well Record Form or other form provided or approved by the Department shall be completed and submitted to the Department within 30 days after well completion or abandonment unless another schedule has been approved by the Department. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f

4. All analytical data and water levels obtained from each monitoring well shall be submitted to the Department within 30 days of receipt of laboratory results unless another schedule has been approved by the Department as required by R.61-71.H.1.d.

5. If any of the information provided to the Department changes, notification to Debra Thoma (tel: (803) 896-6397 or e-mail: thomadl@dhec.sc.gov) shall be provided a minimum of twenty-four (24) hours prior to well construction as required by R.61-71.H.1.a.

6. All temporary monitoring wells shall be abandoned within 5 days of borehole completion using appropriate methods as required by R.61-71.H.4.c. All other wells shall be properly developed per R.61-71.H.2.d.

7. Departmental approval is required prior to abandonment of all monitoring wells as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards and Regulations, dated April 26, 2002. A copy of this approval should be on the site during well installation.

Date of Issuance: **March 8, 2012** **Approval #:** **UMW-24493**

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SC DHEC UST Programmatic QAPP
For
Smith's Grocery, SCDHEC Site ID# 09322

3176 Charlotte Highway, York, South Carolina

Prepared by:
Jeff L. Coleman
Senior Scientist
Midlands Environmental Consultants, Inc.
(Certified Site Rehabilitation Contractor UCC-0009)
235-B Dooley Road
Lexington, SC 29073
(803)808-2043

Date: February 28, 2012

Approvals

Debra Thoma SC DHEC Project Manager	Signature	Date 3/8/12
Bryan T. Shane, P.G. Site Rehabilitation Contractor	Signature	Date 2-27-12
Brendon P. Kelly Contractor QA Manager	Signature	Date 3/2/12
Michael Woodrum Laboratory Director	Signature	Date 2/28/12

Approved Cost Agreement 43397

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
01 PLAN						
		C	TIER II/COMP. PLAN/QAPP APP B	1.0000	525.00	525.00
03 COMPREHENSIVE SURVEY						
			COMPREHENSIVE SURVEY	3.0000	1,000.00	3,000.00
04 MOB/DEMOB						
		A	EQUIPMENT	2.0000	575.00	1,150.00
		B	PERSONNEL	5.0000	290.00	1,450.00
06 SOIL BORINGS (DRILLED)						
		A	SOIL BORINGS & FLD SCREENING	800.0000	17.00	13,600.00
		C	FRACTURED ROCK	1,200.0000	27.50	33,000.00
08 ABANDONMENT						
		A	ABANDONMENT 2" DIA OR LESS	800.0000	5.00	4,000.00
		B	GREATER THAN 2" TO 6 DIAMETER	800.0000	5.50	4,400.00
09 WELL INSTALLATION						
		B	WATER TABLE (DRILLED)	550.0000	38.00	20,900.00
		D	ROCK DRILLING	1,200.0000	58.00	69,600.00
10 SAMPLE COLLECTION						
		A	GROUND WATER	47.0000	55.00	2,585.00
		C	WATER SUPPLY	32.0000	30.00	960.00
		H	FIELD BLANK	3.0000	5.00	15.00
11 ANALYSES						
	GW GROUNDWATER	A1	BTEXNM+OXYGS+1,2-DCA+ETH-8260B	85.0000	100.00	8,500.00
		F	EDB	85.0000	55.00	4,675.00
	SOIL SOIL	W	GRAIN SIZE/HYDROMETER	2.0000	99.00	198.00
12 AQUIFER CHARACTERIZATION						
		B	SLUG TEST	2.0000	150.00	300.00
17 DISPOSAL						
		A	WASTEWATER	200.0000	0.80	160.00
		C	SOIL (TREATMENT/DISPOSAL)	10.0000	72.50	725.00
19 RPT/PROJECT MNGT & COORDINATIO						
		PCT	PERCENT	0.1500	169,743.00	25,461.45
					Total Amount	195,204.45

Midlands
Environmental
Consultants, Inc.

March 23, 2012

UST
APR 0 2 2012
PROGRAM

UST
6/Tech
DOCKETING

Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Report of Water Supply Well Sampling and Chemical Analyses,
And Granulated Activated Carbon (GAC) Unit Installation
Smith's Grocery
S.C. Highway 49
York, South Carolina
SCDHEC Site ID# 09322, CA # 42585
MECI Project Number 11-3700
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached Report of Water Supply Well Sampling and Chemical Analyses, and Granulated Activated Carbon (GAC) Unit Installation for the referenced site. This report describes assessment activities conducted at the site and results of those activities in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines, including adherence to the UST Division Programmatic Quality Assurance Program Plan (QAPP).

Midlands Environmental appreciates the opportunity to offer our professional environmental services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.

Jeff L. Coleman
Senior Scientist

Bryan T. Shane, P.G.
Principal Geologist

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

TABLE OF CONTENTS

1.0 INTRODUCTION **1**

1.1 QAPP STATEMENT 1
1.2 PROJECT INFORMATION 2

2.0 SURROUNDING PROPERTY USAGE **2**

3.0 FIELD EXPLORATION **2**

3.1 WATER SUPPLY WELL SAMPLING AND CHEMICAL ANALYSES 2

3.1 GRANULAR ACTIVATED CARBON (GAC) UNIT FILTER CHANGE AND REPAIR **4**

3.2 GAC UNIT INSTALLATION **4**

4.0 TEST RESULTS AND EVALUATION **5**

4.1 WATER SUPPLY WELL ANALYTICAL RESULTS 5

5.0 ASSESSMENT SUMMARY & RECOMMENDATIONS **5**

6.0 QUALIFICATIONS OF REPORT **5**

TABLE OF CONTENTS (cont.)

TABLES:

**Table 1 – SOIL ANALYTICAL RESULTS
**Table 2 – FIELD PARAMETERS
Table 3 – GROUNDWATER ANALYTICAL RESULTS
**Table 3A – GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
**Table 4 – AQUIFER CHARACTERISTICS
**Table 5 – SITE CONCEPTUAL MODEL

FIGURES:

Figure 1 – TOPOGRAPHIC MAP
Figure 2 – SITE BASE MAP
**Figure 3 – SOIL COC SITE MAP
Figure 4 – GROUNDWATER COC SITE MAP
**Figure 5 – POTENTIOMETRIC DATA SITE MAP (GROUNDWATER CONTOUR)
**Figure 6 – GEOLOGIC CROSS SECTIONS

**APPENDIX A – SITE SURVEY
APPENDIX B – SAMPLING LOGS, LABORATORY DATA SHEETS AND CHAIN OF CUSTODY FORMS
**APPENDIX C – TAX MAP DATA
**APPENDIX D – SOIL BORING/FIELD SCREENING LOGS & 1903 FORMS
**APPENDIX E – WELL LOGS & 1903 FORMS
**APPENDIX F – AQUIFER EVALUATION SUMMARY FORMS, DATA, GRAPHS, EQUATIONS
**APPENDIX G – DISPOSAL MANIFESTS
**APPENDIX H – LOCAL ZONING REGULATIONS
**APPENDIX I – FATE & TRANSPORT MODELING
**APPENDIX J – ACCESS AGREEMENTS
APPENDIX K – DATA VERIFICATION CHECKLIST

NOTE: ITEMS LISTED WITH AN ** BESIDE IT WERE NOT NEEDED AS A PART OF THIS SCOPE OF WORK

1.0 INTRODUCTION

A. **Owner/Operator Information**

Facility Name:	Smith's Grocery	UST Permit #:	09322
Facility Address:	SC Highway 49		
Name:	Lois Smith		
Address:	3176 Charlotte Highway, York, SC 29745		
Telephone #:	(803) 684-6289		

B. **Property Owner Information**

Name	Lois Smith
Tax Map #:	York Co. Tax Map#: 4560000043
Address	3176 Charlotte Highway, York, SC 29745
Telephone #	(803) 684-6289

C. **Contractor Information**

Name:	Midlands Environmental Consultants, Inc.
Certification #:	9
Address:	P. O. Box 854, Lexington, SC 29071
Telephone #:	(803) 808-2043

D. **SCDHEC Certified Well Driller**

Name:	
Driller:	
Certification #:	
Address:	
Telephone #:	

E. **SCDHEC Certified Laboratory**

Name:	Shealy Environmental Services, Inc.
Certification #:	32010
Address:	106 Vantage Point Drive, West Columbia, SC 29172
Telephone #:	(803) 791-9700

1.1 QAPP STATEMENT

This report conforms to the SCDHEC UST Management Division Programmatic QAPP. The Report, Tables (Table 1-Soil Analytical Data, Table 2-Field Parameters, Table 3-Groundwater Analytical Results, Table 4-Aquifer Characteristics, and Table 5-Site Conceptual Model), Figures (Figure 1-Topographic Map, Figure 2-Site Features, Figure 3-Soil CoC Site Map, Figure 4-Groundwater CoC Site Map, Figure 5-Groundwater Contour Map, and Figure 6-Geologic Cross Section) , and Appendices are presented in accordance with formatting requirements set forth in section A9 of the UST Management Division Programmatic QAPP, Revision 1, June 2011. Some or all of the tables and figures in this report were not applicable to the scope of services presented, however have been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP.

1.2 PROJECT INFORMATION

The subject site (Smith's Grocery) is located near the intersection of S.C. Highway 49 and Southern Pines Road, York, York County, South Carolina (see Figure 1). The site consists of an approximately 2.00 acre parcel of land (see Figure 2), and currently occupied by a convenience store. The site formerly maintained one 6,000 gallon gasoline UST and one 8,000 gallon gasoline UST. The South Carolina Department of Health and Environmental Control (SCDHEC) reported release of petroleum product from two single walled underground storage tanks (UST) at the subject site in June of 1993, which was confirmed in September of 1996.

Prior to commencement of the field activities described in this document, a QAPP Contractors Addendum was completed by MECI personnel, submitted to SCDHEC and approved by the SCDHEC project manager.

Previous assessment activities at the subject site failed to identify a number of water supply wells in the vicinity of the subject site. Prior to additional assessment at the site, MECI proposed to sample all water supply wells in the area to help focus future assessment activities. Following the water supply well sampling event, several additional water supply wells were found to be impacted, and GAC units were installed.

The above project information is based on MECI field notes and SCDHEC files.

2.0 SURROUNDING PROPERTY USAGE

The subject site is located near York, York County, South Carolina. SC Highway 49, Charlotte Highway, forms the eastern border of the site, beyond which is a residential subdivision, The Pines. North of the subject site are residential properties. South and west of the site are agricultural and undeveloped properties.

3.0 FIELD EXPLORATION

Field exploration conducted at the site included:

- sampling of thirty-six (36) nearby water supply wells;
- Granular Activated Carbon (GAC) Unit Filter Change; and,
- installation of three GAC units.

Two of the newly installed GAC units were installed in-line with previous GAC units on water supply wells WSW-2 and WSW-3 and a new GAC unit was installed on water supply well WSW-24.

3.1 WATER SUPPLY WELL SAMPLING AND CHEMICAL ANALYSES

During the initial site visit prior to QAPP preparation, MECI personnel identified thirty-eight (38) monitoring wells on, and surrounding the subject site.

On February 2, 2012, MECI personnel collected thirty-eight (38) water supply well samples from thirty-six (36) monitoring wells at the subject site. Water supply wells WSW-2 and WSW-3 were sampled Pre- and Post- GAC unit. Water supply wells WSW-34 and WSW-38 were not able to be

sampled, due to property access issues. The following matrix contains well status, owner(s), and tax map identification numbers:

Water Supply Well Number	Well Owner	York County Tax Map Number:	Notes:	Well Status
WSW-1	Reid Smith	4560000043	3176 Charlotte Highway (On-Site)	Active
WSW-2	Gary A. Wiggam	4890401024	3043 Clover Circle	Active / GAC Unit
WSW-3	Susan W. & Tony H. Hill	4890401023	3049 Clover Circle	Active / GAC Unit
WSW-4	Michelle Belcher	4890401022	2101 Pinewild Court	Active
WSW-5	Henry Ray Emser	4890401019	2106 Pinewild Court	Active
WSW-6	Clyde W. & Iris R. Dooley	4890401018	2100 Pinewild Court	Active
WSW-7	Susan K. Trear & John A. Okain	4890401017	3071 Clover Circle	Active
WSW-8	Lewis F. & Lana D. Hefner III	4890401016	3077 Clover Circle	Active
WSW-9	Richard J. Bdener Jr.	4890401015	3085 Clover Circle	Active
WSW-10	Paul & Irene Caltagirone	4890401013	3140 Tallamore Lane	Active
WSW-11	Robert C. & Jetta L. Baumgardner	4890401012	3130 Tallamore Lane	Active
WSW-12	Victor & Evelyn Bresg	4890401011	3124 Tallamore Lane	Active
WSW-13	Albert B. Small	4890401010	3118 Tallamore Lane	Active
WSW-14	Richad W. & Vince L. Judy	4890401009	3112 Tallamore Lane	Active
WSW-15	William L. & Leah H. Youngblood	4890401008	3106 Tallamore Lane	Active
WSW-16	Scott A. Reed	4890401007	3100 Tallamore Lane	Active
WSW-17	Steve A. & Layliona T. Edison	4890401006	3001 Clover Circle	Active
WSW-18	Jeff C. & Marcy A. Buck	4890401005	3011 Clover Circle	Active
WSW-19	Ramon L. Guzman	4890401004	3017 Clover Cirlce	Active
WSW-20	Kevin A. & Ursula A. Shuler	4890401003	3023 Clover Circle	Active
WSW-21	Joseph J. Galambos	4890401002	3029 Clover Circle	Active
WSW-22	Everette D. & Janet E. Crook	4890401001	3035 Clover Circle	Active
WSW-23	Michael V. McCarter	4890401027	3032 Clover Cirlce	Active / Impacted EDB above RBSL's
WSW-24	Christopher D. Jeter	4890401028	3040 Clover Circle	Active / Impacted EDB Detected
WSW-25	Kenny L. & Tamara L. Beasley	4890401029	3050 Clover Circle	Active
WSW-26	Michael D. & Leann R. Lowrey	4890401030	3060 Clover Circle	Active
WSW-27	Joseph C. & Elaine D. Biggers	4890401031	3070 Clover Circle	Active
WSW-28	Robert B. & Jacie Braden	4890401032	3129 Tallamore Lane	Active
WSW-29	William D. & Betty L. Tyndall	4890401033	3121 Tallamore Lane	Active
WSW-30	James K. & Catherine G. North	4890401025	3016 Clover Circle	Active
WSW-31	Debra L. Goransson	4890401026	3022 Clover Circle	Active
WSW-32	Jeffery V. & Rebecca Laney	4530101002	2111 Old McKinney Road	Active
WSW-33	John E. & Sally Schimepfinig	4540000024	2131 Old McKinney Road	Active
WSW-34	Frontis T. & Etta H. Hemphill	4560000003	2146 Old McKinney Road	Not Sampled / Could not access well
WSW-35	William & Daisy Lowery	4560000007	2143 Old Son Lowery Road	Active
WSW-36	Frontis Tyree Hemphill	4560000008	2140Old Son Lowery Road	Active
WSW-37	Frontis Tyree Hemphill	4560000040	SAA	Active
WSW-38	Forest L. & Helen W. Montgomery	4560000010	3243 Charlotte Highway	Not Sampled / Could not access well

The samples obtained from WSW-1, WSW-2 Pre, WSW-2 Post, WSW-3 Pre, WSW-3 Post, WSW-4 through WSW-33, WSW-35, WSW-36 and WSW-37 were analyzed for volatile organic compounds including BTEX, naphthalene, methyl-tertiary-butyl-ether (EPA Method 8260B), and EDB (EPA Method 8011). Results of the laboratory analyses are discussed in Section 4.1 and summarized in Table 3. The analytical results are also presented in Appendix B.

3.1 GRANULAR ACTIVATED CARBON (GAC) UNIT FILTER CHANGE AND REPAIR

On February 2, 2012, MECI personnel mobilized to the subject site to change the GAC filters on two water supply wells (WSW-2 and WSW-3). Both GAC filters were changed in accordance with SCDHEC regulations and the manufacturers (EcoWater Systems) guidelines. The spent gravel/carbon media was removed from both GAC units and the inside the carbon vessels were thoroughly cleaned. Both GAC units were refilled with 24 lbs of gravel (covering the bottom distributor) and completed with an approximate two cubic feet of new liquid phase activated carbon or until there was an approximate 12" inches of freeboard space between the top of activated carbon and the top distributor. After the filter change, each unit was allowed to properly backwash and the electronic component was reset to reflect appropriate time/backwash cycle (3 day-1,000 gallon cycle).

At the time of the February 2, 2012 GAC change, Pre- and Post- GAC samples were taken from WSW-2 and WSW-3. Analytical results indicated "break-though" of petroleum constituents immediately following the GAC carbon change. On February 29, 2012, MECI personnel mobilized to the subject site to change the GAC filters on WSW-2 and WSW-3. These filters were changed immediately following the installation of new, in-line, GAC units on WSW-2 and WSW-3.

3.2 GAC UNIT INSTALLATION

During the water supply well sampling event on February 2, 2012, Mr. Tony Hill, owner of WSW-3, expressed concern that immediately following a GAC unit carbon change, he could still smell petroleum odors in his tap water. The load of petroleum constituents is too high for one GAC unit, and breakthrough is occurring immediately following a carbon change. MECI recommended adding a second GAC unit, in-line with the original unit, to account for high petroleum constituent loads in both WSW-2 and WSW-3.

Analytical results indicated that two additional water supply wells, WSW-23 and WSW-24, were impacted with EDB concentrations above RBSL's. The SCDHEC project managed approved GAC unit installation on both of these water supply wells.

On February 29, 2012, an additional GAC unit was installed on WSW-2 and WSW-3. Due to property owner access issues, a GAC unit was not installed on WSW-24 until March 16th, 2012. Efforts are still underway to contact and gain access to install a GAC unit on WSW-23. These GAC units were installed by Brad Kimberlin of B.K. Plumbing, Inc. of Kannapolis, NC. (North Carolina Plumbing Certification #: 23265).

New Clack Corporation 1.5 cubic foot carbon tanks (holding 50 pounds of activated carbon) were installed with new Clack Corporation Model WS1 Control Valves. All Clack components have a 5 year warranty on the control valves and a lifetime warranty on the media tanks. A new GAC housing was installed with the GAC unit on WSW-24. Larger GAC housings were installed on WSW-2 and

WSW-3 to accommodate the additional GAC unit. A copy of the keys for these GAC housings will be included with this report.

4.0 TEST RESULTS AND EVALUATION

The following sections discuss groundwater test results for the subject site.

4.1 WATER SUPPLY WELL ANALYTICAL RESULTS

The samples obtained from WSW-1, WSW-2 Pre, WSW-2 Post, WSW-3 Pre, WSW-3 Post, WSW-4 through WSW-33, WSW-35, WSW-36 and WSW-37 were analyzed for petroleum constituents. The laboratory analytical results from the groundwater samples obtained indicate petroleum impact to water supply wells WSW-2 Pre, WSW-2 Post, WSW-3 Pre, WSW-3 Post, WSW-7, WSW-16, WSW-23 and WSW-24. Water supply wells WSW-2 and WSW-3 have historically been impacted, but the results from WSW-2 Post and WSW-3 Post indicate immediate petroleum constituent breakthrough following a GAC filter change. WSW-23 and WSW-24 analytical results indicated EDB impact at 0.071 micrograms per liter and 0.049 micrograms per liter, respectively. Analytical data for WSW-7 indicated MTBE concentrations at 0.93J micrograms per liter and data for WSW-16 indicated Benzene concentrations at 0.25J micrograms per liter. CoC concentrations in these wells are very low, and below RBSL's for each constituent. The results of the analysis for the water supply well and specific parameters are listed on Table 3, and the detection limits for each parameter are provided in the laboratory reports (Appendix B)

5.0 ASSESSMENT SUMMARY & RECOMMENDATIONS

The laboratory analytical results from the groundwater samples obtained indicate petroleum impact to water supply wells WSW-2 Pre, WSW-2 Post, WSW-3 Pre, WSW-3 Post, WSW-7, WSW-16, WSW-23 and WSW-24. Water supply wells WSW-2 and WSW-3 have historically been impacted, but the results from WSW-2 Post and WSW-3 Post indicate immediate petroleum constituent breakthrough following a GAC filter change. An additional GAC unit was installed, in line with the original GAC unit on these water supply wells as part of this assessment. WSW-23 and WSW-24 analytical results indicated EDB impact at 0.071 micrograms per liter and 0.049 micrograms per liter, respectively. MECI installed a GAC unit on WSW-24, and will installed a GAC unit on WSW-23 once contact with the property owner is made. Analytical data for WSW-7 indicated MTBE concentrations at 0.93J micrograms per liter and data for WSW-16 indicated Benzene concentrations at 0.25J micrograms per liter. CoC concentrations in these wells are below RBSL's for each constituent.

Prior to the February 2, 2012 GAC filter change, the most recent GAC unit filter change was completed on October 26, 2011. Based on time frame between the October 26, 2011 GAC filter change and the analytical results obtained during the February 2, 2012 sampling event, MECI recommends changing the GAC unit filters on a two month schedule.

6.0 QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assessment are consistent with those normally employed in hydrogeological assessment and waste management projects of this type. Our evaluation of site conditions has been based on our understanding of the site, project information provided to us, and data obtained in our exploration. The general subsurface conditions utilized in our evaluation have been based on interpretation of subsurface data between borings. Contents of

this report are intended for the sole use of SCDHEC under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

-oOo-

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS
SITE NAME
SITE LOCATION, SOUTH CAROLINA
MECI PROJECT NUMBER ##-####
SCDHEC SITE ID NUMBER

Boring Number	Sample Date	Depth (feet BGS)	Benzene (µg/kg)	Toluene (µg/kg)	Ethylbenzene (µg/kg)	Total Xylenes (µg/kg)	MTBE (µg/kg)	Naphthalene (µg/kg)

Soil Samples for chemical analysis were not obtained during this assessment. In order to conform with formatting guidelines provided by the SCDHEC UST Management Division Programmatic Quality Assurance Program Plan (QAPP), this filler table is included to provide report continuity.

Notes:

1. BGS = Below Ground Surface
2. µg/kg = micrograms per kilogram
3. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
4. Soil Samples collected from discrete split samples during installation of Monitoring wells.

TABLE 2
FIELD PARAMETERS
SITE NAME
SITE LOCATION, SOUTH CAROLINA
MECI PROJECT NUMBER ##-####
SCDHEC SITE ID NUMBER #####

Well Number	Sample Date	Dissolved Oxygen (mg/l)	Temperature (° Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Intervals	Depth to Water (ft)	Well-head Elevation	Groundwater Elevation

Potentiometric data was not obtained during this assessment. In order to conform with formatting guidelines provided by the SCDHEC UST Management Division Programmatic Quality Assurance Program Plan (QAPP), this filler table is included to provide report continuity.

Notes:

1. mg/l = milligrams per liter.
2. Elevations are referenced to an assumed site datum.
3. Groundwater depths were measured from the top of the PVC riser pipe.
4. Stabilized Groundwater levels measured 00/00/000.
9. Dissolved oxygen, initial pH, initial conductivity and temperature measurements obtained 00/00/0000.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
PAGE 1 OF 6
FEBRUARY 2, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3700
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-1R	10/26/10	**7,360**	**30,200**	**5,060**	**28,800**	**71,420**	**4.3J**	**1,190J**	**26.3**	**18.3**
	02/01/11	**7,900**	**28,100**	**6,080**	**28,100**	**70,180**	<250	**583**	<250	**20.1**
	10/03/11	**8,200**	**32,000**	**6,500**	**37,000**	**83,700**	<2,000	**850J**	**200J**	**18**
MW-2	10/26/10	**2,860**	**3,630**	**390**	**3,710**	**10,590**	**79.5J**	**110**	**112**	**15.1**
	02/01/11	**2,100**	**2,590**	**174**	**1,750**	**6,614**	**199**	<125	**224**	**18.2**
	10/03/11	**11,000**	**19,000**	**1,600**	**11,000**	**42,600**	**570J**	<1,000	**710J**	**20**
MW-3	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-4R	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-5	10/26/10	<5.0	**101**	**1.9J**	**11.5**	**114.4J**	<5.0	**3.5J**	<5.0	<0.020
	02/01/11	<5.0	**4.8J**	<5.0	<10.0	**4.8J**	<5.0	<5.0	<5.0	NT
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-6	10/26/10	**18.2**	**2.2J**	**14.8**	**74.4**	**109.6J**	<5.0	**5.6**	<5.0	**0.13**
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7	10/26/10	<250	**875**	**2,120**	**21,500**	**24,495**	<250	**1,150**	<250	**1.1**
	02/01/11	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-8	10/26/10	**10,100**	**37,700**	**4,420**	**26,100**	**78,320**	<500	**866**	<500	**29.2**
	02/01/11	**11,400**	**52,000**	**5,360**	**29,900**	**98,660**	<1,250	**978J**	<1,250	**18.0**
	10/03/11	**11,000**	**55,000**	**5,400**	**32,000**	**103,400**	<2,000	**970J**	**370J**	**22**
MW-9R	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.020
MW-10	10/27/10	**6,280**	**17,700**	**5,220**	**26,000**	**55,200**	<250	**813**	**112J**	**48.9**
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
12. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
PAGE 2 OF 6
FEBRUARY 2, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3700
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-11	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	NT
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-12	10/26/10	**1,870**	**24.0**	**479**	**838**	**3,211.0**	<5.0	**112**	**38.8**	**0.95**
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	**1.8J**	**0.057**
	10/03/11	**3.5J**	<5.0	<5.0	<5.0	**3.5J**	<5.0	<5.0	**2.8J**	<0.022
MW-13	10/26/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-14	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-15	10/26/10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-16	10/26/10	**4.1J**	<5.0	<5.0	<10.0	**4.1J**	<5.0	**3.2J**	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	**2.8J**	**2.8J**	<5.0	<5.0	<5.0	**0.034**
	10/03/11	**0.31J**	<5.0	<5.0	<5.0	**0.31J**	<5.0	<5.0	<5.0	**0.037**
MW-17	10/26/10	**250**	<5.0	<5.0	**45.5**	**295.5**	**2.1J**	**8.7**	<5.0	**0.046**
	02/01/11	**34.5**	<10.0	<10.0	**21.5**	**56.0**	<10.0	<10.0	<10.0	NT
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-18	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.021
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-19	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	**253**	<5.0	<10.0	**253**	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
MW-20	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.020

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
12. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
PAGE 3 OF 6
FEBRUARY 2, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3700
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
TW-1	10/26/10	**8,720**	**293**	**2,370**	**11,900**	**23,283**	<250	**559**	<250	**20.6**
	02/01/11	**1,920**	**106**	**785**	**4,230**	**7,041**	<100	**228**	<100	**4.0**
	10/03/11	**10,000**	**3,100**	**3,500**	**17,000**	**33,600**	**55J**	**480J**	<500	**18**
TW-2	10/26/10	**12,900**	**17,400**	**1,930**	**9,830**	**42,060**	**217J**	**624**	<500	**0.062**
	02/01/11	**12,500**	**19,400**	**1,850**	**9,440**	**43,190**	**191J**	**296J**	<500	<0.020
	10/03/11	**9,300**	**17,000**	**2,100**	**11,000**	**39,400**	**140J**	**380J**	**310J**	<0.019
TW-3	10/26/10	**152**	**12.9**	<5.0	**20.5**	**185.4**	<5.0	**5.2**	**3.6J**	**1.4**
	02/01/11	**242**	**9.0**	**2.1J**	**37.0**	**290.1J**	<5.0	**6.5**	**13.4**	**2.1**
	10/03/11	**74**	<5.0	<5.0	**14**	**88**	<5.0	**1.7J**	**9.5**	**0.98**
IW-2	10/03/11	**22,000**	**56,000**	**4,800**	**27,000**	**109,800**	<2,500	<2,500	<2,500	**21**
IW-3	10/03/11	**19,000**	**39,000**	**3,900**	**22,000**	**83,900**	**390J**	<2,000	<2,000	**120**
IW-4	10/03/11	**68**	**12**	**4.1J**	**58**	**142.1J**	<5.0	<5.0	<5.0	<0.019
IW-5	10/03/11	**13,000**	**57,000**	**5,000**	**30,000**	**105,000**	<2,500	<2,500	<2,500	**7.8**
IW-6	10/03/11	**140**	**18J**	**87**	**2,200**	**2,445J**	<50	**340**	<50	<0.019
IW-8	10/03/11	**1,900**	**89J**	**2,400**	**8,100**	**12,489J**	<200	**480**	<200	**0.87**
IW-9	10/26/10	**505**	**562**	**1,250**	**5,110**	**7,427**	**5.8J**	**335**	<10.0	**0.39**
	02/01/11	**408**	**642**	**1,340**	**6,090**	**8,480**	<5.0	**389**	<5.0	**0.52**
	10/03/11	**280**	**250**	**1,100**	**5,100**	**6,730**	<100	**340**	<100	**0.38**
IW-10	10/03/11	**510**	<50	**210**	**1,500**	**2,220**	<50	**67**	<50	**1.7**
IW-11	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-16	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
12. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
PAGE 4 OF 6
FEBRUARY 2, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3700
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
IW-18	10/03/11	**490**	<10	**350**	**200**	**1,040**	<10	**38**	**58**	**0.36**
IW-19	10/03/11	**1,500**	**1,800**	**880**	**4,400**	**8,580**	<100	**150**	**50J**	**11**
IW-20	10/03/11	**3.8J**	<5.0	**3.2J**	**22**	**29.0J**	<5.0	**3.6J**	<5.0	<0.020
WSW-1	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
(Formally WSW-Smith)	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-2 Pre	10/26/10	**288**	<5.0	<5.0	**67.6**	**355.6**	<5.0	**11.8**	**23.5**	**1.3**
(Formally WSW-Swift Pre)	02/01/11	**7.5**	<5.0	<5.0	**9.7J**	**17.2J**	<5.0	<5.0	**6.7**	**0.45**
	03/15/11	**22.7**	<5.0	<5.0	**17.0**	**39.7**	<5.0	**3.5J**	**8.0**	**0.57**
	10/03/11	**190**	<5.0	<5.0	**75**	**265**	**0.49J**	**19**	**22**	**0.71**
	02/02/12	**25**	<5.0	<5.0	**23**	**48**	<5.0	**4.8J**	NT	**0.40**
WSW-2 Post	10/26/10	**157**	<5.0	**1.6J**	**46.7**	**205.3J**	**3.0J**	**13.6**	**12.5**	**0.60**
(Formally WSW-Swift Post)	02/01/11	**7.8**	<5.0	<5.0	**8.8J**	**16.6J**	<5.0	<5.0	**7.1**	**0.45**
	03/15/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	**1.2J**	<5.0	<5.0	<5.0	**1.2J**	<5.0	<5.0	**1.2J**	<0.020
	02/02/12	**1.1J**	<5.0	<5.0	<5.0	**1.1J**	<5.0	<5.0	NT	<0.020
WSW-3 Pre	10/26/10	**14.0**	<5.0	<5.0	<10.0	**14.0**	<5.0	<5.0	**1.6J**	**0.33**
(Formally WSW-Hill Pre)	02/01/11	**27.4**	<5.0	<5.0	**5.9J**	**33.3J**	<5.0	<5.0	**6.0**	**0.33**
	03/15/11	**63.2**	<5.0	<5.0	**12.5**	**75.7**	<5.0	<5.0	**6.8**	**0.60**
	10/03/11	**120**	<5.0	<5.0	**22**	**142**	<5.0	**2.4J**	**13**	**0.68**
	02/02/12	**78**	<5.0	<5.0	**13**	**91**	<5.0	<5.0	NT	**0.52**
WSW-3 Post	10/26/10	**2.4J**	<5.0	<5.0	<10.0	**2.4J**	<5.0	<5.0	**1.3J**	**0.034**
(Formally WSW-Hill Post)	02/01/11	**3.7J**	<5.0	<5.0	<10.0	**3.7J**	<5.0	<5.0	<5.0	**0.062**
	03/15/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	**3.4J**	<5.0	<5.0	<5.0	**3.4J**	<5.0	<5.0	**1.0J**	**0.035**
	02/02/12	**18**	<5.0	<5.0	**2.7J**	**20.7J**	<5.0	<5.0	NT	**0.13**
WSW-4	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-5	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
12. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
PAGE 5 OF 6
FEBRUARY 2, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3700
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
WSW-6	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
WSW-7	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	**0.93J**	<5.0	NT	<0.020
WSW-8	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-9	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
WSW-10	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-11	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-12	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-13	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
WSW-14	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
WSW-15	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
WSW-16	02/02/12	**0.25J**	<5.0	<5.0	<5.0	**0.25J**	<5.0	<5.0	NT	<0.019
WSW-17	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-18	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-19	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
WSW-20	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
WSW-21	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-22	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	**0.039**
(Formally WSW-Crock)	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	**0.022**
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	**0.034**
	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
WSW-23	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	**0.071**

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
12. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
PAGE 6 OF 6
FEBRUARY 2, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3700
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	MTBE (µg/l)	Naphthalene (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
WSW-24	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	**0.049**
WSW-25	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-26	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-27	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-28	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-29	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-30	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
WSW-31	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-32	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-33	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
WSW-34	02/02/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
WSW-35	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
WSW-36	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-37	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-38	02/02/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
WSW-2 Pre (Duplicate Sample)	02/02/12	**16**	<5.0	<5.0	**26**	**42**	<5.0	**5.0**	NT	**0.48**
WSW-3 Pre (Duplicate Sample)	02/02/12	**96**	<5.0	<5.0	**15**	**111**	<5.0	<5.0	NT	**0.59**
Field Blank	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
Trip Blank	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	NT

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
12. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 4 - AQUIFER CHARACTERISTICS (Page 1 of 2)

SOUTH CAROLINA
Department of Health and Environmental Control (DHEC)

Site Data

SITE ID # _____ COUNTY _____

FACILITY NAME _____

SLUG DATA

See Appendix _____ Table _____ Figure _____ for a list of all data measurements.
(water level logs, etc.)(Complete as appropriate).
Water Level Recovery Data was measured by ORS Interface Probe .
(Hermit Data Logger, Manually with Water Level Indicator, etc.)(List Method)
Complete the following table for each well tested.
COMPLETE A SECOND SHEET IF MORE THAN FOUR WELLS ARE TESTED

Aquifer Characteristics were not obtained as part of this assessment. In order to conform with formatting guidelines provided by the SCDHEC UST Management Division Programmatic Quality Assurance Program Plan (QAPP), this filler table is included to provide report continuity.

Calculations

See Appendix _____ Table _____ Figure _____ for calculations
The method for aquifer calculations was NAVFAC
Calculated values by well were as follows:

Slug Test Conducted in Well(s) number				
Hydraulic Conductivity				cm/sec

Thickness of the aquifer used to calculate hydraulic conductivity was N/A feet.
The aquifer is _____ confined _____ semi-confined _____ water table (Check as Appropriate).
SEE SHEET 3
The estimated seepage velocity is _____ feet per year based on a hydraulic conductivity of _____ cm/sec, a hydraulic gradient of _____ ft/ft, and a porosity of _____ percent for _____ soil.

SUMMARY of SLUG TEST

TABLE 4 - AQUIFER CHARACTERISITCS (Page 2 of 2)

SOUTH CAROLINA
Department of Health and Environmental Control (DHEC)

Site Data

SITE ID # 0 COUNTY 0

FACILITY NAME 0

Hydraulic Conductivity (average)

Hydraulic Conductivity Average = _____ cm/sec
()

_____ ft./day

_____ ft./min

Groundwater Seepage Velocity

V = (Ki)/(Ne)
(ft./day)

* Enter Values in Shaded Areas Only

where:

K = Hydraulic Conductivity (ft./day)
I = Hydraulic Gradient (ft./ft.)
Ne = Effective Permeability

K = _____ ft./day
I = _____ ft./ft.
Ne = _____

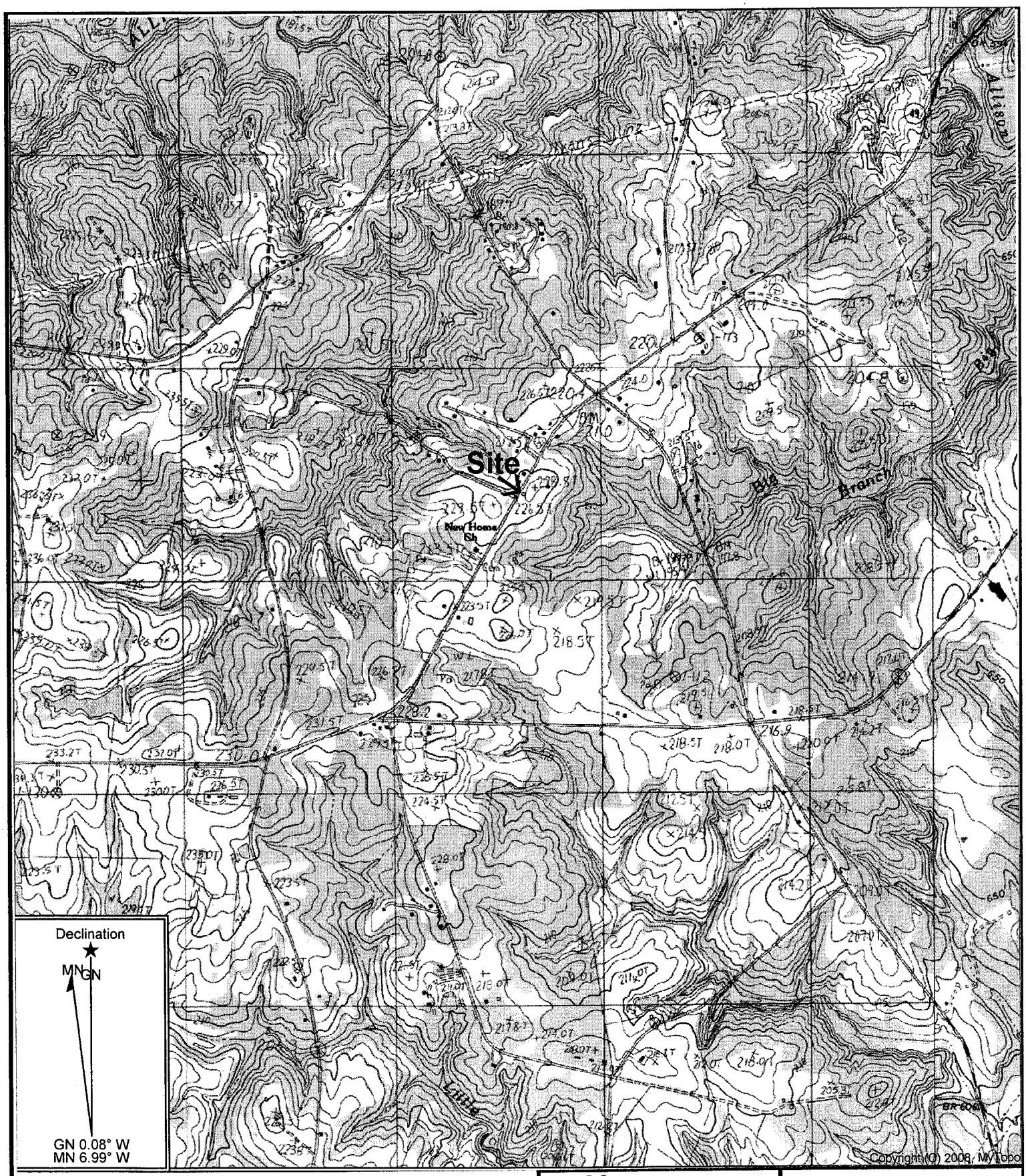
V = _____ ft./day _____ ft./year

Groundwater Seepage Velocity Calculations

TABLE 5
SITE CONCEPTUAL MODEL AND POSSIBLE EXPOSURE POINTS
(CURRENT LAND USE)

Potentially Exposed Population	Exposure Route, Medium, and Exposure Point	Pathway Selected for Evaluation?	Reason for Selection or Nonselection
Off-site Resident	Ingestion of groundwater from impacted water well Direct contact with surface soil Inhalation while showering Dermal contact while showering Inhalation of volatiles Ignition of vapors Dermal contact with surface water	A Site Conceptual Model was not required as part of this assessment. In order to conform with formatting guidelines provided by the SCDHEC UST Management Division Programmatic Quality Assurance Program Plan (QAPP), this filler table is included to provide report continuity.	
On-site Resident	Ingestion of groundwater Direct contact with surface soil Inhalation while showering Dermal contact while showering Inhalation of volatiles Ignition of vapors		
Worker	Ingestion of ground water Direct contact with surface soil Inhalation while showering Dermal contact while showering Inhalation of volatiles Ignition of vapors		
Visitor	Ingestion of ground water Direct contact with surface soil Inhalation while showering Dermal contact while showering Inhalation of volatiles Ignition of vapors Dermal contact with surface water		

FIGURES



GRAPHIC SCALE

0 1000 2000 4000

1IN = 2000FT

Reference: Clover, South Carolina
USGS 7.5 Min. Quad
Countour Interval – 3 Meters

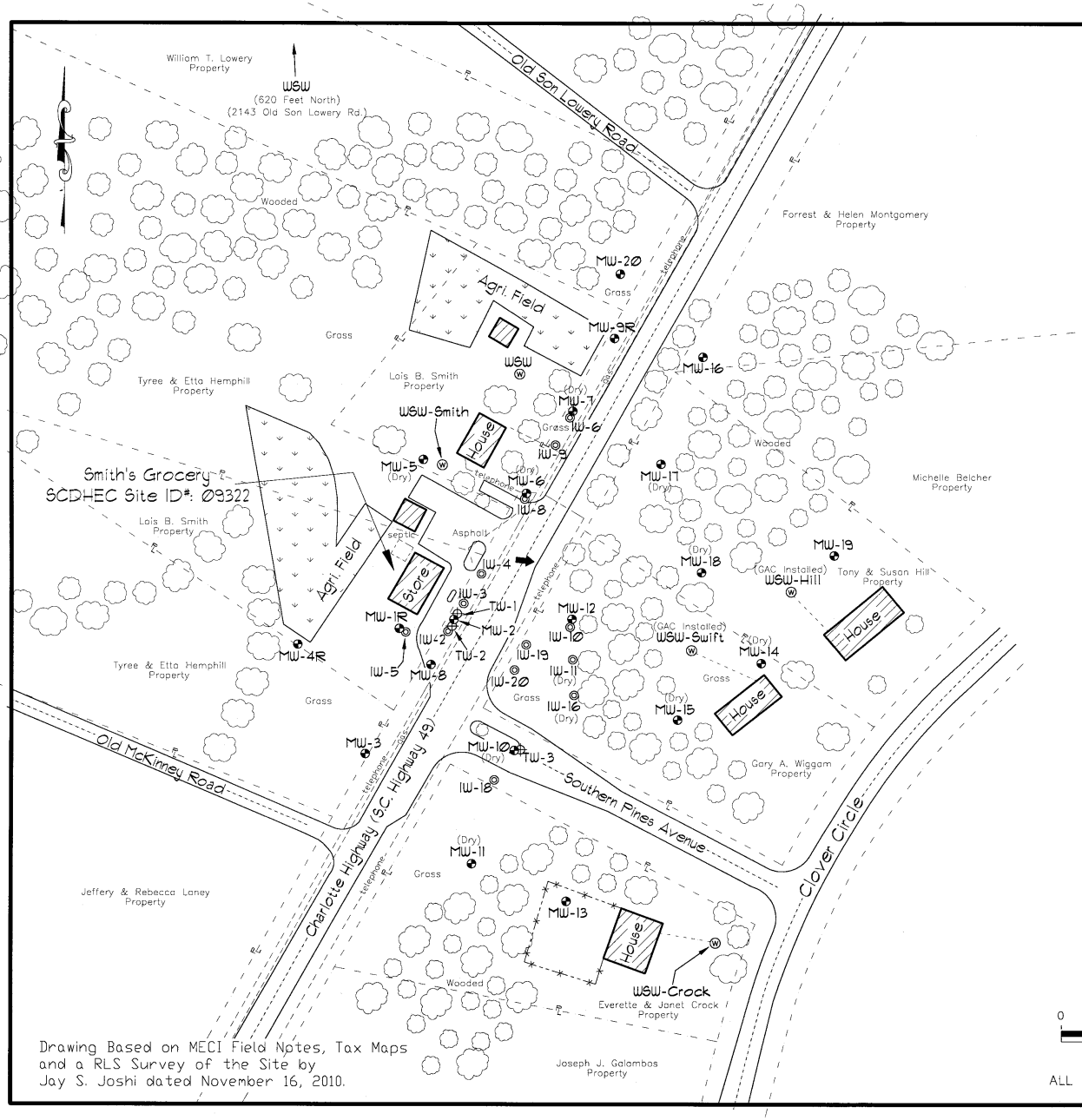
Midlands Environmental Consultants, Inc.

Site Location

Smith's Grocery
South Carolina Highway 49, Clover, SC
SCDHEC Site ID* 09322

Figure 1

MECI 11-3700



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Buried Sewer
- Under Ground Telephone
- Fence

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3700
DATE March 23, 2012
FIGURE 2

Water Supply Well COC Concentration Data

Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	EDB (ug/l)
WSW-1	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-2 Pre	25	<5.0	<5.0	23	48	<5.0	4.8J	0.40
WSW-2 Post	1.1J	<5.0	<5.0	<5.0	1.1J	<5.0	<5.0	<0.020
WSW-3 Pre	78	<5.0	<5.0	13	91	<5.0	<5.0	0.52
WSW-3 Post	18	<5.0	<5.0	2.7J	20.7J	<5.0	<5.0	0.13
WSW-4	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-5	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-6	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.020
WSW-7	<5.0	<5.0	<5.0	<5.0	BDL	0.93J	<5.0	<0.020
WSW-8	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-9	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.020
WSW-10	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-13	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.020
WSW-14	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.020
WSW-15	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.020
WSW-16	0.25J	<5.0	<5.0	<5.0	0.25J	<5.0	<5.0	<0.019
WSW-17	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-18	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-19	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.020
WSW-20	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.020
WSW-21	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-22	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.020
WSW-23	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	0.071
WSW-24	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	0.049
WSW-25	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-26	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-27	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-28	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-29	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-30	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.020
WSW-31	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-32	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-33	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.020
WSW-34	NS	NS	NS	NS	NS	NS	NS	NS
WSW-35	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.020
WSW-36	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-37	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.019
WSW-38	NS	NS	NS	NS	NS	NS	NS	NS
WSW-2 Pre Duplicate	16	<5.0	<5.0	26	42	<5.0	5.0	0.48
WSW-3 Pre Duplicate	96	<5.0	<5.0	15	111	<5.0	<5.0	0.59
Field Blank	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<0.020
Trip Blank	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT

Notes: Groundwater samples collected on February 2, 2012.
BDL = Below Detection Limits
"J" Values included in Total BTEX Calculations

Tax Data Obtained from York County GIS Department

Tax Map Data
(Water Supply Well Locations)

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3700
DATE March 23, 2012
Figure 2A

ID	Tax Map #	Owner
A	4560000043 Site WSW-1	Lois B. Smith 3176 Charlotte Highway York, SC 29745
B	4890401024 WSW-2 GAC Unit	Gary A. Wiggam 3043 Clover Circle York, SC 29745
C	4890401023 WSW-3 GAC Unit	Susan W. & Tony H. Hill 3049 Clover Circle York, SC 29745
D	4890401022 WSW-4	Michelle Belcher 2101 Pinewild Court York, SC 29745
E	4890401019 WSW-5	Henry Ray Emser 2106 Pinewild Court York, SC 29745
F	4890401018 WSW-6	Clyde W. & Iris R. Dooley 2100 Pinewild Court York, SC 29745
G	4890401017 WSW-7	Susan K. Trear & John A. Okain 3071 Clover Circle York, SC 29745
H	4890401016 WSW-8	Lewis F. & Lana D. Hefner III 3077 Clover Circle York, SC 29745
I	4890401015 WSW-9	Richard J. Bedner Jr. 3085 Clover Circle York, SC 29745
J	4890401013 WSW-10	Paul & Irene Caltagirone 3140 Tallamore Lane York, SC 29745
K	4890401012 WSW-11	Robert C. & Jetta L. Baumgardner 3130 Tallamore Lane York, SC 29745
L	4890401011 WSW-12	Victor & Evelyn Bresg 3124 Tallamore Lane York, SC 29745
M	4890401010 WSW-13	Albert B. Small 3118 Tallamore Lane York, SC 29745
N	4890401009 WSW-14	Richard W. & Vicie L. Judy 3112 Tallamore Lane York, SC 29745
O	4890401008 WSW-15	William L. & Leah H. Youngblood 3106 Tallamore Lane York, SC 29745
P	4890401007 WSW-16	Scott A. Reed 3100 Tallamore Lane York, SC 29745
Q	4890401006 WSW-17	Steve A. & Layliona T. Edison 3001 Clover Circle York, SC 29745
R	4890401005 WSW-18	Jeff C. & Marcy A. Buck 3011 Clover Circle York, SC 29745
S	4890401004 WSW-19	Ramon L. Guzman 3017 Clover Circle York, SC 29745
T	4890401003 WSW-20	Kevin A. & Ursula A. Shuler 3023 Clover Circle York, SC 29745
U	4890401002 WSW-21	Joseph J. Galambos 3029 Clover Circle York, SC 29745
V	4890401001 WSW-22	Everette D. & Janet E. Crook 3035 Clover Circle York, SC 29745
W	4890401027 WSW-23	Michael V. McCarter 3032 Clover Circle York, SC 29745
X	4890401028 WSW-24	Christopher D. Jeter 3040 Clover Circle York, SC 29745
Y	4890401029 WSW-25	Kenny L. Tamara L. Beasley 3050 Clover Circle York, SC 29745
Z	4890401030 WSW-26	Michael D. & Leann R. Lowrey 3060 Clover Circle York, SC 29745
AA	4890401031 WSW-27	Joseph C. Elaine D. Biggers 3070 Clover Circle York, SC 29745
BB	4890401032 WSW-28	Robert B. & Jacie Braden 3129 Tallamore Lane York, SC 29745
CC	4890401033 WSW-29	William D. & Betty L. Tyndall 3121 Tallamore Lane York, SC 29745
DD	4890401025 WSW-30	James K. & Catherine G. North 3016 Clover Circle York, SC 29745
EE	4890401026 WSW-31	Debra L. Goransson 3022 Clover Circle York, SC 29745
FF	4530101002 WSW-32	Jeffery V. & Rebecca Laney 2111 Old McKinney Road York, SC 29745
GG	4540000024 WSW-33	John E. & Sally Schimepfinig 2131 Old McKinney Road York, SC 29745
HH	4560000003 WSW-34	Frontis T. & Etta H. Hemphill 2146 Old McKinney Road York, SC 29745
II	4560000007 WSW-35	William & Daisy Lowery 2143 Old Son Lowery Road York, SC 29745
JJ	4560000008 WSW-36	Frontis Tyree Hemphill 2140 Old Son Lowery Road York, SC 29745
KK	4560000040 WSW-37	
LL	4560000010 WSW-38	Forest L. & Helen W. Montgomery 3243 Charlotte Higway York, SC 29745

Tax Data Obtained from York County GIS Department

Tax Map Data
(Water Supply Well Owner Information)

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322

Midlands Environmental Consultants, Inc.

JOB NO. 11-3700
DATE March 21, 2012
Figure 2B

Soil Samples for chemical analysis were not obtained during this assessment. In order to conform with formatting guidelines provided by the SCDHEC UST Management Division Programmatic Quality Assurance Program Plan (QAPP), this filler Figure is included to provide report continuity.

Midlands Environmental Consultants, Inc.	Soil CoC Site Map
Site Name Site Location, South Carolina SCDHEC Site ID: *****	
Figure 3	MECI **-****

Groundwater samples for chemical analysis were not obtained during this assessment. In order to conform with formatting guidelines provided by the SCDHEC UST Management Division Programmatic Quality Assurance Program Plan (QAPP), this filler Figure is included to provide report continuity.

Midlands Environmental Consultants, Inc.	GW CoC Site Map
Site Name Site Location, South Carolina SCDHEC Site ID: *****	
Figure 4	MECI **-****

Potentiometric data was not obtained during this assessment. In order to conform with formatting guidelines provided by the SCDHEC UST Management Division Programmatic Quality Assurance Program Plan (QAPP), this filler Figure is included to provide report continuity.

Midlands Environmental Consultants, Inc.	Potentiometric Data Site Map
Site Name Site Location, South Carolina SCDHEC Site ID: *****	
Figure 5	MECI **-****

Construction of Geologic Cross Sections were not part of this assessment. In order to conform with formatting guidelines provided by the SCDHEC UST Management Division Programmatic Quality Assurance Program Plan (QAPP), this filler Figure is included to provide report continuity.

Midlands Environmental Consultants, Inc.	Geologic Cross Sections
Site Name Site Location, South Carolina SCDHEC Site ID: *****	
Figure 6	MECI **-****

APPENDIX A:

SITE SURVEY

This appendix is not applicable to the scope of services presented in the subject report, however this page has been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP and provide report continuity

APPENDIX B:

SAMPLING LOGS, LABORATORY DATA SHEETS, & CHAIN-OF-CUSTODY FORMS

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Midlands Environmental Consultants, Inc.
235 Dooley Rd
Lexington, SC 29073
Attention: Bryan Shane

Project Name: **Smiths Grocery**

Project Number: **11-3700**

Lot Number: **NB06033**

Date Completed: **02/16/2012**

Kelly M. Maberry
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
Midlands Environmental Consultants, Inc.
Lot Number: NB06033

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Receiving
Samples -036 and -040 were listed on the chain of custody, but no sample containers were received. Per the client, disregard these samples.

Samples -003, -005, -010, -011, -015, -017, -027 and -032 for volatiles analysis contained vials with air bubbles greater than ¼" or 6mm in diameter. The laboratory uses these vials for screening and the vials without bubbles for analysis whenever possible. Condition of samples is documented on the Sample Receipt Checklist (SRC).

Sample Summary

Midlands Environmental Consultants, Inc.

Lot Number: NB06033

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	WSW-1	Aqueous	02/02/2012 1421	02/06/2012
002	WSW-2 PRE	Aqueous	02/02/2012 1100	02/06/2012
003	WSW-2 POST	Aqueous	02/02/2012 1201	02/06/2012
004	WSW-3 PRE	Aqueous	02/02/2012 1210	02/06/2012
005	WSW-3 POST	Aqueous	02/02/2012 1300	02/06/2012
006	WSW-4	Aqueous	02/02/2012 1402	02/06/2012
007	WSW-5	Aqueous	02/02/2012 1358	02/06/2012
008	WSW-6	Aqueous	02/02/2012 1342	02/06/2012
009	WSW-7	Aqueous	02/02/2012 1332	02/06/2012
010	WSW-8	Aqueous	02/02/2012 1324	02/06/2012
011	WSW-9	Aqueous	02/02/2012 1315	02/06/2012
012	WSW-10	Aqueous	02/02/2012 1308	02/06/2012
013	WSW-11	Aqueous	02/02/2012 1300	02/06/2012
014	WSW-12	Aqueous	02/02/2012 1245	02/06/2012
015	WSW-13	Aqueous	02/02/2012 1236	02/06/2012
016	WSW-14	Aqueous	02/02/2012 1226	02/06/2012
017	WSW-15	Aqueous	02/02/2012 1218	02/06/2012
018	WSW-16	Aqueous	02/02/2012 1208	02/06/2012
019	WSW-17	Aqueous	02/02/2012 1159	02/06/2012
020	WSW-18	Aqueous	02/02/2012 1148	02/06/2012
021	WSW-19	Aqueous	02/02/2012 1138	02/06/2012
022	WSW-20	Aqueous	02/02/2012 1130	02/06/2012
023	WSW-21	Aqueous	02/02/2012 1120	02/06/2012
024	WSW-22	Aqueous	02/02/2012 1110	02/06/2012
025	WSW-23	Aqueous	02/02/2012 1430	02/06/2012
026	WSW-24	Aqueous	02/02/2012 1419	02/06/2012
027	WSW-25	Aqueous	02/02/2012 1411	02/06/2012
028	WSW-26	Aqueous	02/02/2012 1500	02/06/2012
029	WSW-27	Aqueous	02/02/2012 1453	02/06/2012
030	WSW-28	Aqueous	02/02/2012 1445	02/06/2012
031	WSW-29	Aqueous	02/02/2012 1439	02/06/2012
032	WSW-30	Aqueous	02/02/2012 1433	02/06/2012
033	WSW-31	Aqueous	02/02/2012 1425	02/06/2012
034	WSW-32	Aqueous	02/02/2012 1429	02/06/2012
035	WSW-33	Aqueous	02/02/2012 1441	02/06/2012
036	WSW-34	Aqueous	02/02/2012 1450	
037	WSW-35	Aqueous	02/02/2012 1452	02/06/2012
038	WSW-36	Aqueous	02/02/2012 1421	02/06/2012
039	WSW-37	Aqueous	02/02/2012 1435	02/06/2012
040	WSW-38	Aqueous	02/02/2012 1457	
041	Field Blank	Aqueous	02/02/2012 1505	02/06/2012
042	Trip Blank	Aqueous	02/02/2012	02/06/2012
043	Duplicate WSW-2 (PRE)	Aqueous	02/02/2012 1100	02/06/2012
044	Duplicate WSW-3 (PRE)	Aqueous	02/02/2012 1210	02/06/2012

Sample Summary (Continued)

Lot Number: NB06033

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
(44 samples)				

Executive Summary

Midlands Environmental Consultants, Inc.

Lot Number: NB06033

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	WSW-2 PRE	Aqueous	Benzene	8260B	25		ug/L	7
002	WSW-2 PRE	Aqueous	Naphthalene	8260B	4.8	J	ug/L	7
002	WSW-2 PRE	Aqueous	Xylenes (total)	8260B	23		ug/L	7
002	WSW-2 PRE	Aqueous	1,2-Dibromoethane (EDB)	8011	0.40		ug/L	7
003	WSW-2 POST	Aqueous	Benzene	8260B	1.1	J	ug/L	8
004	WSW-3 PRE	Aqueous	Benzene	8260B	78		ug/L	9
004	WSW-3 PRE	Aqueous	Xylenes (total)	8260B	13		ug/L	9
004	WSW-3 PRE	Aqueous	1,2-Dibromoethane (EDB)	8011	0.52		ug/L	9
005	WSW-3 POST	Aqueous	Benzene	8260B	18		ug/L	10
005	WSW-3 POST	Aqueous	Xylenes (total)	8260B	2.7	J	ug/L	10
005	WSW-3 POST	Aqueous	1,2-Dibromoethane (EDB)	8011	0.13		ug/L	10
009	WSW-7	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.93	J	ug/L	14
018	WSW-16	Aqueous	Benzene	8260B	0.25	J	ug/L	23
025	WSW-23	Aqueous	1,2-Dibromoethane (EDB)	8011	0.071		ug/L	30
026	WSW-24	Aqueous	1,2-Dibromoethane (EDB)	8011	0.049		ug/L	31
043	Duplicate WSW-2 (PRE)	Aqueous	Benzene	8260B	16		ug/L	46
043	Duplicate WSW-2 (PRE)	Aqueous	Naphthalene	8260B	5.0		ug/L	46
043	Duplicate WSW-2 (PRE)	Aqueous	Xylenes (total)	8260B	26		ug/L	46
043	Duplicate WSW-2 (PRE)	Aqueous	1,2-Dibromoethane (EDB)	8011	0.48		ug/L	46
044	Duplicate WSW-3 (PRE)	Aqueous	Benzene	8260B	96		ug/L	47
044	Duplicate WSW-3 (PRE)	Aqueous	Xylenes (total)	8260B	15		ug/L	47
044	Duplicate WSW-3 (PRE)	Aqueous	1,2-Dibromoethane (EDB)	8011	0.59		ug/L	47

(22 detections)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-1**
Date Sampled: **02/02/2012 1421**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-001**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1558	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 1754	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		103	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-2 PRE**
Date Sampled: **02/02/2012 1100**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-002**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1621	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**25**		**5.0**	**0.20**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**4.8**	**J**	**5.0**	**1.7**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**23**		**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 1815	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.40**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		94	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-2 POST**
Date Sampled: **02/02/2012 1201**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-003**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1644	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**1.1**	**J**	**5.0**	**0.20**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 1837	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		104	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-3 PRE**
Date Sampled: **02/02/2012 1210**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-004**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1707	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**78**		**5.0**	**0.20**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**13**		**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 1859	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.52**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		89	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-3 POST**
Date Sampled: **02/02/2012 1300**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-005**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1730	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**18**		**5.0**	**0.20**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**2.7**	**J**	**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 1920	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.13**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-4**
Date Sampled: **02/02/2012 1402**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-006**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1753	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 2024	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		93	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-5**
Date Sampled: **02/02/2012 1358**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-007**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1816	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 2046	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		109	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-6**
Date Sampled: **02/02/2012 1342**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-008**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1839	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 2107	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		101	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-7**
Date Sampled: **02/02/2012 1332**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-009**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1902	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.93**	**J**	**5.0**	**0.40**	**ug/L**	**1**
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 2128	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		88	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-8**
Date Sampled: **02/02/2012 1324**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-010**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1925	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 2150	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		97	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-9**
Date Sampled: **02/02/2012 1315**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-011**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1948	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 2212	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		98	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-10**
Date Sampled: **02/02/2012 1308**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-012**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 2012	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 2233	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		85	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-11**
Date Sampled: **02/02/2012 1300**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-013**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 2034	BM		77234

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 2255	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		87	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-12**
Date Sampled: **02/02/2012 1245**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-014**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1716	BM		77201

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 2316	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-13**
Date Sampled: **02/02/2012 1236**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-015**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1737	BM		77201

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		102	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 2338	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		116	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-14**
Date Sampled: **02/02/2012 1226**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-016**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1757	BM		77201

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/10/2012 2359	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		98	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-15**
Date Sampled: **02/02/2012 1218**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-017**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/07/2012 1819	BM		77201

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0021	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		103	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-16**
Date Sampled: **02/02/2012 1208**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-018**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/10/2012 2259	JJG		77531
2	5030B	8260B	1	02/15/2012 1347	DLB		77826

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**0.25**	**J**	**5.0**	**0.20**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	2
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130		99	70-130
Bromofluorobenzene		99	70-130		96	70-130
Toluene-d8		97	70-130		104	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0042	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		98	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-17**
Date Sampled: **02/02/2012 1159**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-019**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/10/2012 2322	JJG		77531
2	5030B	8260B	1	02/15/2012 1408	DLB		77826

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	2
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130		99	70-130
Bromofluorobenzene		98	70-130		95	70-130
Toluene-d8		97	70-130		103	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0104	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		103	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-18**
Date Sampled: **02/02/2012 1148**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-020**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/10/2012 2345	JJG		77531
2	5030B	8260B	1	02/15/2012 1429	DLB		77826

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	2
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130		98	70-130
Bromofluorobenzene		100	70-130		95	70-130
Toluene-d8		101	70-130		103	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0126	RBH	02/09/2012 2345	77480

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		90	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-19**
Date Sampled: **02/02/2012 1138**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-021**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/11/2012 0008	JJG		77531

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0252	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		93	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-20**
Date Sampled: **02/02/2012 1130**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-022**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 1145	BM		77315

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0313	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		90	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-21**
Date Sampled: **02/02/2012 1120**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-023**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 0209	JJG		77255

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0335	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		102	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-22**
Date Sampled: **02/02/2012 1110**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-024**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 0230	JJG		77255

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0356	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		110	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-23**
Date Sampled: **02/02/2012 1430**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-025**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 0251	JJG		77255

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0418	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.071**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		108	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-24**
Date Sampled: **02/02/2012 1419**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-026**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 0312	JJG		77255

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0439	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.049**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		102	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-25**
Date Sampled: **02/02/2012 1411**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-027**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 0332	JJG		77255

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0501	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		104	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-26**
Date Sampled: **02/02/2012 1500**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-028**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 1208	BM		77315

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0522	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		102	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-27**
Date Sampled: **02/02/2012 1453**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-029**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 1231	BM		77315

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0544	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		98	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-28**
Date Sampled: **02/02/2012 1445**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-030**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 1254	BM		77315

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		88	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0605	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		92	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-29**
Date Sampled: **02/02/2012 1439**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-031**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 1316	BM		77315

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0627	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		93	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-30**
Date Sampled: **02/02/2012 1433**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-032**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 1339	BM		77315

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		89	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0648	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		90	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-31**
Date Sampled: **02/02/2012 1425**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-033**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/11/2012 0031	JJG		77531

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0709	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		106	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-32**
Date Sampled: **02/02/2012 1429**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-034**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 0106	JJG		77255

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0731	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		101	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-33**
Date Sampled: **02/02/2012 1441**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-035**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 0127	JJG		77255

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0752	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		105	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-35**
Date Sampled: **02/02/2012 1452**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-037**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 0148	JJG		77255

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0814	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		101	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-36**
Date Sampled: **02/02/2012 1421**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-038**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 1401	BM		77315

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0918	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		94	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-37**
Date Sampled: **02/02/2012 1435**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-039**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 1425	BM		77315

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 0940	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		104	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **Field Blank**
Date Sampled: **02/02/2012 1505**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-041**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 1448	BM		77315

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 1001	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		105	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **Trip Blank**
Date Sampled: **02/02/2012**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-042**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 1510	BM		77315

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.**
Description: **Duplicate WSW-2 (PRE)**
Date Sampled: **02/02/2012 1100**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-043**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 1534	BM		77315

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**16**		**5.0**	**0.20**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**5.0**		**5.0**	**1.7**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**26**		**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/11/2012 1023	RBH	02/09/2012 2345	77481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.48**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		102	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **Duplicate WSW-3 (PRE)**
Date Sampled: **02/02/2012 1210**
Date Received: **02/06/2012**

Laboratory ID: **NB06033-044**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/08/2012 1557	BM		77315

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**96**		**5.0**	**0.20**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**15**		**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/13/2012 1729	RBH	02/12/2012 1305	77568

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.59**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		108	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ77201-001
Batch: 77201
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	5.0	0.20	ug/L	02/07/2012 1144
Ethylbenzene	ND		1	5.0	1.7	ug/L	02/07/2012 1144
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/07/2012 1144
Naphthalene	ND		1	5.0	1.7	ug/L	02/07/2012 1144
Toluene	ND		1	5.0	1.7	ug/L	02/07/2012 1144
Xylenes (total)	ND		1	5.0	1.7	ug/L	02/07/2012 1144

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ77201-002
Batch: 77201
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	50		1	101	70-130	02/07/2012 1021
Ethylbenzene	50	54		1	108	70-130	02/07/2012 1021
Methyl tertiary butyl ether (MTBE)	50	49		1	98	70-130	02/07/2012 1021
Naphthalene	50	47		1	94	70-130	02/07/2012 1021
Toluene	50	53		1	106	70-130	02/07/2012 1021
Xylenes (total)	100	110		1	108	70-130	02/07/2012 1021

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ77201-003
Batch: 77201
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	52		1	103	2.0	70-130	20	02/07/2012 1042
Ethylbenzene	50	53		1	107	1.1	70-130	20	02/07/2012 1042
Methyl tertiary butyl ether (MTBE)	50	50		1	99	1.8	70-130	20	02/07/2012 1042
Naphthalene	50	49		1	98	4.9	70-130	20	02/07/2012 1042
Toluene	50	54		1	107	1.1	70-130	20	02/07/2012 1042
Xylenes (total)	100	110		1	108	0.25	70-130	20	02/07/2012 1042

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		106	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ77234-001
Batch: 77234
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	5.0	0.20	ug/L	02/07/2012 1302
Ethylbenzene	ND		1	5.0	1.7	ug/L	02/07/2012 1302
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/07/2012 1302
Naphthalene	ND		1	5.0	1.7	ug/L	02/07/2012 1302
Toluene	ND		1	5.0	1.7	ug/L	02/07/2012 1302
Xylenes (total)	ND		1	5.0	1.7	ug/L	02/07/2012 1302

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		92	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ77234-002
Batch: 77234
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	52		1	105	70-130	02/07/2012 1119
Ethylbenzene	50	56		1	112	70-130	02/07/2012 1119
Methyl tertiary butyl ether (MTBE)	50	46		1	93	70-130	02/07/2012 1119
Naphthalene	50	49		1	98	70-130	02/07/2012 1119
Toluene	50	52		1	105	70-130	02/07/2012 1119
Xylenes (total)	100	110		1	113	70-130	02/07/2012 1119

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ77234-003
Batch: 77234
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	50		1	100	4.5	70-130	20	02/07/2012 1153
Ethylbenzene	50	55		1	109	2.3	70-130	20	02/07/2012 1153
Methyl tertiary butyl ether (MTBE)	50	47		1	95	1.9	70-130	20	02/07/2012 1153
Naphthalene	50	49		1	98	0.063	70-130	20	02/07/2012 1153
Toluene	50	52		1	103	1.7	70-130	20	02/07/2012 1153
Xylenes (total)	100	110		1	109	3.0	70-130	20	02/07/2012 1153

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ77255-001
Batch: 77255
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	5.0	0.20	ug/L	02/07/2012 2158
Ethylbenzene	ND		1	5.0	1.7	ug/L	02/07/2012 2158
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/07/2012 2158
Naphthalene	ND		1	5.0	1.7	ug/L	02/07/2012 2158
Toluene	ND		1	5.0	1.7	ug/L	02/07/2012 2158
Xylenes (total)	ND		1	5.0	1.7	ug/L	02/07/2012 2158

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ77255-002
Batch: 77255
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	51		1	102	70-130	02/08/2012 0645
Ethylbenzene	50	50		1	101	70-130	02/08/2012 0645
Methyl tertiary butyl ether (MTBE)	50	47		1	94	70-130	02/08/2012 0645
Naphthalene	50	51		1	102	70-130	02/08/2012 0645
Toluene	50	51		1	102	70-130	02/08/2012 0645
Xylenes (total)	100	100		1	100	70-130	02/08/2012 0645

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		80	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ77255-003
Batch: 77255
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	52		1	103	1.0	70-130	20	02/08/2012 0706
Ethylbenzene	50	51		1	103	2.1	70-130	20	02/08/2012 0706
Methyl tertiary butyl ether (MTBE)	50	48		1	96	1.7	70-130	20	02/08/2012 0706
Naphthalene	50	49		1	98	3.3	70-130	20	02/08/2012 0706
Toluene	50	51		1	102	0.57	70-130	20	02/08/2012 0706
Xylenes (total)	100	100		1	102	1.9	70-130	20	02/08/2012 0706

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		79	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ77315-001
Batch: 77315
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	5.0	0.20	ug/L	02/08/2012 1056
Ethylbenzene	ND		1	5.0	1.7	ug/L	02/08/2012 1056
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/08/2012 1056
Naphthalene	ND		1	5.0	1.7	ug/L	02/08/2012 1056
Toluene	ND		1	5.0	1.7	ug/L	02/08/2012 1056
Xylenes (total)	ND		1	5.0	1.7	ug/L	02/08/2012 1056

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ77315-002
Batch: 77315
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	50		1	100	70-130	02/08/2012 0925
Ethylbenzene	50	54		1	107	70-130	02/08/2012 0925
Methyl tertiary butyl ether (MTBE)	50	47		1	93	70-130	02/08/2012 0925
Naphthalene	50	43		1	86	70-130	02/08/2012 0925
Toluene	50	51		1	102	70-130	02/08/2012 0925
Xylenes (total)	100	110		1	107	70-130	02/08/2012 0925

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ77315-003
Batch: 77315
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	50		1	101	1.0	70-130	20	02/08/2012 0948
Ethylbenzene	50	54		1	109	1.6	70-130	20	02/08/2012 0948
Methyl tertiary butyl ether (MTBE)	50	46		1	92	1.6	70-130	20	02/08/2012 0948
Naphthalene	50	45		1	89	3.0	70-130	20	02/08/2012 0948
Toluene	50	52		1	104	1.1	70-130	20	02/08/2012 0948
Xylenes (total)	100	110		1	108	0.61	70-130	20	02/08/2012 0948

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		112	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NB06033-028DU
Batch: 77315
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Benzene	ND	ND		1	0.00	20	02/08/2012 1924
Ethylbenzene	ND	ND		1	0.00	20	02/08/2012 1924
Methyl tertiary butyl ether (MTBE)	ND	ND		1	0.00	20	02/08/2012 1924
Naphthalene	ND	ND		1	0.00	20	02/08/2012 1924
Toluene	ND	ND		1	0.00	20	02/08/2012 1924
Xylenes (total)	ND	ND		1	0.00	20	02/08/2012 1924

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		114	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS - MS

Sample ID: NB06033-029MS
Batch: 77315
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	50	54		1	108	70-130	02/08/2012 1947
Ethylbenzene	ND	50	55		1	110	70-130	02/08/2012 1947
Methyl tertiary butyl ether (MTBE)	ND	50	48		1	96	70-130	02/08/2012 1947
Naphthalene	ND	50	53		1	105	70-130	02/08/2012 1947
Toluene	ND	50	54		1	107	70-130	02/08/2012 1947
Xylenes (total)	ND	100	110		1	110	70-130	02/08/2012 1947

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		118	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ77531-001
Batch: 77531
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	5.0	0.20	ug/L	02/10/2012 2150
Ethylbenzene	ND		1	5.0	1.7	ug/L	02/10/2012 2150
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	0.40	ug/L	02/10/2012 2150
Naphthalene	ND		1	5.0	1.7	ug/L	02/10/2012 2150
Toluene	ND		1	5.0	1.7	ug/L	02/10/2012 2150
Xylenes (total)	ND		1	5.0	1.7	ug/L	02/10/2012 2150

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ77531-002
Batch: 77531
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	46		1	92	70-130	02/10/2012 2018
Ethylbenzene	50	47		1	94	70-130	02/10/2012 2018
Methyl tertiary butyl ether (MTBE)	50	45		1	91	70-130	02/10/2012 2018
Naphthalene	50	49		1	97	70-130	02/10/2012 2018
Toluene	50	46		1	93	70-130	02/10/2012 2018
Xylenes (total)	100	94		1	94	70-130	02/10/2012 2018

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ77531-003
Batch: 77531
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	47		1	93	1.5	70-130	20	02/10/2012 2041
Ethylbenzene	50	47		1	94	0.38	70-130	20	02/10/2012 2041
Methyl tertiary butyl ether (MTBE)	50	47		1	94	3.4	70-130	20	02/10/2012 2041
Naphthalene	50	49		1	97	0.064	70-130	20	02/10/2012 2041
Toluene	50	46		1	93	0.29	70-130	20	02/10/2012 2041
Xylenes (total)	100	95		1	95	1.4	70-130	20	02/10/2012 2041

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ77826-001
Batch: 77826
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Naphthalene	ND		1	5.0	1.7	ug/L	02/15/2012 0921

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		103	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ77826-002
Batch: 77826
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Naphthalene	50	42		1	85	70-130	02/15/2012 0757

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ77826-002
Batch: 77826
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		103	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ77826-003
Batch: 77826
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Naphthalene	50	42		1	84	0.68	70-130	20	02/15/2012 0818

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		103	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MB

Sample ID: NQ77480-001
Batch: 77480
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 02/09/2012 2345

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	02/10/2012 1711

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		99	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: NQ77480-002
Batch: 77480
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 02/09/2012 2345

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.27		1	109	60-140	02/10/2012 1732

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		108	57-137

EDB & DBCP by Microextraction - MS

Sample ID: NB06033-005MS
Batch: 77480
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 02/09/2012 2345

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.13	0.25	0.36		1	92	60-140	02/10/2012 1941

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		92	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MSD

Sample ID: NB06033-005MD
Batch: 77480
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 02/09/2012 2345

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.13	0.25	0.38		1	101	5.9	60-140	20	02/10/2012 2003

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		96	57-137

EDB & DBCP by Microextraction - MB

Sample ID: NQ77481-001
Batch: 77481
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 02/09/2012 2345

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	02/11/2012 0209

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		107	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: NQ77481-002
Batch: 77481
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 02/09/2012 2345

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.28		1	112	60-140	02/11/2012 0230

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		106	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MS

Sample ID: NB06033-037MS
Batch: 77481
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 02/09/2012 2345

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	ND	0.25	0.28		1	112	60-140	02/11/2012 0835

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		101	57-137

EDB & DBCP by Microextraction - MSD

Sample ID: NB06033-037MD
Batch: 77481
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 02/09/2012 2345

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	ND	0.25	0.26		1	104	9.1	60-140	20	02/11/2012 0857

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		96	57-137

EDB & DBCP by Microextraction - MB

Sample ID: NQ77568-001
Batch: 77568
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 02/12/2012 1305

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	02/13/2012 1646

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		105	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - LCS

Sample ID: NQ77568-002
Batch: 77568
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 02/12/2012 1305

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.29		1	116	60-140	02/13/2012 1707

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		111	57-137

EDB & DBCP by Microextraction - MS

Sample ID: NB06033-044MS
Batch: 77568
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 02/12/2012 1305

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.59	0.24	0.81		1	87	60-140	02/13/2012 1750

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		104	57-137

EDB & DBCP by Microextraction - MSD

Sample ID: NB06033-044MD
Batch: 77568
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 02/12/2012 1305

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.59	0.24	0.84		1	96	2.9	60-140	20	02/13/2012 1812

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		109	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 10712

Client: MCCi	Report to Contact: B. Shane	Sampler (Printed Name): Chris Lashley	Quote No.
Address: 235 B Dooley Rd	Telephone No. / Fax No. / Email: 803-808-2045 cms@mcci.net	Waybill No.	Page: 1 of 5
City: Lexington	State: SC	Zip Code: 29073	Number of Containers: 3 / 3 / 5 / 5
Project Name: Smiths Grocery	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH		Bottle (See Instructions on back): A
Project Number: 09322 / 11-3700	P.O. Number		Preservative
			Lot No.: NB60033

Sample ID / Description (Container for each sample may be combined on one line)	Date	Time	G-Grab C-Composite	Matrix: GW	DW	WW	S	Other	Analysis: BTEX, MTBE	EDB	Remarks / Cooler ID
WSW-1	2/2	1421	G			X			X	X	
WSW-2 PRE		1100									
WSW-2 Post		1201									
WSW-3 PRE		1210									
WSW-3 Post		1300									
WSW-4		1402									
WSW-5		1358									
WSW-6		1342									
WSW-7		1332									
WSW-8	2/2	1324	G			X			X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify):

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time		Date	Time
1. Relinquished by: Sampler	2-2-12	1700	1. Received by	2/2/12	1700
2. Relinquished by	2/6/12	2:25	2. Received by: Hunter Mellen	2/6/12	2:25
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by: Hunter Mellen	2-6-12	1500	4. Laboratory Received by	2/6/12	1500

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack — Receipt Temp: 1.0 °C — Temp. Blank: ☐ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 10713

Client: MESI	Report to Contact: B. Shaw	Sampler (Printed Name): Chris Lashley	Quote No.
Address: 235 B Dooly Rd	Telephone No. / Fax No. / Email: 803-808-2043 / cmc2@mesi.net	Waybill No.	Page: 2 of 5
City: Lexington	State: SC Zip Code: 29073	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H_2SO_4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH	Number of Containers: 3 A S
Project Name: Smith Grocery			Bottle (Sea Insit/Chem on back): 3 A S
Project Number: 09326/11-3700	P.O. Number:		Preservative:
			Lot No.: NB06033

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	Grab/Composite	Matrix: GW	DW	WW	S	Other	Analysis: BTEX, Naphth MTBE		EDB	Remarks / Cooler ID
WSW-9	2/2	1315	G			X			X		X	
WSW-10		1308										
WSW-11		1300										
WSW-12		1245										
WSW-13		1236										
WSW-14		1226										
WSW-15		1218										
WSW-16		1208										
WSW-17		1159										
WSW-18	2/2	1198	G			X			X		X	

Turn Around Time Required: (Prior lab approval required for expedited TAT) ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

1. Relinquished by: Chris Lashley	Date: 2-2-12	Time: 1700	1. Received by: Chris Lashley	Date: 2-2-12	Time: 1700
2. Relinquished by:	Date: 2-6-12	Time: 2:25	2. Received by: Hunter Miller	Date: 2-6-12	Time: 225
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by: Hunter Miller	Date: 2-6-12	Time: 1500	4. Laboratory Received by:	Date: 2-6-12	Time: 1500

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack | Receipt Temp. _____ °C | Temp. Blank ☐ Y ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 10714

Client: MEC	Report to Contact: B. Shaw	Sampler (Printed Name): Chris Lashley	Quote No.
Address: 235 B Dooly Rd	Telephone No. / Fax No. / Email: 803-808-2093 / cms2mec.net	Waybill No.	Page: 3 of 5
City: Lexington	State: SC	Zip Code: 29073	Number of Containers
Project Name: Smith Grocery	Preservative: 1. None 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH		Bottle (See Instructions on back)
Project Number: 09-322 / 11-3700	P.O Number		Preservative
			Lot No. NP06073

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	Grab / Composite	Matrix: GW	DW	WW/A	S	Other	Analysis: BTEX, MTBE	EDB	Remarks / Cooler ID
WSW-19	2/2	1138	G			X			X	X	
WSW-20		1130									
WSW-21		1120									
WSW-22		1110									
WSW-23		1430									
WSW-24		1419									
WSW-25		1411									
WSW-26		1500									
WSW-27		1459									
WSW-28	2/2	1445	G			X			X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

1. Relinquished by / Sampler		Date: 2/2/12	Time: 1700	1. Received by		Date: 2/2/12	Time: 1700
2. Relinquished by		Date: 2/6/12	Time: 2225	2. Received by	Hunter Miller	Date: 2/10/12	Time: 2225
3. Relinquished by		Date	Time	3. Received by		Date	Time
4. Relinquished by	Hunter Miller	Date: 2-6-12	Time: 1500	4. Laboratory Received by		Date: 2/6/12	Time: 1500

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check): ☑ Yes ☐ No ☐ Not Pack — Receipt Temp: 1.0 °C — Temp. Blank: ☐ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com
Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY **Chain of Custody Record** Number 10715

Client: MEC,	Report to Contact: B. Shane	Sampler (Printed Name): Chris Lashley	Quote No.
Address: 235 B Dooly Rd	Telephone No. / Fax No. / Email: 803-808-2093 / cms@mec.net	Waybill No.	Page 4 of 5
City: Lexington	State: SC	Zip Code: 29073	Number of Containers: 3 / A / S
Project Name: Smiths Grocery	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. NCL 6. Na Thio. 7. NaOH		Bottle (See Instructions on back): 3 / A / S
Project Number: 09322 / 11-3700	P.O. Number:		Preservative: EDD
			Lot No.: NB61033

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	Grab	Composite	Matrix: GW	DW	WW	S	Other	Analysis: BTEX, MTBE	Remarks / Cooler ID
WSW-29	2/2	1439	6				X			X	
WSW-30		1433									
WSW-31		1425									
WSW-32		1429									
WSW-33		1441									
WSW-34		1450									
WSW-35		1452									
WSW-36		1421									
WSW-37		1435									
WSW-38	2/2	1457	6				X			X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify):

Possible Hazard Identification: ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

1. Relinquished by Sampler	Date 2/2/12	Time 1700	1. Received by	Date 2-2-12	Time 1700
2. Relinquished by	Date 2/6/12	Time 225	2. Received by Hunter Miller	Date 2/6/12	Time 225
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by Hunter Miller	Date 2-6-12	Time 1500	4. Laboratory Received by	Date 2/6/12	Time 1500

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack — Receipt Temp. 1.0 °C — Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v21

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY

Chain of Custody Record

Number 10716

Client: MACI	Report to Contact: B. Shaver	Sampler (Printed Name): Chris Lashley	Quote No.
Address: 235 B. Dooly Rd	Telephone No. / Fax No. / Email: 803-808-2043 / cms@maci.md	Waybill No.	Page: 5 of 5
City: Lexington	State: SC	Zip Code: 29073	Number of Containers
Project Name: Smithy Corner	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCl 6. Na Thio. 7. NaOH		Bottle (See instructions on back)
Project Number: 04322/11-3700	P.O. Number:		Preservative
			Lot No.

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: Benz, Naph, Imp 82	EDB	Remarks / Cooler ID
Field Blank	2/2	1505						X	X	X	
Trip Blank								X	X		
Duplicate WSW-2 (Pre)		1100	G				X		X	X	
Duplicate WSW-3 (Pre)	2/2	1210	G				X		X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify):

Possible Hazard Identification: Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

1. Relinquished by		Date: 2/2/12	Time: 1700	1. Received by		Date: 2/2	Time: 1700
2. Relinquished by		Date: 2/6/12	Time: 2235	2. Received by	Hunter Miller	Date: 2/6/12	Time: 2235
3. Relinquished by		Date	Time	3. Received by		Date	Time
4. Relinquished by	Hunter Miller	Date: 2-6-12	Time: 1500	4. Laboratory Received by		Date: 2.6.12	Time: 1500

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack — Receipt Temp. 1.0 °C — Temp. Blank ☐ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Receipt Checklist (SRC)

Client: MCCI Cooler Inspected by/date: EC 5/6/12 Lot #: NB60333 (6033) EC 5/6/12

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐		2. If custody seals were present, were they intact and unbroken?
Cooler ID/temperature upon receipt 1.4 °C / °C / °C / °C Method: ☐ Temperature Blank ☑ Against Bottles (trip Blank) Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other:_____. (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☐	No ☑		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☑	No ☐	EC 5/6/12	14. Were any samples containers missing? -030, -040
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☑	No ☐	EC 5/6/12 NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s)_____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH) with the SR # (number)

Sample(s) -003(6) -005(1) -010(3) -011(5) were received with bubbles >6 mm in diameter. (2 with bubbles)

Sample(s) -015(3), -017(3) -027(2) -032(2) were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb.

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: Date of response:

Comments: -030, -040 No Samples received (WSW 37, WSW-38)

APPENDIX C:

TAX MAP

This appendix is not applicable to the scope of services presented in the subject report, however this page has been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP and provide report continuity

APPENDIX D:

SOIL BORING/FIELD SCREENING LOGS & 1903 FORMS

This appendix is not applicable to the scope of services presented in the subject report, however this page has been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP and provide report continuity

APPENDIX E:

WELL COMPLETION LOGS & 1903 FORMS

This appendix is not applicable to the scope of services presented in the subject report, however this page has been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP and provide report continuity

APPENDIX F:

AQUIFER EVALUATION SUMMARY FORMS, DATA, GRAPHS, EQUATIONS

This appendix is not applicable to the scope of services presented in the subject report, however this page has been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP and provide report continuity

APPENDIX G:

DISPOSAL MANIFEST

This appendix is not applicable to the scope of services presented in the subject report, however this page has been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP and provide report continuity

APPENDIX H:
LOCAL ZONING REGULATIONS

This appendix is not applicable to the scope of services presented in the subject report, however this page has been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP and provide report continuity

APPENDIX I:
FATE AND TRANSPORT MODELING

This appendix is not applicable to the scope of services presented in the subject report, however this page has been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP and provide report continuity

APPENDIX J:
ACCESS AGREEMENTS

This appendix is not applicable to the scope of services presented in the subject report, however this page has been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP and provide report continuity

APPENDIX K:
DATA VERIFICATION CHECKLIST

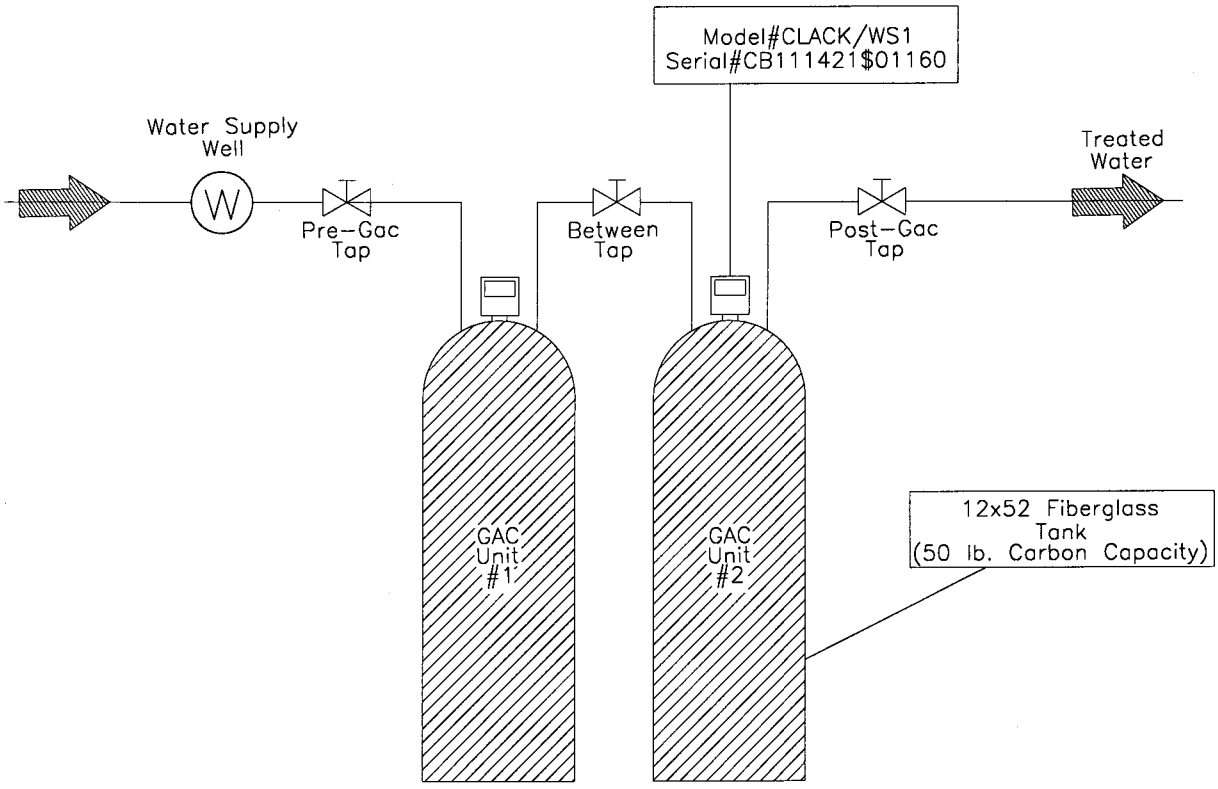
Contractor Checklist

Item#	Item	Yes	No	N/A
1	Are Facility Name, Permit #, and address provided?	X		
2	Is UST Owner/Operator name, address, & phone number provided?	X		
3	Is name, address, & phone number of current property owner provided?	X		
4	Is the DHEC Certified UST Site Rehabilitation Contractor's Name, Address, telephone number, and certification number provided?	X		
5	Is the name, address, telephone number, and certification number of the well driller that installed borings/monitoring wells provided?			X
6	Is the name, address, telephone number, and certification number of the certified laboratory(ies) performing analytical analyses provided?	X		
7	Has the facility history been summarized?			X
8	Has the regional geology and hydrogeology been described?			X
9	Are the receptor survey results provided as required?	X		
10	Has current use of the site and adjacent land been described?	X		
11	Has the site-specific geology and hydrogeology been described?			X
12	Has the primary soil type been described?			X
13	Have field screening results been described?			X
14	Has a description of the soil sample collection and preservation been detailed?			X
15	Has the field screening methodology and procedure been detailed?			X
16	Has the monitoring well installation and development dates been provided?			X
17	Has the method of well development been detailed?			X
18	Has justification been provided for the locations of the monitoring wells?			X
19	Have the monitoring wells been labeled in accordance with the UST QAPP guidelines?	X		
20	Has the groundwater sampling methodology been detailed?	X		
21	Have the groundwater sampling dates and groundwater measurements been provided? (Table 2 & Figure 5)			X
22	Has the purging methodology been detailed?			X
23	Has the volume of water purged from each well been provided along with measurements to verify that purging is complete? (Appendix B)			X
24	If free-product is present, has the thickness been provided?			X
25	Does the report include a brief discussion of the assessment done and the results?	X		
26	Does the report include a brief discussion of the aquifer evaluation and results?			X
27	Does the report include a brief discussion of the fate & transport models used?			X

Item#	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk Evaluation)			X
29	Have the exposure pathways been analyzed? (Tier 2 Risk Evaluation)			X
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 Risk Evaluation)			X
31	Have recommendations for further action been provided and explained?	X		
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)			X
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)			X
34	Has the current and historical laboratory data been provided in tabular format? (Table 3)	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form? (Appendix F)			X
36	Have the Site conceptual model tables been included? (Tier 1 Risk Evaluation)			X
37	Has the topographic map been provided with all required elements? (Figure 1)	X		
38	Has the site base map been provided with all required elements? (Figure 2, 2A, 2B)	X		
39	Have the CoC site maps been provided? (Figures 3, 4, 4A, 4B)			X
40	Has the site potentiometric map been provided? (Figure 5)			X
41	Have the geologic cross-sections been provided? (Figure 6)			X
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements? (Appendix A)			X
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements? (Appendix B)	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements? (Appendix C)	X		
47	Have the soil boring/field screening logs been provided? (Appendix E)			X
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)			X
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)			X
50	Have the disposal manifests been provided? (Appendix G)			X
51	Has a copy of the local zoning regulations been provided? (Appendix H)			X
52	Has all fate and transport modeling been provided? (Appendix I)			X
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)			X
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided? (Appendix K)	X		

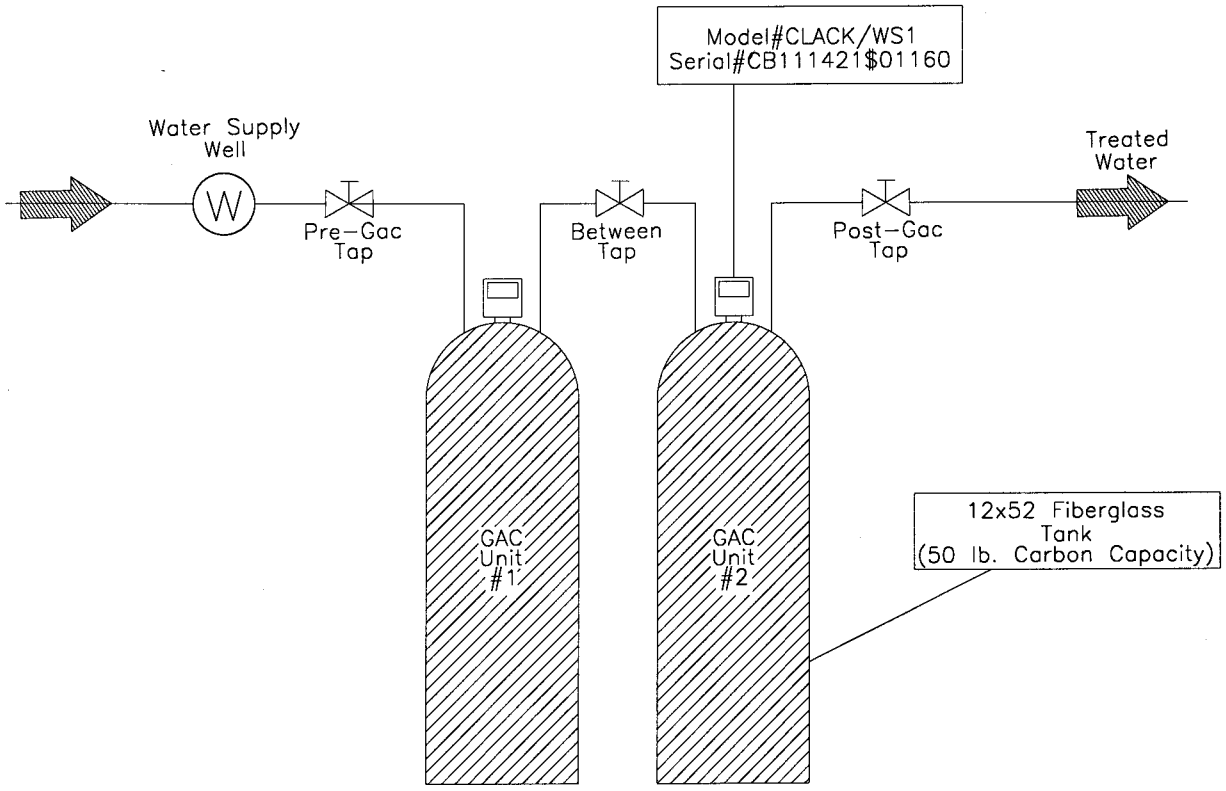
APPENDIX L:
GAC UNIT DOCUMENTATION

WSW–Swift(WSW–2)
3043 Clover Circle, York, SC



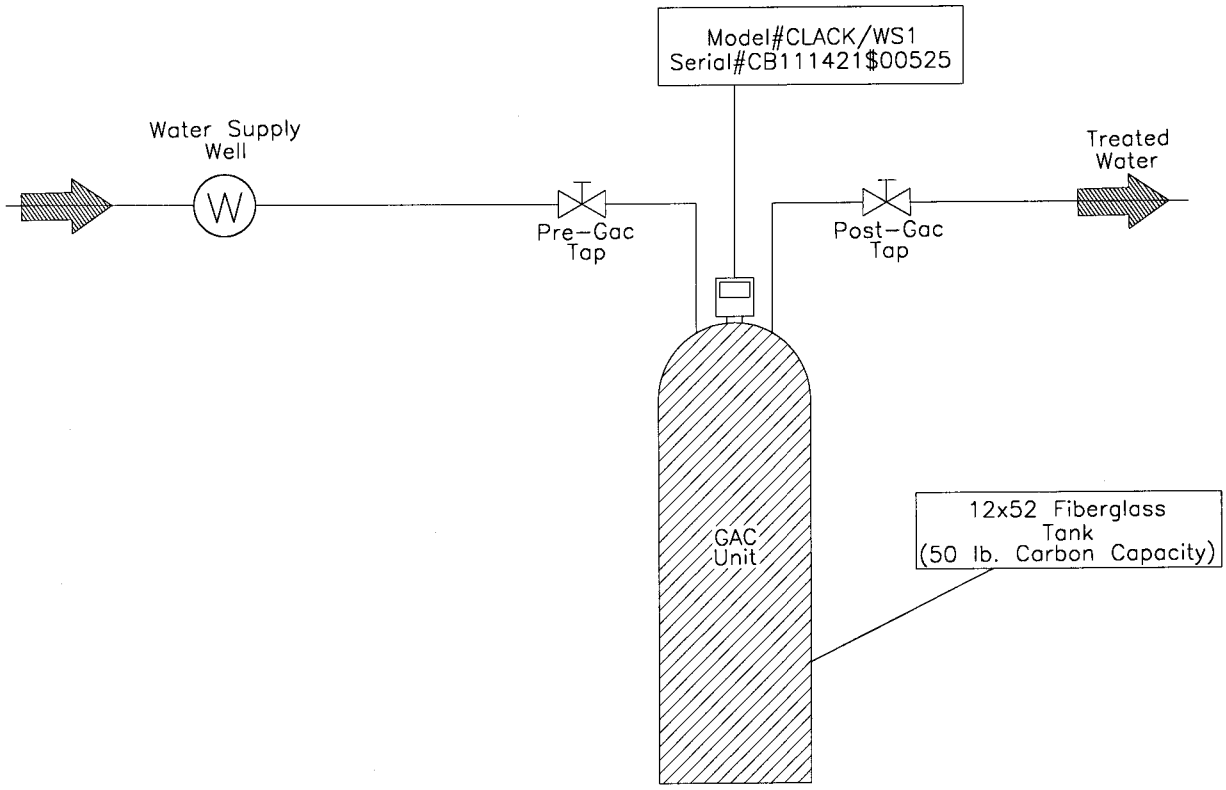
Midlands Environmental Consultants, Inc.	GAC System Schematic
Smith's Grocery York, SC SCDHEC Site ID# 09322	
WSW-Swift (WSW-2)	MECI 11-3700

WSW-Hill(WSW-3)
3049 Clover Circle, York, SC



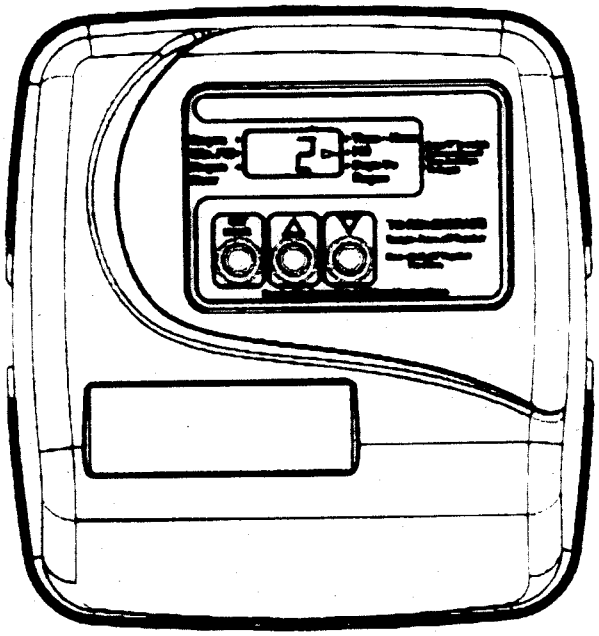
Midlands Environmental Consultants, Inc.	GAC System Schematic
Smith's Grocery York, SC SCDHEC Site ID# 09322	
WSW-Hill (WSW-3)	MECI 11-3700

WSW–Jeter(WSW–24)
3040 Clover Circle, York, SC



Midlands Environmental Consultants, Inc.	GAC System Schematic
Smith's Grocery York, SC SCDHEC Site ID# 09322	
WSW-Jeter(WSW-24)	MECI 11-3700

Water Specialist
1" Control Valve Series Model: WS1TC
1.25" Control Valve Series Model: WS1.25TC



Operation and Instruction Manual for OEM Only.

Please Note: This operation and instruction manual is for the training of the OEM and for the OEM to use to train their customers. This document is not to be used as the complete system manual.

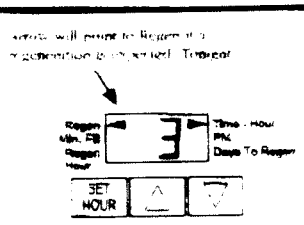
MANUAL REGENERATION

NOTE: For softeners, if brine tank does not contain salt, fill with salt and wait at least 2 hours before regeneration.

If you need to initiate a manual regeneration, either immediately, or tonight at the preprogrammed time (typically 2 a.m.), complete the following steps:

For Immediate Regeneration:

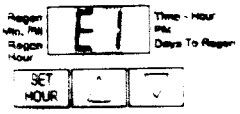
Press and hold UP and DOWN simultaneously until valve motor starts (typically 3 seconds).



For Regeneration Tonight:

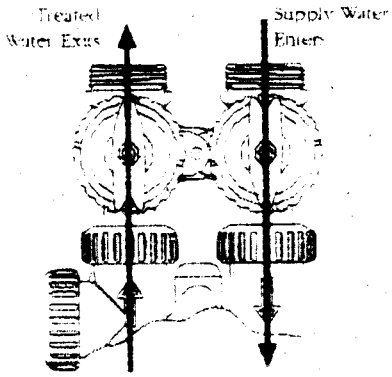
Press and release UP and DOWN simultaneously (notice that arrow points to Regen).

If the display shows "E1," "E2" or "E3" for error, call a service technician.

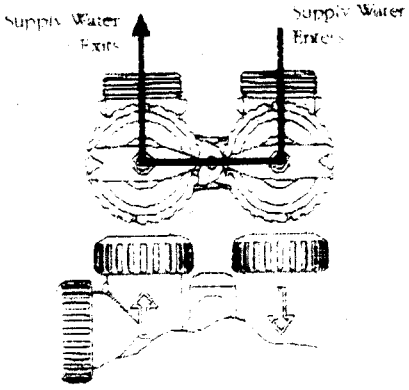


To **shut off water** to the system, please position arrow handles as shown in the **bypass operation** diagram below. If your valve doesn't look like the diagram below, contact your service technician for instructions on how to shut off water.

NORMAL OPERATION

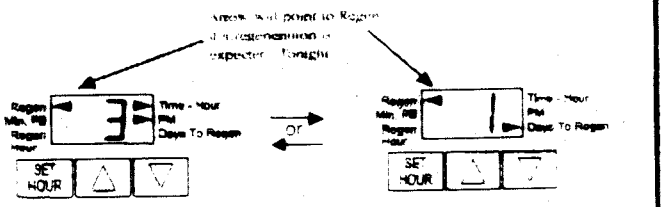


BYPASS OPERATION



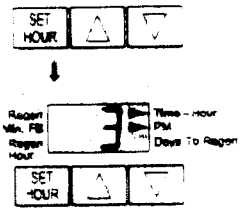
GENERAL OPERATION

When the system is operating, one of two displays will be shown: time of day or days until the next regeneration. Pressing UP or DOWN will toggle between the two choices.



TO SET TIME OF DAY

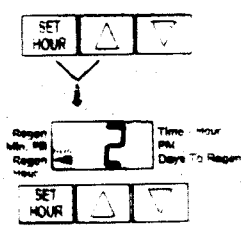
In the event of a power outage, time of day needs to be reset. All other information will be stored in memory no matter how long the power outage. Please complete the steps as shown to the right. To access this mode, press SET HOUR.



1. Accessed by pressing SET HOUR.
2. Adjust to the nearest hour using UP or DOWN. An arrow points to PM during p.m. hours.
3. Press SET HOUR to complete and return to normal operation.

TO SET TIME OF REGENERATION

For initial set-up or to make adjustments, please complete the steps as shown to the right. Access this mode by pressing SET HOUR and UP simultaneously for 5 seconds.



1. Accessed by pressing SET HOUR and UP simultaneously for 5 seconds.
2. Adjust time of regeneration hour using the UP or DOWN. An arrow points to PM during p.m. hours. Simultaneously press SET HOUR and DOWN to return to normal operation.

Table of Contents

Control Valve Function and Cycles of Operation — Control Valve Function and Cycles of Operation 1 - 2
OEM General Programming Instructions — Programming 1
- OEM System Setup — Programming 1
- Installer Displays/Settings — Programming 3
- User Displays/Settings — Programming 4

Drawings and Part Numbers
- Front Cover and Drive Assembly — Drawings and Part Numbers 1
- WS1TC Drive Cap, Pistons and Spacer Stack — Drawings and Part Numbers 2a
- WS1.25TC Drive Cap, Pistons and Spacer Stack — Drawings and Part Numbers 2b
- WS1 & WS1.25 Identification Figure — Drawings and Part Numbers 2c

FOR INFORMATION COMMON TO ALL 1" & 1.25" CONTROL VALVES REFER TO THE WS1&WS1.25 COMMON INFORMATION MANUAL

The common manual contains the Table of Contents shown below

Other Drawings and Part Numbers
- Compliance Table — No page number
- Injector Cap, Injector Screen, Injector, Plug and O-ring — Drawings and Part Numbers 3a
- Injector Order Information — Drawings and Part Numbers 3b
- Injector Graphs US Units: Injector Draw, Slow Rinse and Total Flow Rates — Drawings and Part Numbers 3c-3d
- Injector Graphs Metric Units: Injector Draw, Slow Rinse and Total Flow Rates — Drawings and Part Numbers 3e-3f
- Refill Flow Control Assembly and Refill Port Plug — Drawings and Part Numbers 4
- Drain Line – 3/4" — Drawings and Part Numbers 5
- Drain Line – 1" — Drawings and Part Numbers 6
- Water Meter, Meter Plug and Mixing Valve — Drawings and Part Numbers 7
- Installation Fitting Assemblies — Drawings and Part Numbers 8a – 8b
- Bypass Valve — Drawings and Part Numbers 9
- Flow Diagrams – Service and Backwash — Drawings and Part Numbers 10
- Flow Diagrams – Downflow and Upflow — Drawings and Part Numbers 11
- Flow Diagrams – Rinse and Fill — Drawings and Part Numbers 12
- WS1 Service Spanner Wrench — Drawings and Part Numbers 13

General Information — General Information 1
- General Warnings (Must appear in OEM's manual) — General Information 1
- Specifications which must be included in OEM's Manual — General Information 2
- Quick Reference Specifications — General Information 2
- Drive Assembly — General Information 3
- Drive Cap Assembly, Main Piston and Regenerant Piston — General Information 3
- Spacer Stack Assembly — General Information 4
- Injector Cap, Screen, Injector Plug and Injector — General Information 4
- Refill Flow Control Assembly or Refill Port Plug — General Information 4
- Drain Line Flow Control and Fitting Assembly — General Information 5
- Water Meter or Meter Plug — General Information 6
- Mixing Valve — General Information 6
- Installation Fitting Assemblies — General Information 6
- Bypass Valve — General Information 7 - 8

Installation — Installation 1 - 2
Service Instructions — Service Instructions 1 - 5
Troubleshooting — Troubleshooting 1 - 2
Limited Warranty — Last Page

Control Valve Function and Cycles of Operation

This glass filled Noryl* (or equivalent) fully automatic control valve is designed as the primary control center to direct and regulate all cycles of a downflow regeneration water softener or filter.

The time clock control valve can be set to perform downflow regeneration or simply backwash. The time clock control valve has two calendar options for regeneration frequency:
1. an option where the user can choose the number of days (1-99) between each regeneration; and
2. a seven-day option where the user can choose which day(s) of the week a regeneration should occur.

The control valve is compatible with a variety of regenerants and resin cleaners. The control valve is capable of routing the flow of water in the necessary paths to regenerate or backwash water treatment systems. The injector regulates the flow of brine or other regenerants. The control valve regulates the flow rates for backwashing, rinsing, and the replenishing of treated water into a regenerant tank, when applicable.

The control valve uses no traditional fasteners (e.g. screws); instead clips, threaded caps and nuts and snap type latches are used. Caps and nuts only need to be firmly hand tightened because radial seals are used. Tools required to service the valve include one small blade screw driver, one large blade screw driver, pliers and a pair of hands. A plastic wrench is available which eliminates the need for screwdrivers and pliers. Disassembly for servicing takes much less time than comparable products currently on the market. Control valve installation is made easy because the distributor tube can be cut ½" above to ½" below the top of tank thread. The distributor tube is held in place by an o-ring seal and the control valve also has a bayonet lock feature for upper distributor baskets.

The AC adapter power pack comes with a 15 foot power cord and is designed for use with the control valve. The AC adapter power pack is for dry location use only. If the power goes out, only the time of day needs to be reset. All other values are permanently stored in the nonvolatile memory.

Table 1 shows the time for the backwash, regenerative, and rinse cycles for the ten available programming options. Six different programs are available for a softener, one for a regenerative filter, and three programs for backwash only filters. When the control valve is used as a:
1. softener, one or two backwashes occur and refill always occurs after the rinse cycle (P0 through P5);
2. regenerative filter, one backwash occurs and refill always occurs after the rinse cycle (P6); and
3. backwashing filter, one backwash occurs (P7 through P9).

Table 1
Regeneration Cycles and Times for Different Programs

Program	All times in Minutes				
	C1 1st Backwash	C2 Regenerate	C3 2nd Backwash	C4 Rinse	C5 Fill
P0	3	50	3	3	1-99
P1	8	50	8	4	1-99
P2	8	70	10	6	1-99
P3	12	70	12	8	1-99
P4	10	50	Skipped	8	1-99
P5	4	50	Skipped	4	1-99
P6	12	6	Skipped	12	1-99
P7	6	Skipped	Skipped	4	Skipped
P8	10	Skipped	Skipped	6	Skipped
P9	14	Skipped	Skipped	8	Skipped

NOTE: During regeneration the display will show C1, C2, etc. If the cycle is skipped, that cycle number will not be displayed.

*Noryl is a trademark of General Electric

The user can initiate manual regeneration. The user has the option to request the manual regeneration at the delayed regeneration time or to have the regeneration occur immediately. Simultaneously press the UP + DOWN buttons to start a regeneration at the next delayed regeneration time. If a regeneration is to occur today an arrow will point to regeneration. For immediate regeneration, simultaneously press and hold the UP + DOWN buttons for three seconds.

When in regeneration, step through the different regeneration cycles by simultaneously pressing the UP + DOWN buttons.

OEM General Instructions

The control valve offers multiple procedures that allow the valve to be modified to suit the needs of the installation. These **procedures are:**

- OEM System Setup
- Installer Displays & Settings (either 1-99 Days Between Regeneration option or 7-Day option)
- User Displays

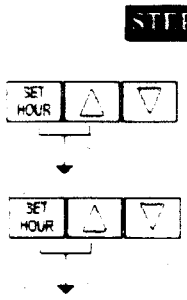
These procedures can be accessed in any order. Details on each of the procedures are provided below and on the following pages

When in operation, normal user displays show the time of day or days remaining before regeneration. When stepping through a procedure, if no buttons are pressed within five minutes the display returns to a normal user display. Any changes made prior to the five minute time out are incorporated

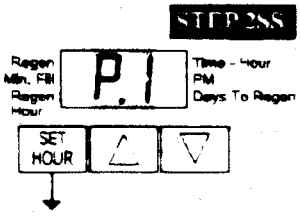
To quickly exit Installer Displays & Settings or OEM Setup, simultaneously press SET HOUR + DOWN. Any changes made prior to the exit are incorporated.

To reinitialize the control valve, check to make sure the valve is in the User Display. Then simultaneously press SET HOUR + DOWN or unplug power source plug (black wire) on the circuit board, and plug back in

OEM System Setup



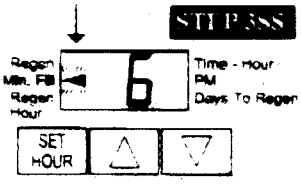
STEP 1SS – From normal mode, press SET HOUR + UP buttons simultaneously for 3 seconds and release. Then press SET HOUR + UP buttons simultaneously for 3 seconds and release.



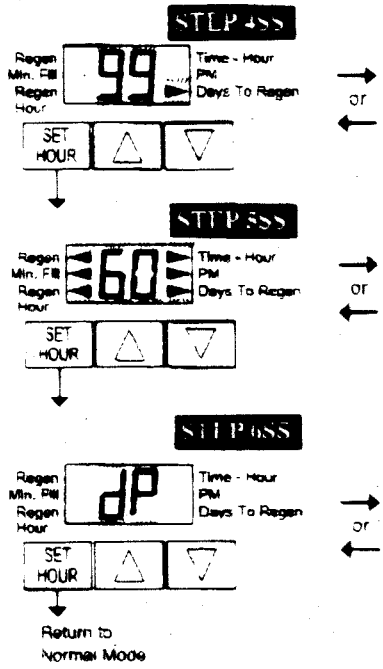
STEP 2SS – Choose the desired program by pressing the UP or DOWN buttons. Prior to selecting a program, verify the correct valve body, main piston, regenerant piston, and stack are being used, and that the injector or injector plug(s) are in the correct locations. See Compliance Table in Service Instructions under Injector Cap, Screen, Injector Plug and Injector section and Figure 6. Press SET HOUR button to go to Step 3SS

Regeneration Cycles and Times for Different Programs

Program	All times in Minutes				
	C1 1st Backwash	C2 Regenerate	C3 2nd Backwash	C4 Rinse	C5 Fill
P0	3	50	7	5	1-99
P1	5	50	7	4	1-99
P2	8	70	10	6	1-99
P3	12	70	12	8	1-99
P4	10	50	Skipped	8	1-99
P5	4	50	Skipped	4	1-99
P6	12	5	Skipped	12	1-99
P7	3	Skipped	Skipped	4	Skipped
P8	10	Skipped	Skipped	6	Skipped
P9	4	Skipped	Skipped	5	Skipped



STEP 3SS – If program P0 through P6 was selected, enter in the minutes of fill using the UP or DOWN buttons. The allowable values vary from a low of 1 to a high of 99. If program P7, P8 or P9 was selected, dashes will appear for minutes of fill. Press SET HOUR button to go to Step 4SS. Note: For each minute of fill 0.5 gallons of water is added to the solution tank. With salt (sodium chloride) this equates to approximately 4.2 pounds of salt per minute of fill.



STEP 4SS — Use UP or DOWN buttons to switch between

- 1-99 Days Between Regen, or
- 7-Day

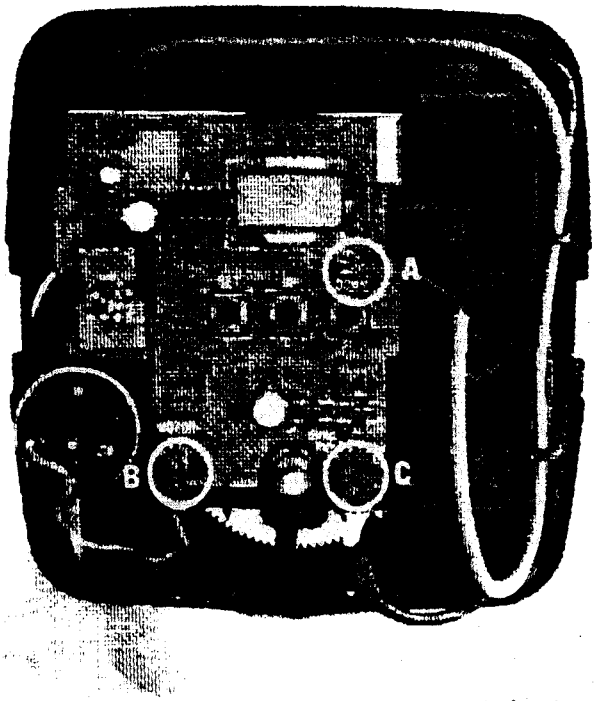
Press SET HOUR button to go to Step 5SS.

STEP 5SS — Use UP or DOWN buttons to switch between 60 Hz or 50 Hz option. Press SET HOUR button to go to Step 6SS

STEP 6SS — If a differential pressure switch is installed and actuated

- a regeneration will occur immediately if no arrow points at Regen Hour; or
- a regeneration will occur at the delayed regeneration hour if an arrow points at Regen Hour.

Use UP or DOWN buttons to switch between the two choices. If a differential switch is not installed the settings in this display are ignored. Press SET HOUR to exit OEM system setup.



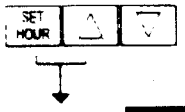
NOTE: A regeneration will be initiated or scheduled after the control has received a signal for two minutes.

A. Differential pressure switch connection

B. Motor wire connection

C. AC adapter wire connection

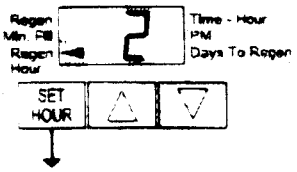
STEP 1ID



Installer Displays & Settings (1-99 Days Between Regeneration option)

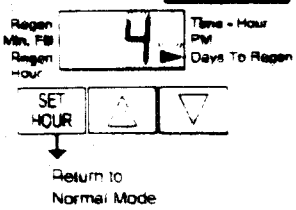
STEP 1ID – From normal mode, press SET HOUR + UP buttons simultaneously for 3 seconds and release.

STEP 2ID



STEP 2ID – Regeneration Time. Set the clock to the hour the regeneration should occur by using the UP or DOWN buttons. An arrow points to PM after 12. Press SET HOUR to go to STEP 3ID

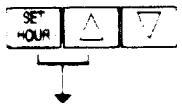
STEP 3ID



STEP 3ID – Days To Regen. Set the number of days between regenerations. The allowable range is 1 to 99. Press SET HOUR to exit Installer Displays & Settings

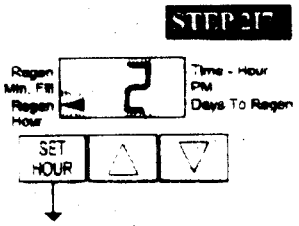
Installer Displays & Settings (7 day option)

STEP 1I7



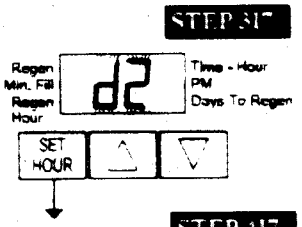
STEP 1I7 – From normal mode, press SET HOUR + UP buttons simultaneously for 3 seconds and release.

STEP 2I7



STEP 2I7 – Regeneration Time. Set the clock to the hour the regeneration should occur by using the UP or DOWN buttons. An arrow points to PM after 12. Press SET HOUR to go to STEP 3I7

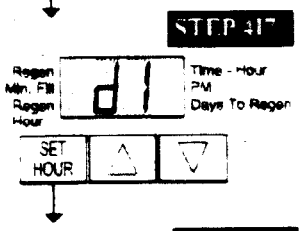
STEP 3I7



STEP 3I7 – Current Day of Week: Set the current day of the week by using the UP or DOWN buttons (See chart at right for date codes). Press SET HOUR to go to STEP 4I7

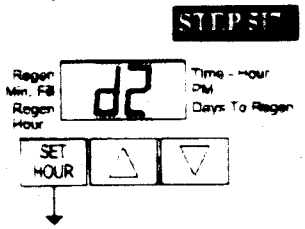
Display	Day of Week
d1	Sunday
d2	Monday
d3	Tuesday
d4	Wednesday
d5	Thursday
d6	Friday
d7	Saturday

STEP 4I7

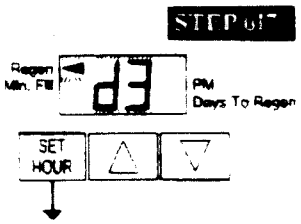


STEP 4I7 – Sunday Regeneration. To regenerate on Sunday use the UP or DOWN button until the arrow points to Regen. If the arrow does not point to Regen a regeneration will not occur on Sunday. Press SET HOUR to go to STEP 5I7

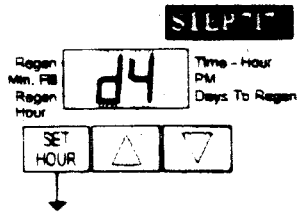
STEP 5I7



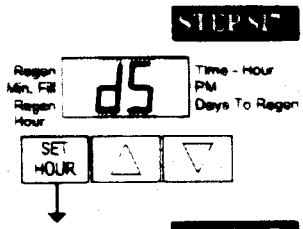
STEP 5I7 – Monday Regeneration. To regenerate on Monday use the UP or DOWN button until the arrow points to Regen. If the arrow does not point to Regen a regeneration will not occur on Monday. Press SET HOUR to go to STEP 6I7



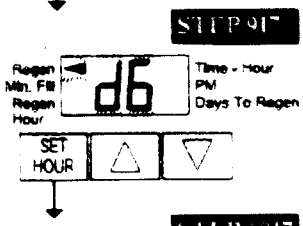
STEP 6I7 – Tuesday Regeneration. To regenerate on Tuesday use the UP or DOWN button until the arrow points to Regen. If the arrow does not point to Regen a regeneration will not occur on Tuesday. Press SET HOUR to go to STEP 7I"



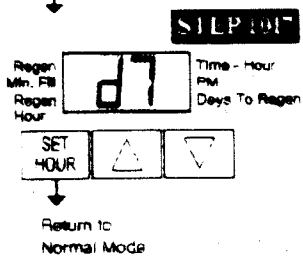
STEP 7I7 – Wednesday Regeneration: To regenerate on Wednesday use the UP or DOWN button until the arrow points to Regen. If the arrow does not point to Regen a regeneration will not occur on Wednesday. Press SET HOUR to go to STEP 8I"



STEP 8I7 – Thursday Regeneration: To regenerate on Thursday use the UP or DOWN button until the arrow points to Regen. If the arrow does not point to Regen a regeneration will not occur on Thursday. Press SET HOUR to go to STEP 9I"



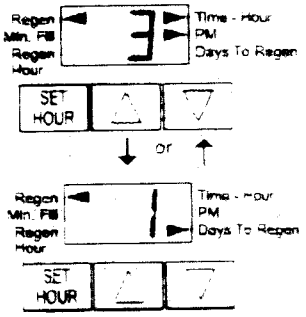
STEP 9I7 – Friday Regeneration: To regenerate on Friday use the UP or DOWN button until the arrow points to Regen. If the arrow does not point to Regen a regeneration will not occur on Friday. Press SET HOUR to go to STEP 10I"



STEP 10I7 – Saturday Regeneration. To regenerate on Saturday use the UP or DOWN button until the arrow points to Regen. If the arrow does not point to Regen a regeneration will not occur on Saturday. Press SET HOUR to exit Installer Displays & Settings.
NOTE: If all arrows are turned off in d1-d7, Days to Regen in the User Displays will always read " and a regeneration will never occur.

User Displays

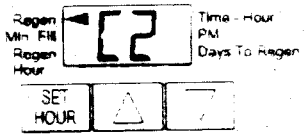
General Operation



When the system is operating one of two displays will be shown. Pressing UP or DOWN button will alternate between the displays. One of the displays is always the current time of day (to the nearest hour). The second display is the days remaining until the next regeneration. If the days remaining is equal to one, a regeneration will occur at the next preset regeneration time. The user can scroll between displays as desired.

If the system has called for a regeneration that will occur at the preset time of regeneration, the arrow will point to Regen.

Regeneration Mode

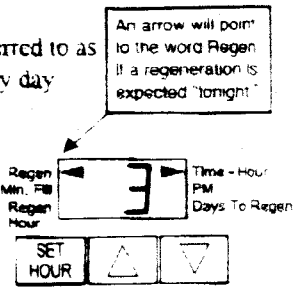


Typically a system is set to regenerate at a time of low water usage. An example of a time with low water usage is when a household is asleep. If there is a demand for water when the system is regenerating, untreated water will be used.

When the system begins to regenerate, the display will change to indicate the cycle of the regeneration process (see Table 3) that is occurring and an arrow will also point to Regen. The system will run through the steps automatically and will reset itself to provide treated water when the regeneration is completed.

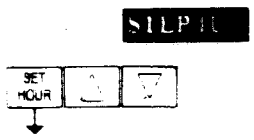
Manual Regeneration

Sometimes there is a need to regenerate the system sooner than when the system calls for it, usually referred to as a manual regeneration. There may be a period of heavy water usage because of guests or a heavy laundry day.



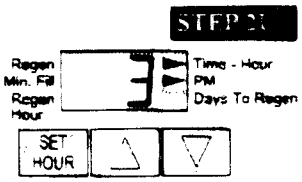
To initiate a manual regeneration at the preset delayed regeneration time, simultaneously press UP + DOWN buttons together and release. The arrow will point to the word Regen if a regeneration is expected "tonight." To cancel the regeneration simultaneously press UP – DOWN buttons and release.

To initiate a manual regeneration immediately, simultaneously press UP – DOWN buttons together for three seconds. The system will begin to regenerate immediately. The request cannot be cancelled.
Note: For softeners, if brine tank does not contain salt, fill with salt and wait at least two hours before regenerating.



Set Time of Day

STEP 1U – Press SET HOUR

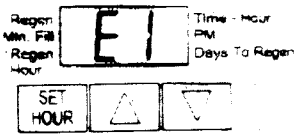


STEP 2U – Current time: Set the clock to the closest hour by using the UP and DOWN button. An arrow points to PM after 12. After a power outage, the time of day will need to be reset. Press SET HOUR to exit.

Power Loss

If the power goes out current time of day will need to be reset. If the power goes out while the system is regenerating, the cycle picks up where it was interrupted when the power returns.

Error Message

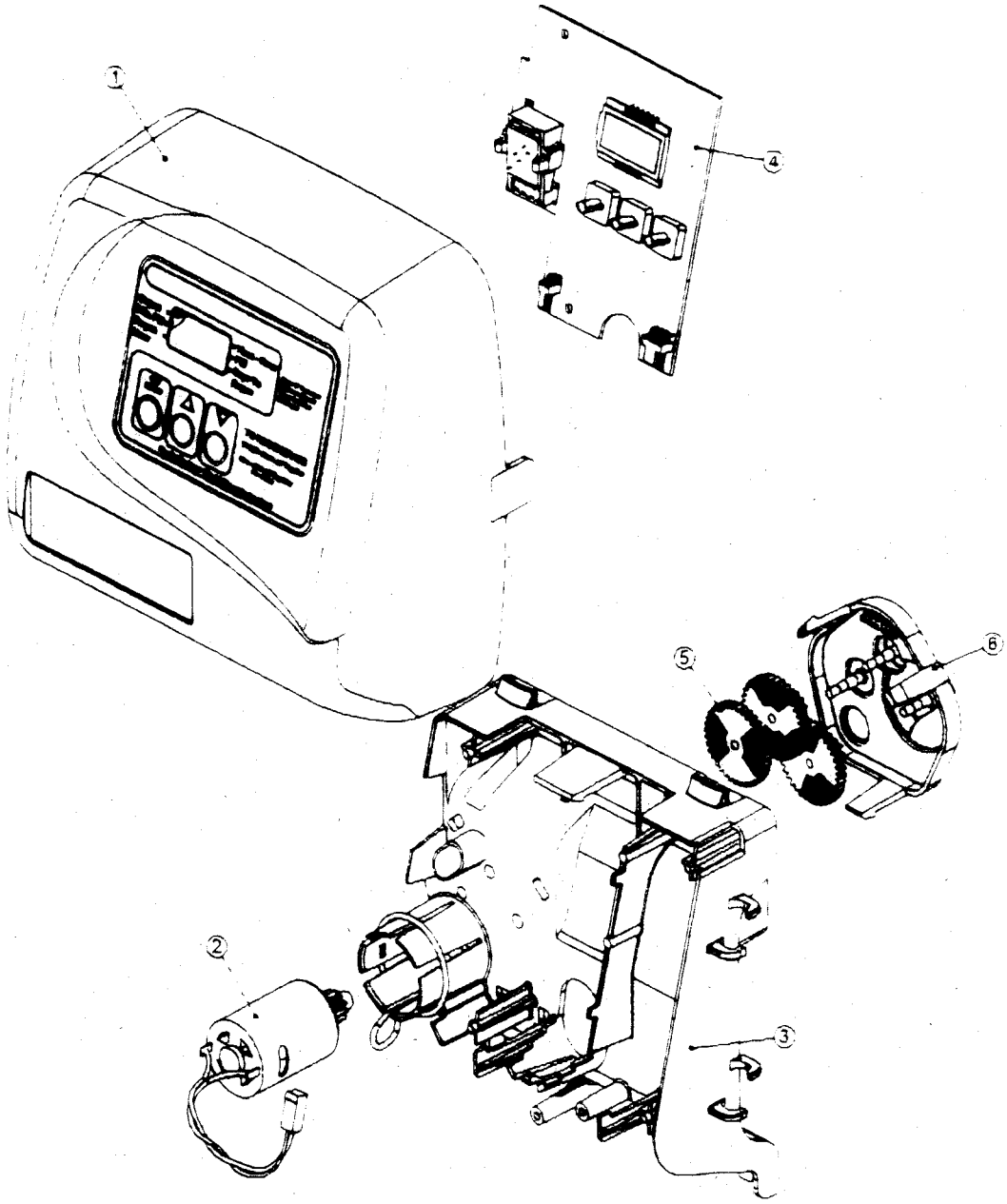


If "E1," "E2" or "E3" appears on the display contact the OEM for help. This indicates that the valve did not function properly.

Front Cover and Drive Assembly

Drawing No.	Order No	Description	Quantity
1	V3175TC-01	WS1TC Front Cover ASY	1
2	V3107-01	WS1 Motor	1
3	V3106-01	WS1 Drive Bracket & Spring Clip	1
4	V3108TC	WS1TC PC Board	1
5	V3110	WS1 Drive Reducing Gear 12 x 36	3
6	V3109	WS1 Drive Gear Cover	1
	V3002TC	WS1TC Drive ASY	*
Not Shown	V3186	WS1 AC Adapter 110V - 12V	1
Not Shown	V3186	WS1 AC ADAPTER 110V-12V	1
	V3186EU	WS1 AC ADAPTER 220-240V-12V EU	
	V3186UK	WS1 AC ADAPTER 220-240V-12V UK	
	V3186-01	WS1 AC ADAPTER CORD ONLY	

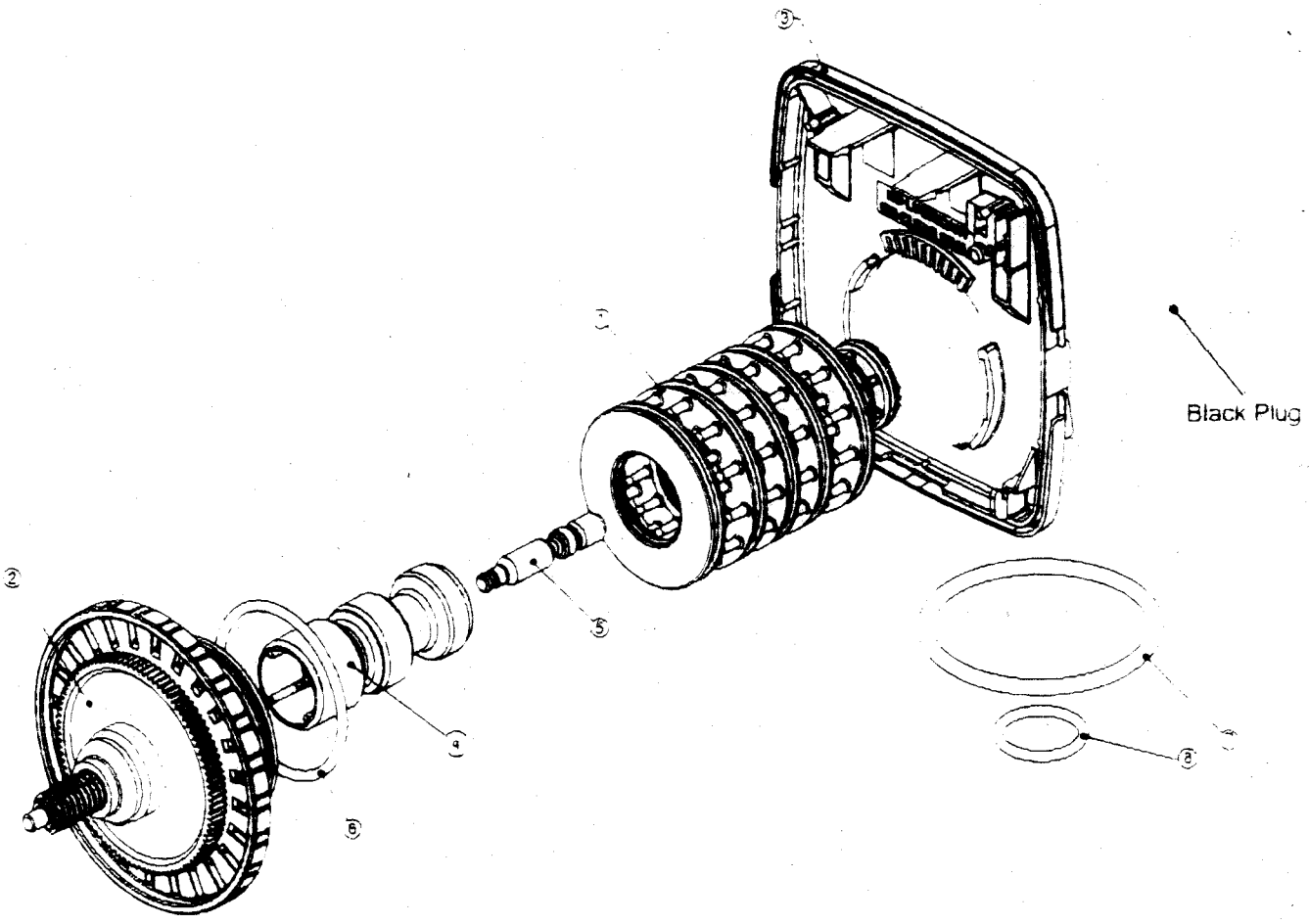
*** Drawing number parts 2 through 6 may be purchased as a complete assembly, part V3002.**



WS1TC Drive Cap Assembly, Downflow Piston, Regenerant Piston and Spacer Stack Assembly

Drawing No.	Order No.	Description	Quantity
1	V3005	WS1 Spacer Stack Assembly	1
2	V3004	Drive Cap ASY	1
3	V3178	WS1 Drive Back Plate	1
4	V3011	WS1 Piston Downflow ASY	1
5	V3174	WS1 Regenerant Piston	1
6	V3135	O-ring 228	1
7	V3180	O-ring 337	1
8	V3105	O-ring 215 (Distributer Tube)	1
Not Shown	V3001	WS1 Body ASY Downflow	1
	V3001-02	WS1 Mixing Valve Body ASY	

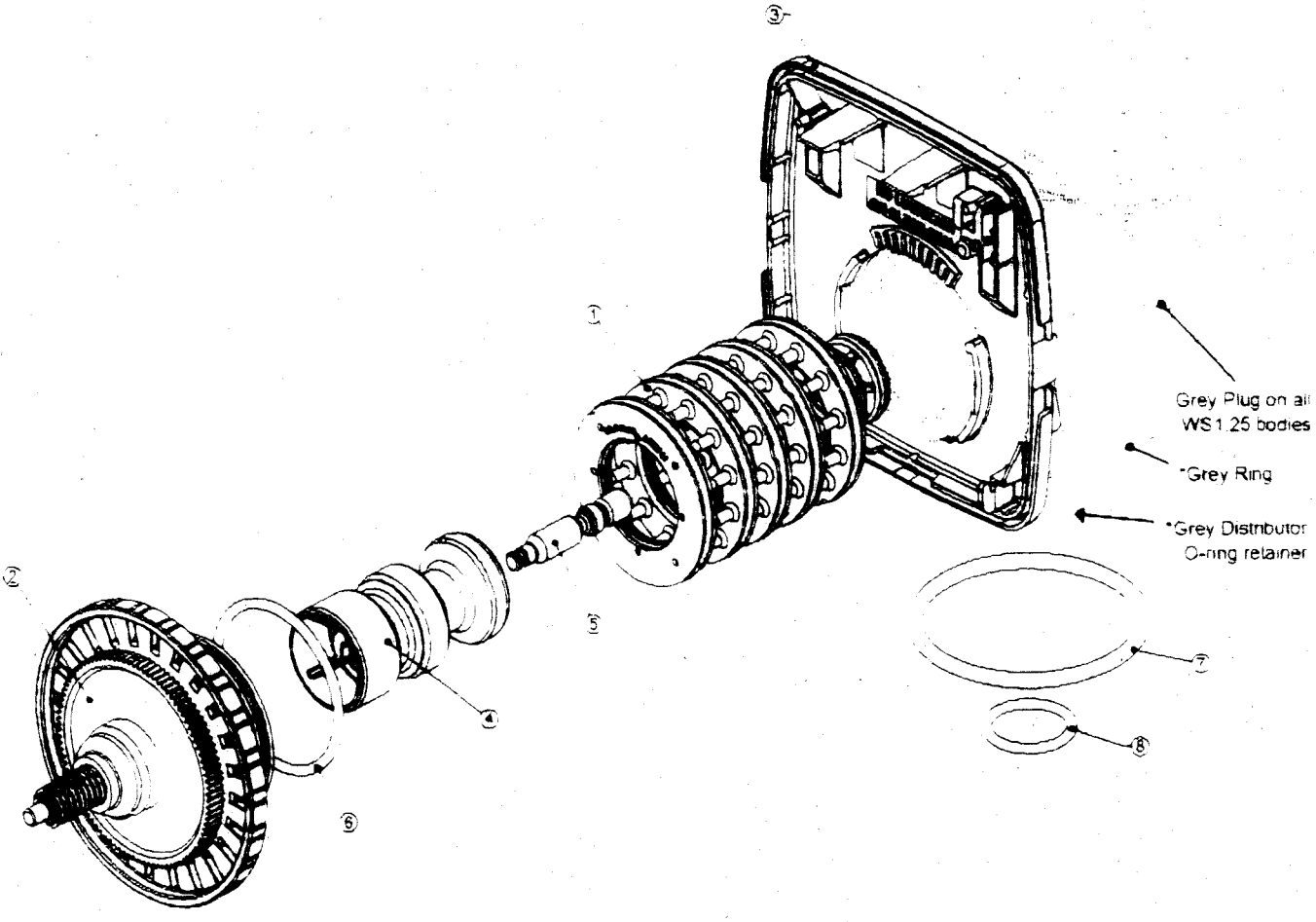
Note: The regenerant piston is not used in backwash only applications



WS1.25TC Drive Cap Assembly, Downflow Piston, Regenerant Piston and Spacer Stack Assembly

Drawing No.	Order No	Description	Quantity
1	V3430	WS1.5 Spacer Stack Assembly	1
2	V3004	Drive Cap ASY	1
3	V3178	WS1 Drive Back Plate	1
4	V3407	WS1.5 Piston Downflow ASY	1
5	V3174	WS1 Regenerant Piston	1
6	V3135	O-ring 228	1
7	V3180	O-ring 337	1
8	V3358	O-ring 219 (Distributor Tube Opening 1.32")	1
	V3357	O-ring 218 (Distributor Tube Opening 32mm)	
Not Shown	V3020	WS1.25 Body ASY Downflow (Distributor Tube Opening 1.32")	1
	V3020-01	WS1.25 Mixing Valve Body Downflow ASY (Distributor Tube Opening 1.32")	
	V3020-02	WS1.25 Body ASY Downflow (Distributor Tube Opening 32mm)	
	V3020-03	WS1.25 Mixing Valve Body Downflow ASY (Distributor Tube Opening 32mm)	

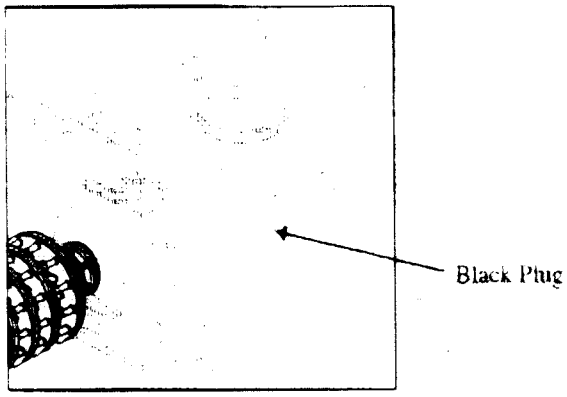
Note: The regenerant piston is not used in backwash only applications.

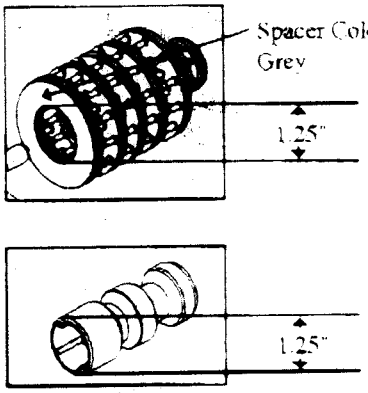


*Only for valves that have a 32mm Distributor Tube Opening

WS1 & WS1.25 Identification Figure

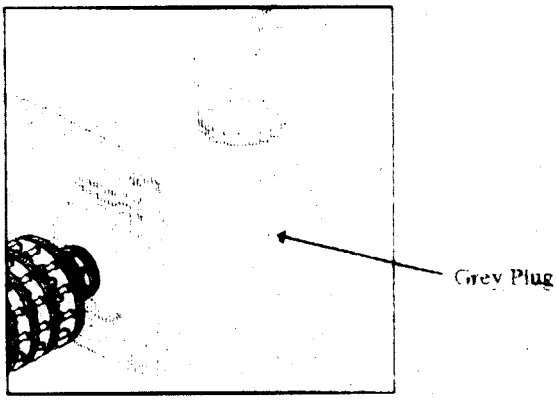
WS1TC with 1.050" Distributor Tube Opening Identification

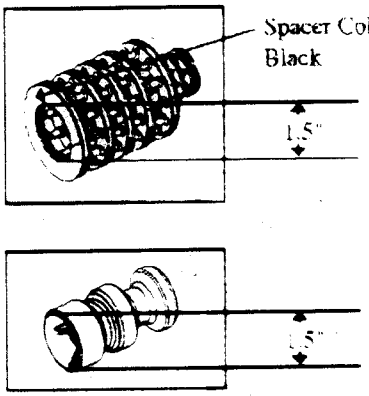




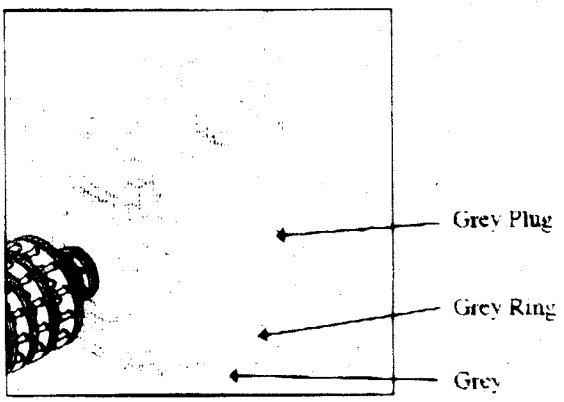
Note: The WS1 downflow piston is a solid amber color.

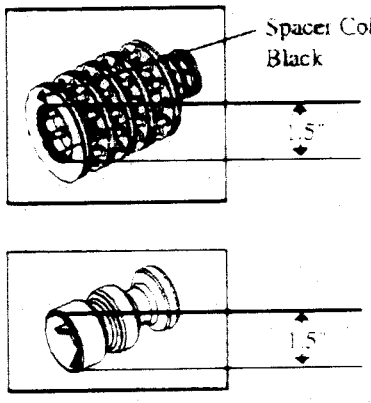
WS1.25 with 1.32" Distributor Tube Opening Identification





WS1.25 with 32mm Distributor Tube Opening Identification





FOR INFORMATION COMMON TO ALL 1" & 1.25" CONTROL VALVES REFER TO THE WS1&WS1.25 COMMON INFORMATION MANUAL

The common manual contains the Table of Contents shown below

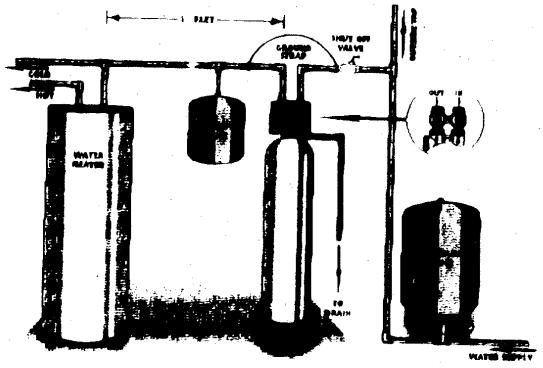
Other Drawings and Part Numbers	
Compliance Table	No page number
Injector Cap, Injector Screen, Injector, Plug and O-ring	Drawings and Part Numbers 3a
Injector Order Information	Drawings and Part Numbers 3b
Injector Graphs US Units: Injector Draw, Slow Rinse and Total Flow Rates	Drawings and Part Numbers 3c-3d
Injector Graphs Metric Units: Injector Draw, Slow Rinse and Total Flow Rates	Drawings and Part Numbers 3e-3f
Refill Flow Control Assembly and Refill Port Plug	Drawings and Part Numbers 4
Drain Line – 3/4"	Drawings and Part Numbers 5
Drain Line – 1"	Drawings and Part Numbers 6
Water Meter, Meter Plug and Mixing Valve	Drawings and Part Numbers 7
Installation Fitting Assemblies	Drawings and Part Numbers 8a – 8b
Bypass Valve	Drawings and Part Numbers 9
Flow Diagrams – Service and Backwash	Drawings and Part Numbers 10
Flow Diagrams – Downflow and Upflow	Drawings and Part Numbers 11
Flow Diagrams – Rinse and Fill	Drawings and Part Numbers 12
WS1 Service Spanner Wrench	Drawings and Part Numbers 13
General Information	General Information 1
General Warnings (Must appear in OEM's manual)	General Information 1
Specifications which must be included in OEM's Manual	General Information 2
Quick Reference Specifications	General Information 2
Drive Assembly	General Information 3
Drive Cap Assembly, Main Piston and Regenerant Piston	General Information 3
Spacer Stack Assembly	General Information 4
Injector Cap, Screen, Injector Plug and Injector	General Information 4
Refill Flow Control Assembly or Refill Port Plug	General Information 4
Drain Line Flow Control and Fitting Assembly	General Information 5
Water Meter or Meter Plug	General Information 6
Mixing Valve	General Information 6
Installation Fitting Assemblies	General Information 6
Bypass Valve	General Information 7 - 8
Installation	Installation 1 - 2
Service Instructions	Service Instructions 1 - 5
Troubleshooting	Troubleshooting 1 - 2
Limited Warranty	Last Page

The nuts and caps are designed to be unscrewed or tightened by hand or with the special plastic Service Wrench, #CV3193-01. If necessary, pliers can be used to unscrew the nut or cap. Do not use a pipe wrench to tighten nuts or caps. *Do not place screwdriver in slots on caps and/or tap with a hammer.*

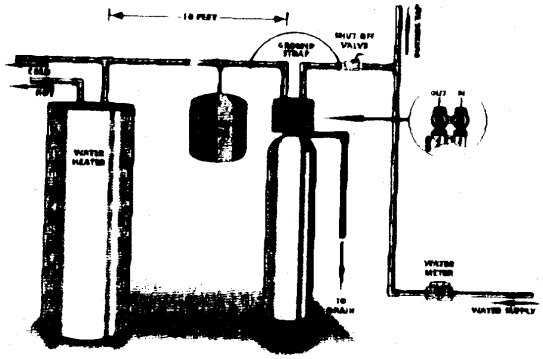
SITE REQUIREMENTS

- water pressure – 25-100 psi
- water temperature – 33-100°F (0.5-37.7°C)
- electrical – 115/120V, 60Hz uninterrupted outlet
- the tank should be on a firm level surface
- current draw is 0.5 amperes
- the plug-in transformer is for dry locations only

WELL WATER INSTALLATION



MUNICIPAL INSTALLATION



1. The distance between the drain and the water filter should be as short as possible.

2. Do not install any water filter with less than 10 feet of piping between its outlet and the inlet of a water heater. For an IMS or IMB filter, an expansion tank on the outlet side of the system is recommended.

***CAUTION:* To protect the unit in the event of a hot water heater backup, the manufacturer recommends the use of an expansion tank on the outlet side of the unit.**

3. Do not locate unit where it or its connections (including the drain and overflow lines) will ever be subjected to room temperatures under 33° F.

D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

UST DOCKETING 62Rel

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

APR 18 2012

Re: Bottle Water Service from Hill residence
Smith's Grocery, 3176 Charlotte Hwy , York, SC
UST Permit #09322; CA#43618
Release reported June 30, 1993
Price Quote received April 16, 2012
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the price quote submitted by Midlands Environmental Consultants, Inc. to provide bottled water service for the Hill residence until a replacement water supply well can be installed. Cost agreement number 43618 has been approved for the amount shown on the enclosed cost agreement form for bottled water service. The cost agreement was set up for a three-month period.

Documentation regarding the water service and invoice are due within 90 days from the date of this letter. Midlands Environmental Consultants, Inc. can submit an invoice for direct payment from State Underground Petroleum Environmental Response Bank (SUPERB) Account for preapproved costs. Receipts from the bottled water company will be required for reimbursement of actual costs. If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

On all correspondence regarding this site, please reference UST Permit #09322. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6397, fax me at (803) 896-6245, or e-mail me at thomadl@dhec.sc.gov.

Sincerely,

Debra L Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Approved Cost Agreement (ACA)

cc: Bryan Shane, Midlands Environmental Consultants, Inc., PO Box 854, Lexington, SC, 29071 (w/ enc.)
Technical File (w/ enc.)

Approved Cost Agreement 43618

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
18 MISCELLANEOUS						
			5 GALLON WATER JUGS	30.0000	6.95	208.50
			PORCELAIN CROCK	3.0000	3.00	9.00
19 RPT/PROJECT MNGT & COORDINATIO						
		PCT	PERCENT	0.1500	217.50	32.63
				Total Amount		250.13

Midlands Environmental Consultants, Inc.

October 29, 2012

Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Tier II Assessment Report
Smith's Grocery
3176 Charlotte Highway
York, South Carolina
SCDHEC Site ID# 09322, CA # 43397
MECI Project Number 12-3850
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

On Behalf of Ms. Lois ~~Smith~~, ~~Midlands~~ Environmental Consultants Inc. (MECI) is pleased to submit the attached Tier II Report for the referenced site. This report describes assessment activities conducted at the site and results of those activities in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines, including adherence to the UST Division Programmatic Quality Assurance Program Plan (QAPP).

Midlands Environmental appreciates the opportunity to offer our professional environmental services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.

John C. Bryant
Staff Geologist

Bryan T. Shane, P.G.
Principal Geologist

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

TABLE OF CONTENTS

1.0 INTRODUCTION 1

1.1 QAPP STATEMENT 1
1.2 PROJECT INFORMATION 2

2.0 POTENTIAL RECEPTOR SURVEY 2

2.1 SURROUNDING PROPERTY USAGE 3

3.0 FIELD EXPLORATION 3

3.1 GROUNDWATER FIELD SCREENING 3
3.1.1 Direct Push Groundwater Field Screening 3
3.1.2 Fractured Rock Field Screening (Downhole Camera) 4
3.2 MONITORING WELL INSTALLATION 6
3.2.1 Conventional Monitoring Well Installation 6
3.2.2 Multi-Port Sampling Monitoring Well Installation 7
3.3 MONITORING WELL ABANDONMENT 8
3.4 SOIL SAMPLING AND ANALYSES 8
3.5 MONITORING WELL SAMPLING AND CHEMICAL ANALYSES 9
3.6 WATER SUPPLY WELL SAMPLING AND CHEMICAL ANALYSES 11
3.7 INFLOW PERMEABILITY TESTS 13
3.8 SITE SURVEY 13

4.0 AREA GEOLOGY AND HYDROGEOLOGY 13

4.1 LOCAL SUBSURFACE CONDITIONS 13

5.0 TEST RESULTS AND EVALUATION 14

5.1 GROUNDWATER ANALYTICAL RESULTS 14
5.2 WATER SUPPLY WELL ANALYTICAL RESULTS 15
5.3 HYDRAULIC CONDUCTIVITY 16
5.4 GROUNDWATER MOVEMENT 16

6.0 ASSESSMENT SUMMARY 16

7.0 RECOMMENDATIONS AND CLASSIFICATION 18

8.0 QUALIFICATIONS OF REPORT 18

TABLE OF CONTENTS (cont.)

TABLES:

**Table 1 – SOIL ANALYTICAL RESULTS
Table 1A – FIELD SCREENING ANALYTICAL RESULTS (DIRECT PUSH)
Table 1B – FIELD SCREENING ANALYTICAL RESULTS (FRACTURED ROCK)
Table 2 – FIELD PARAMETERS
Table 3 – GROUNDWATER ANALYTICAL RESULTS
Table 3A – GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
Table 4 – AQUIFER CHARACTERISTICS
Table 5 – SITE CONCEPTUAL MODEL (CURRENT LAND USE)
Table 5A – SITE CONCEPTUAL MODEL (FUTURE LAND USE)

FIGURES:

Figure 1 – TOPOGRAPHIC MAP
Figure 2 – SITE BASE MAP
Figure 2B-SITE BASE MAP (WATER SUPPLY WELL LOCATIONS)
Figure 3 – SOIL COC SITE MAP
Figure 3A – FIELD SCREENING SITE MAP (DIRECT PUSH)
Figure 3B – FIELD SCREENING SITE MAP (FRACTURED ROCK)
Figure 4 – GROUNDWATER COC SITE MAP (TOTAL BTEX ISOPLETH)
Figure 4A – GROUNDWATER COC SITE MAP (BENZENE ISOPLETH)
Figure 4B – GROUNDWATER COC SITE MAP (TOLUENE ISOPLETH)
Figure 4C – GROUNDWATER COC SITE MAP (ETHYLBENZENE ISOPLETH)
Figure 4D – GROUNDWATER COC SITE MAP (TOTAL XYLENES ISOPLETH)
Figure 4E – GROUNDWATER COC SITE MAP (NAPHTHALENE ISOPLETH)
Figure 4F – GROUNDWATER COC SITE MAP (EDB ISOPLETH)
Figure 4G– GROUNDWATER COC SITE MAP (OXYGENATES)
Figure 4H– WATER SUPPLY WELL COC SITE MAP
Figure 4I– WATER SUPPLY WELL COC SITE MAP (OXYGENATES)
Figure 5 – POTENTIOMETRIC DATA SITE MAP (GROUNDWATER CONTOUR)
Figure 6 – GEOLOGIC CROSS SECTIONS (A TO A')
Figure 6A – GEOLOGIC CROSS SECTIONS (B TO B')

APPENDIX A – SITE SURVEY
APPENDIX B – SAMPLING LOGS, LABORATORY DATA SHEETS AND CHAIN OF CUSTODY FORMS
APPENDIX C – TAX MAP DATA
APPENDIX D – SOIL BORING/FIELD SCREENING LOGS & 1903 FORMS
APPENDIX E – WELL LOGS & 1903 FORMS
APPENDIX F – AQUIFER EVALUATION SUMMARY FORMS, DATA, GRAPHS, EQUATIONS
APPENDIX G – DISPOSAL MANIFESTS
**APPENDIX H – LOCAL ZONING REGULATIONS
**APPENDIX I – FATE & TRANSPORT MODELING
APPENDIX J – ACCESS AGREEMENTS
APPENDIX K – DATA VERIFICATION CHECKLIST

NOTE: ITEMS LISTED WITH AN ** BESIDE IT WERE NOT NEEDED AS A PART OF THIS SCOPE OF WORK

1.0 INTRODUCTION

A. **Owner/Operator Information**

Facility Name:	Smith's Grocery	UST Permit #:	09322
Facility Address:	3176 Charlotte Highway, York, SC 29745		
Name:	Lois Smith		
Address:	3176 Charlotte Highway, York, SC 29745		
Telephone #:	Contact: Lois Smith (803-684-6289)		

B. **Property Owner Information**

Name	Byrum Boyd A Life Estate
Tax Map #:	York County Tax Map #: 4560000043
Address	3176 Charlotte Highway, York, SC 29745
Telephone #	Contact: Lois Smith (803-684-6289)

C. **Contractor Information**

Name:	Midlands Environmental Consultants, Inc.
Certification #:	9
Address:	P. O. Box 854, Lexington, SC 29071
Telephone #:	(803) 808-2043

D. **SCDHEC Certified Well Driller**

Name:	Environmental Drilling & Probing Services, LLC.
Driller:	Tommy Bolyard
Certification #:	B 01846
Address:	17538 Greenhill Road, Charlotte, NC 28278
Telephone #:	(704) 607-7529

E. **SCDHEC Certified Laboratory**

Name:	Shealy Environmental Services, Inc.
Certification #:	32010
Address:	106 Vantage Point Drive, West Columbia, SC 29172
Telephone #:	(803) 791-9700
Name:	Schnabel Engineering
Certification #:	N/A
Address:	104 Corporate Boulevard, West Columbia, SC 29172
Telephone #:	(803) 796-6240

1.1 QAPP STATEMENT

This report conforms to the SCDHEC UST Management Division Programmatic QAPP. The Report, Tables (Table 1-Soil Analytical Data, Table 2-Field Parameters, Table 3-Groundwater Analytical Results, Table 4-Aquifer Characteristics, and Table 5-Site Conceptual Model), Figures (Figure 1-Topographic Map, Figure 2-Site Features, Figure 3-Soil CoC Site Map, Figure 4-Groundwater CoC Site Map, Figure 5-Groundwater Contour Map, and Figure 6-Geologic Cross Section) , and Appendices are presented in accordance with formatting requirements set forth in section A9 of the UST Management Division Programmatic QAPP, Revision 1, June 2011. Some or all of the tables

and figures in this report were not applicable to the scope of services presented, however have been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP.

1.2 PROJECT INFORMATION

The subject site (Smith's Grocery) is located at 3176 Charlotte Highway (S.C. Highway 49), near the intersection of Charlotte Highway and Southern Pines Road in York, York County, South Carolina (see Figure 1). The site consists of an approximately 2.00 acre parcel of land (see Figure 2), and currently occupied by a vacant convenience store. The site formerly maintained one 6,000 gallon gasoline UST and one 8,000 gallon gasoline UST. The South Carolina Department of Health and Environmental Control (SCDHEC) reported release of petroleum product from two single walled underground storage tanks (UST) at the subject site in June of 1993, which was confirmed in September of 1996. The site is currently ranked a Class 1D.

Previous assessments at the referenced site were conducted by CBM Environmental Services, Inc. (CBM) of Fort Mill, SC. CBM completed a Rapid Assessment at the site in January of 2000. This assessment included field screening of groundwater and soil, aquifer slug test, and installation of groundwater monitoring wells. In September of 2001, SEI Environmental of Columbia, SC implemented corrective action efforts at the site. During the implementation process, SEI Environmental installed eighteen injection wells surrounding the property.

In November of 2010, MECI completed additional assessment activities at the site. This additional assessment included replacing three monitoring wells which were determined to be dry during previous groundwater sampling events. During assessment activities it was observed that there were several undocumented water supply wells located at properties within 1000' feet of the site. Based on this observance, MECI proposed to sample all water supply wells in the area to help focus future assessment activities. Following the water supply well sampling event in February of 2012, several water supply wells were found to be impacted, and GAC units were installed.

Prior to commencement of the field activities described in this document, a QAPP Contractors Addendum was completed by MECI personnel, submitted to SCDHEC and approved by the SCDHEC project manager.

The above project information is based on MECI field notes and SCDHEC files.

2.0 POTENTIAL RECEPTOR SURVEY

During the Tier II Assessment MECI personnel conducted a survey of potential receptors within a 1,000-foot radius of the site. During this survey, thirty-nine water supply wells were identified within 1,000' feet of the subject site. Detailed information regarding the located water supply wells are discussed in Section 3.5, and water supply well locations are presented in Appendix A, Appendix C, Figure 4H, and Figure 4I.

Drainage ditches run along South Carolina Highway 49. At the time of sampling, these drainage ditches were dry.

Telephone, water (Water Supply Well), and gas lines were identified on and surrounding the site. Utilities at the site are buried approximately three to six feet below ground surface (BGS). Given the burial depth of the utilities and the depth to groundwater, it is unlikely that utilities would serve as receptors or preferential pathways dependant upon groundwater fluctuation.

2.1 SURROUNDING PROPERTY USAGE

The subject site is located near York, York County, South Carolina. SC Highway 49, Charlotte Highway, forms the eastern border of the site, beyond which is a residential subdivision; "The Pines". North of the subject site are residential properties. South and west of the site are agricultural and undeveloped properties.

3.0 FIELD EXPLORATION

Field exploration conducted at the site included:

- Field screening of groundwater collected from the site utilizing direct push techniques, and laboratory analysis of samples;
- fractured rock field screening utilizing a downhole camera in conjunction laboratory analysis of groundwater samples;
- construction of ten (10) shallow monitoring wells;
- construction of six (6) nested deep monitoring wells;
- collection of soil samples;
- abandonment of monitoring wells;
- hydrologic testing of selected monitoring wells;
- sampling and chemical analyses of the entire monitoring well network and thirty-eight (38) nearby water supply wells; and,
- a comprehensive survey of subject site.

The monitoring well locations were selected based on the results of our field screening of groundwater samples, existing site conditions, estimated groundwater flow direction, and drilling accessibility. The field screening points are illustrated on Figure 3A, Figure 3B, and well locations are presented on Figure 2 and Appendix A.

3.1 GROUNDWATER FIELD SCREENING

The following section discusses groundwater field screening conducted at the referenced site.

3.1.1 Direct Push Groundwater Field Screening

From April 16 & 17, 2012, eleven direct push field screening locations (GPW-1 through GPW-11) were advanced at the site to collect groundwater samples to define the petroleum constituents in the saprolite aquifer. These borings were advanced by Environmental Drilling and Probing Services of Charlotte, North Carolina (S.C. Drilling Certification: Tommy Bolyard #B 01846). The sampling depth for each location was based on the water table depth, the yield of the water bearing zone as evidenced by flow of water into the direct push apparatus, and the ability to reach the desired depth

below ground surface. Direct push samples were collected at depths (Probe Refusal) to determine the impact of contamination in the saprolite aquifer and its potential relation to petroleum constituents infiltrating downgradient water supply wells.

The total footage for the direct push/temporary borings was 698 feet. The sample locations are presented on Figure 3A. To prevent cross-contamination between borings the reusable down-hole portion of the direct push sampling device and augers were cleaned between borings. New Teflon tubing was utilized at each location. Following the collection of the groundwater samples, the hole left open by the direct push sampling device was abandoned with a bentonite/portland grout slurry.

The groundwater samples obtained were transported to Shealy Environmental Services, Inc of West Columbia, SC (SCDHEC Laboratory Certification #32010) for analysis for BTEX, naphthalene, and methyl-tertiary butyl ether (EPA Method 8260B). Selected samples were and analyzed for EDB (EPA Method 8011). Analytical results for laboratory samples collected from the direct push borings are summarized in Table 1A, Figure 3A, and laboratory reports are included in Appendix B.

3.1.2 Fractured Rock Field Screening (Downhole Camera)

Water Supply Wells Screening & Observations

On April 25, 2012, a submersible downhole camera was placed in WSW-2 and WSW-24 to inspect the water supply wells for potential structural issues and to aid in determining proper depths for further field screening into the rock interface. The downhole camera event was conducted under the supervision of Mr. Travis Franklin of A-1 Well & Pump Service, Asheville, North Carolina.

- WSW-2 is located approximately 230' feet east of the source area on a residential property owned by Mr. Gary Wiggam (3043 Clover Circle/York County Tax Map# 4890401024). The well inspection reveals that WSW-2 is cased with 6" PVC casing which appears to extend to approximately 100' feet from the top of casing (TOC). From 0.0' to 46.0' the casing appears to be intact with no structural issues. At approximately 46.2' the casing appears to be impaired and evidence of streaky flow features are evident. This impairment in the casing of WSW-2 may be a potential area of inflow into the well. Groundwater was encountered at 49.0' feet from the TOC and appears to have significantly high bacterial growth, creating unclear images from 49.0' until 100.0' from the TOC. The clarity of the water at 100.0' appears to indicate the approximate depth of which the casing extends into the bore, however the exact depth of the casing is unknown. At approximately 132.0' and 168.0', there are is visible evidence of enlarged areas which may be hydraulically significant. There appears to be a rock transition at 169.4' which is stable until 176.0'. At 176.0' feet, there is visual evidence of another potential hydraulically significant fracture. The camera was seated in soft sediment at 193.0' from the TOC and is likely the total depth of the well.

- WSW-24 is located approximately 500' feet east-southeast of the source area on a residential property owned by Mr. Christopher Jeter (3040 Clover Circle/York County Tax Map# 4890401028). The well inspection reveals that WSW-24 is cased with 6" PVC casing which extends to 110.8' feet from the top of casing (TOC) and the casing appears to be stable. Groundwater was encountered at 42.2' feet from the TOC. At approximately 117.5', 132.0', 167.0', and from 197.0' to 202.0' there are is visible evidence of enlarged areas which may be hydraulically significant. The camera was seated in soft sediment at 228.0' from the TOC and is likely the total depth of the well.

Open Rock Bore Screening & Observations

From July 10 through 13, 2012, six open rock borings were advanced at the site to screen the groundwater with in the rock interface. These borings were advanced by James Darby Drilling of Rock Hill, SC (S.C. Drilling Certification: Chad Julian #A 01422). The following table presents bore details to include the bore ID, casing depth, and total depth.

Bore ID#	Casing Depth (ft.)	Total Depth (ft.)
FR-1	99.8	188.5
FR-2	120.8	204.2
FR-3	107.7	203.8
FR-4	100.7	200.3
FR-5	111.1	203.8
FR-6	101.5	204.1

From July 18-25, 2012, a downhole camera was utilized in each of the referenced bores to determine potentially hydraulically significant fractures with in the fractured rock aquifer. A combination downhole and side-view dual lens color camera was used for the inspection of each bore and was conducted under the direct supervision of Mr. Mike L. Vaught, P.G. of EGIS, PA.

- **FR-1** is located approximately 70.0' feet east of MW-2, along the eastern shoulder of Charlotte Highway. The well inspection reveals that FR-1 is cased with 6" PVC casing which extends to 99.8' feet from lowest point at the top of TOC. Groundwater was encountered at 41.8' feet from the TOC. At approximate depths of 116.0' and 160.0', visible evidence of enlarged fracture zones were observed. These enlarged areas within the bore may be hydraulically significant. The camera was seated in soft sediment at 188.5' from the TOC.

- **FR-2** is located approximately 190.0' feet northeast of MW-2. FR-2 is cased with 6.25" PVC well casing to 120.8' feet from the lowest point at the top of TOC. Groundwater was encountered at 44.2' feet from the TOC. Potentially significant fracture zones were observed at 135.0', 150.0', and at 202.0'. The fracture zones observed at 135.0' and 202.0' appear to be the result of the presence of a quartz vein deposit. The camera was seated in soft sediment at 204.2' from the TOC.

- **FR-3** is located approximately 180.0' feet south of MW-2. FR-3 is cased with a 6.25" PVC well casing to 107.7' feet from the lowest point at the TOC. Groundwater was encountered at 41.7' feet from the TOC. Potentially significant fracture zones were observed at 130.0', 160.0', and at 190.0'. The camera was seated in soft sediment at 203.8' from the lowest point at the TOC.

- **FR-4** is located approximately 360.0' feet east-southeast of MW-2, at the intersection of Southern Pines Road and Clover Circle. FR-4 is cased with a 6.25" PVC well casing to 100.7' feet from the lowest point at the TOC. Groundwater was encountered at 43.5 feet from the TOC. On July 18, 2012, the downhole camera was advanced to approximately 139.0' feet and was unable to be lowered any further due to a collapse in the bore. In the open borehole, visually there are corners, enlarged/rough areas, and high angle vertical

fractures that could indicate interconnected fractures throughout the borehole of FR-4. On July 24, 2012, EDPS mobilized to the site to clear the fallen rock from the bore. Additionally on July 24, 2012, an second attempt to advance the downhole camera was conducted to visualize the bore from 139.0'-200.3'. Potentially significant fracture zones were observed at 139.0', 166.0', and at 190.0'. The camera was seated in soft sediment at 200.3' from the lowest point at the TOC.

- **FR-5** is located approximately 400.0' feet east of MW-2, located in front 3043 Clover Circle. FR-5 is cased with 6.25" PVC well casing to 111.1' feet from the lowest point at the TOC. Groundwater was encountered at 47.2' feet from the TOC. Potentially significant fracture zones were observed at 118.0', 154.0', and at 188.0'. The camera was seated in soft sediment at 203.8' from the lowest point at the TOC.

- **FR-6** is located approximately 490.0' feet east of MW-2, located in front 3049 Clover Circle. FR-6 is cased with 6.25" PVC well casing to 101.5' feet from the lowest point at the TOC. Groundwater was encountered at 46.7' feet from the TOC. Potentially significant fracture zones were observed at 110.0', 150.0', and at 191.0'. The camera was seated in soft sediment at 204.1' from the lowest point at the TOC.

Following the review of each downhole camera video, MECI strategically developed a plan to install passive diffusion bags (PDB's) into the fractured rock bores at levels to bracket each hydraulically significant fracture zone documented from the visual interpretation. The PDB's were installed into the bore on August 13, 2012 and samples were collected August 28, 2012. The groundwater samples obtained were transported to Shealy Environmental Services, Inc of West Columbia, SC (SCDHEC Laboratory Certification #32010) for analysis for BTEX, naphthalene, methyl-tertiary butyl ether, 1,2 DCA, 8 Oxygenates (EPA Method 8260B) and EDB (EPA Method 8011). Following the collection of the groundwater samples, the open face rock bores were abandoned with a bentonite/portland grout slurry, via tremie pipe by James Darby Drilling of Rock Hill, SC (S.C. Drilling Certification: Chad Julian #A 01422). Analytical results for laboratory samples collected from the fractured rock borings are summarized in Table 1B, Figure 3B, and laboratory reports are included in Appendix B. Copies of the downhole camera videos are additionally included as part of this report.

3.2 MONITORING WELL INSTALLATION

The following section discusses monitoring well installation activities conducted at the subject site.

3.2.1 Conventional Monitoring Well Installation

From August 21 through 30, 2012, ten (10) monitoring wells were installed at the subject site to replace monitoring wells which have historically been vacant of sufficient water for sampling purposes. These wells were installed by Environmental Drilling and Probing Services, LLC. of Rock Hill, SC (S.C. Driller Certification: Tommy Bolyard # B 01846, Joseph Smith #B 01648, and David Brown #B 02053). A track-mounted drilling rig, employing 8.0-inch outer diameter hollow stem augers was utilized for the construction of the referenced wells. Monitoring wells MW-5R, MW-6R, MW-7R, MW-10R, MW-11R, MW-14R, MW-15R, MW-17R, MW-18R, and MW-21 were installed as single cased watertable bracketing monitoring wells.

The following table presents well installation details:

Well ID	Screened Interval (ft)	Total Depth (ft)
MW-5R	30.5-40.5	40.5
MW-6R	34.0-44.0	44.0
MW-7R	34.0-44.0	44.0
MW-10R	40.5-50.5	50.5
MW-11R	44.0-54.0	54.0
MW-14R	48.0-58.0	58.0
MW-15R	48.0-58.0	58.0
MW-17R	38.0-48.0	48.0
MW-18R	45.0-55.0	55.0
MW-21	44.0-54.0	54.0

3.2.2 Multi-Port Sampling Monitoring Well Installation

On September 3 through 7, 2012, six nested monitoring wells, containing three isolated sampling ports, were installed at the referenced site. The multi-port sampling well installation was conducted by Environmental Drilling and Probing Services, LLC. of Rock Hill, SC (S.C. Driller Certification: Tommy Bolyard # B 01846). During construction, a 6.25" outer casing was advanced to the desired depth and grouted in-place. The grout was allowed to cure and the remainder of the depth of the borehole was achieved using air-rotary techniques.

Based on the results of the fractured rock field screening (downhole camera), multi-port sampling wells were installed in at three discrete sampling intervals to isolate potential hydraulically significant fracture zones. During construction, a layer of sand was placed at the base of each bore to bring the base of the deepest screened interval to the correct depth. Starting with the deepest interval first, sand was placed around the screen to form a filter pack extending approximately 2.0' feet above the top of the screen. Following the installation of filter pack, an approximate 2.0' foot transitional seal of bentonite was placed on top and hydrated, followed by an annular seal of grout that was extended until 2.0' feet from the bottom of the next deepest interval. The grout was allowed to cure and the process was repeated until the shallowest interval was completed. The following table presents well installation details:

Well ID	Interval ID	Well Diameter (Inches)	Screen Interval (ft.)
TW-1ABC	A	1"	110.0-120.0
	B	2"	151.0-161.0
	C	2"	190.0-200.0
TW-2ABC	A	1"	127.0-137.0
	B	2"	150.0-160.0
	C	2"	193.0-203.0
TW-3ABC	A	1"	125.0-135.0
	B	2"	157.0-167.0
	C	2"	188.0-198.0
TW-4ABC	A	1"	130.0-140.0
	B	2"	160.0-170.0
	C	2"	190.0-200.0
TW-5ABC	A	1"	110.0-120.0
	B	2"	147.0-157.0
	C	2"	187.0-197.0
TW-6ABC	A	1"	108.0-118.0
	B	2"	143.0-153.0
	C	2"	190.0-200.0

The soils encountered during drilling activities consisted of micaceous clays and silts of the Piedmont Physiographic Province, underlain by saprolite and competent bedrock. Representative portions of soil samples were screened with a Photo Ionization Detector (PID) and classified by MECI personnel. Test boring records showing soil descriptions and screening result are attached in Appendix E.

Drill cuttings were containerized and transported to Waste Management/Richland County Landfill, Elgin, SC by MECI personnel. A total of 7.12 tons was disposed of in this manner. A disposal manifest for these soils is attached at the end of this report.

Following completion of the monitoring wells, the wells were developed by purging until they were determined to be functioning properly and turbidity was reduced. These wells were developed utilizing a Grunfos Redi-flo2 well pump. The drum of purge water was treated by MECI personnel using a granular activated carbon drum. A total of 682.0 gallons of development water was disposed of in this manner. A disposal manifest for the treated purge water is presented in Appendix G.

3.3 MONITORING WELL ABANDONMENT

Ten (10) monitoring wells were abandoned from August 21 through 30, 2012 at the subject site according to South Carolina Well Standards and Regulations R.61-71.H. The well abandonment was conducted under the direction of Mr. Tommy Bolyard (SC Driller's License # B 01846) of Environmental Drilling and Probing Services of Charlotte, NC. The following matrix presents the well identification numbers, surface coverings, well diameter, and total well depth:

Well ID	Well Diameter (Inches)	Total Depth (ft)
MW-5	2"	30.00
MW-6	2"	37.00
MW-7	2"	36.00
MW-10	2"	44.00
MW-11	2"	44.00
MW-14	2"	50.00
MW-15	2"	50.00
MW-17	2"	40.00
MW-18	2"	46.00
IW-16	2"	45.00
Total Footage of Abandoned Wells		**422.0**

The monitoring wells were abandoned with portland bentonite slurry utilizing tremie pipe. A total of 422.0 feet of monitoring wells were abandoned by the methods described above. Following the abandonment, the well pads, vault, and cover were removed from wells located in unpaved areas and the resulting space was filled with backfill to the level of the surrounding land surface. Please find the attached SCDHEC 1903 Water Well Records in Appendix E.

3.4 SOIL SAMPLING AND ANALYSES

Soil samples were collected from split discrete samples collected during the installation of monitoring wells MW-7R and MW-11R. These soil samples collected were analyzed for grain size/hydrometer. The soils were sampled in accordance with SCDHEC's Quality Assurance Program Plan for the

Underground Storage Tank Management Division (QAPP, Dated June 2011) and MECI's Standard Operating Procedures (MECI SOP, Dated August, 2011). The results of the laboratory analyses are the attached laboratory reports (Appendix B).

Soil samples obtained were sent to Shealy Environmental Services, Inc. of West Columbia, SC (SCDHEC Laboratory Certification #32010) for analysis.

The following sampling matrix contains soil sampling details:

SAMPLE ID#	Matrix: Solid	Matrix: Water	BTEX, Naphth, MTBE (EPA Method 8260B)	Total Lead (EPA Method 6010)	PAH's (EPA Method 8270)	TPH (EPA Method 8015)	8 RCRA METALS (EPA Method 6010)	Grainsize/Hydrometer (ASTM D1140)
			Analyte Sampled					
MW-7R	X							X
MW-11R	X							X

Notes: BTEX = benzene, toluene, ethylbenzene, & total xylenes, MTBE=methyl tertiary butyl ether, PAH = polycyclic aromatic hydrocarbons

3.5 MONITORING WELL SAMPLING AND CHEMICAL ANALYSES

On September 25 through 27, 2012, MECI personnel collected groundwater samples from the forty-seven (47) monitoring wells at the subject site. Six (6) monitoring wells (MW-2, MW-3, MW-12, MW-13, MW-19, and IW-11) were gauged and determined to be dry during sampling activities. All newly installed monitoring wells and pre-existing monitoring wells which contained sufficient water were purged prior to sample collection. Six (2) monitoring wells (MW-9R, MW-16, MW-20, IW-10, IW-18, and IW-20) did not contain sufficient water for purging prior to sample collection and were collected as no-purge samples. Forty-one (41) monitoring wells were purged prior to sampling. Sampling/purging of all monitoring wells was completed utilizing a prepackaged, clear, disposable polyethylene bailer and nylon rope. Purging was completed by bailing three to five well volumes of water from the well, until pH, conductivity, dissolved oxygen, and turbidity stabilized to within 10%, or until all available water was evacuated from the well, whichever occurred first. A new set of nitrile gloves were worn at each monitoring well, and at all times samples were handled. Field measurements of turbidity, pH, conductivity, dissolved oxygen, and water temperature were obtained before the well sampling process. MECI utilized YSI550A meters for DO (mg/L) and temperature readings (°C), YSI63 meters for pH and conductivity (uS) readings, and a turbidity tube for turbidity readings (NTU). The attached Field Data Information Sheets presents the results of the field measurements obtained during sampling processes. All wells were sampled in accordance with SCDHEC's Quality Assurance Program Plan for the Underground Storage Tank Management Division (QAPP, Dated June 2011) and MECI's Standard Operating Procedures (MECI SOP, Dated February 2012). Groundwater samples obtained were sent to Shealy Environmental Services, Inc. of West Columbia, SC (SCDHEC Laboratory Certification #32010) for analysis.

The following sampling matrix contains well development and requested analyses for each well:

Monitoring Well	Purge	No Purge	Gauge Only	Not Located	BTEX, Naphthalene, MTBE (EPA Method 8260-B)	EDB (EPA Method 8011)	1,2 DCA (EPA Method 8260-B)	8 Oxygenates (EPA Method 8260-B)	Total Lead (EPA Method 6010)	Sulfate (EPA Method 375.2)	Nitrate (EPA Method 335.2)	Methane (RSK Method)	PAH's (EPA Method 8270)	Ferrous Iron (Field Test)
					Analyte Sampled									
MW-1R	X				X	X	X	X						
MW-2			X											
MW-3			X											
MW-4R	X				X	X	X	X						
MW-5R	X				X	X	X	X						
MW-6R	X				X	X	X	X						
MW-7R	X				X	X	X	X						
MW-8	X				X	X	X	X						
MW-9R		X			X	X	X	X						
MW-10R	X				X	X	X	X						
MW-11R	X				X	X	X	X						
MW-12			X											
MW-13			X											
MW-14R	X				X	X	X	X						
MW-15R	X				X	X	X	X						
MW-16		X			X	X	X	X						
MW-17R	X				X	X	X	X						
MW-18R	X				X	X	X	X						
MW-19			X											
MW-20		X			X	X	X	X						
MW-21	X				X	X	X	X						
TW-1	X				X	X	X	X						
TW-2	X				X	X	X	X						
TW-3	X				X	X	X	X						
TW-1A	X				X	X	X	X						
TW-1B	X				X	X	X	X						
TW-1C	X				X	X	X	X						
TW-2A	X				X	X	X	X						
TW-2B	X				X	X	X	X						
TW-2C	X				X	X	X	X						
TW-3A	X				X	X	X	X						
TW-3B	X				X	X	X	X						
TW-3C	X				X	X	X	X						
TW-4A	X				X	X	X	X						
TW-4B	X				X	X	X	X						
TW-4C	X				X	X	X	X						
TW-5A	X				X	X	X	X						
TW-5B	X				X	X	X	X						
TW-5C	X				X	X	X	X						
TW-6A	X				X	X	X	X						
TW-6B	X				X	X	X	X						
TW-6C	X				X	X	X	X						

Notes: BTEX = benzene, toluene, ethylbenzene, & total xylenes MTBE=methyl tertiary butyl ether 1,2 DCA = 1,2 dicloroethane
PAH = polycyclic aromatic hydrocarbons
Trip Blank provided by Shealy Environmental, temperature obtained upon receipt at Laboratory

Monitoring Well	Purge	No Purge	Gauge Only	Not Located	BTEX, Naphthalene, MTBE (EPA Method 8260-B)	EDB (EPA Method 8011)	1,2 DCA (EPA Method 8260-B)	8 Oxygenates (EPA Method 8260-B)	Total Lead (EPA Method 6010)	Sulfate (EPA Method 375.2)	Nitrate (EPA Method 335.2)	Methane (RSK Method)	PAH's (EPA Method 8270)	Ferrous Iron (Field Test)
					Analyte Sampled									
IW-2	X				X	X	X	X						
IW-3	X				X	X	X	X						
IW-4	X				X	X	X	X						
IW-5	X				X	X	X	X						
IW-6	X				X	X	X	X						
IW-8	X				X	X	X	X						
IW-9	X				X	X	X	X						
IW-10		X			X	X	X	X						
IW-11			X											
IW-18		X			X	X	X	X						
IW-19				X										
IW-20		X			X	X	X	X						
MW-1R Dup.**		X			X	X	X	X						
MW-5R Dup.**		X			X	X	X	X						
MW-8 Dup.**		X			X	X	X	X						
MW-10R Dup.**		X			X	X	X	X						
Field Blank#1					X	X	X	X						
Field Blank#2					X	X	X	X						
Trip Blank#1					X		X	X						
Trip Blank#2					X		X	X						

Notes: BTEX = benzene, toluene, ethylbenzene, & total xylenes MTBE=methyl tertiary butyl ether 1,2 DCA = 1,2 dicloroethane
PAH = polycyclic aromatic hydrocarbons
Trip Blank provided by Shealy Environmental, temperature obtained upon receipt at Laboratory

The results of the laboratory analyses are summarized in Table 3 & 3A and presented in Appendix B.

Purge water produced by the purging process was treated on-site utilizing a granular activated carbon unit. A total of 700.0 gallons of purge water was disposed of in this manner. A disposal manifest for the referenced purge water is presented in Appendix G.

3.6 WATER SUPPLY WELL SAMPLING AND CHEMICAL ANALYSES

On September 25-26, 2012, MECI personnel collected forty-one (41) water supply well samples. The samples obtained from were analyzed for volatile organic compounds including BTEX, naphthalene, methyl-tertiary-butyl-ether, 1,2 DCA, Oxygenates (EPA Method 8260B), and EDB (EPA Method 8011). Results of the laboratory analyses are discussed in Section 5.2 and summarized in Table 3 & 3A. The analytical results are also presented in Appendix B.

The following matrix contains well status, owner(s), and tax map identification numbers:

Water Supply Well Number	Well Owner	York County Tax Map Number:	Notes:	Well Status
WSW-1	Byrum Boyd (Life Estate)	4560000043	3176 Charlotte Highway (On-Site)	Active
WSW-2	Gary A. Wiggam	4890401024	3043 Clover Circle	Active / GAC Unit
WSW-3	Susan W. & Tony H. Hill	4890401023	3049 Clover Circle	Active / GAC Unit
WSW-4	Michelle Belcher	4890401022	2101 Pinewild Court	Active
WSW-5	Henry Ray Emser	4890401019	2106 Pinewild Court	Active
WSW-6	Clyde W. & Iris R. Dooley	4890401018	2100 Pinewild Court	Active
WSW-7	Susan K. Trear & John A. Okain	4890401017	3071 Clover Circle	Active
WSW-8	Lewis F. & Lana D. Hefner III	4890401016	3077 Clover Circle	Active
WSW-9	Richard J. Bdener Jr.	4890401015	3085 Clover Circle	Active
WSW-10	Paul & Irene Caltagirone	4890401013	3140 Tallamore Lane	Active
WSW-11	Robert C. & Jetta L. Baumgardner	4890401012	3130 Tallamore Lane	Active
WSW-12	Victor & Evelyn Bresg	4890401011	3124 Tallamore Lane	Active
WSW-13	Albert B. Small	4890401010	3118 Tallamore Lane	Active
WSW-14	Richad W. & Vince L. Judy	4890401009	3112 Tallamore Lane	Active
WSW-15	William L. & Leah H. Youngblood	4890401008	3106 Tallamore Lane	Active
WSW-16	Scott A. Reed	4890401007	3100 Tallamore Lane	Active
WSW-17	Steve A. & Layliona T. Edison	4890401006	3001 Clover Circle	Active
WSW-18	Jeff C. & Marcy A. Buck	4890401005	3011 Clover Circle	Active
WSW-19	Ramon L. Guzman	4890401004	3017 Clover Cirlce	Active
WSW-20	Kevin A. & Ursula A. Shuler	489040100	3023 Clover Circle	Active
WSW-21	Joseph J. Galambos	4890401002	3029 Clover Circle	Active
WSW-22	Everette D. & Janet E. Crook	4890401001	3035 Clover Circle	Active
WSW-23	Michael V. McCarter	4890401027	3032 Clover Cirlce	Active
WSW-24	Christopher D. Jeter	4890401028	3040 Clover Circle	Active /GAC Unit
WSW-25	Kenny L. & Tamara L. Beasley	4890401029	3050 Clover Circle	Active
WSW-26	Michael D. & Leann R. Lowrey	4890401030	3060 Clover Circle	Active
WSW-27	Joseph C. & Elaine D. Biggers	4890401031	3070 Clover Circle	Active
WSW-28	Robert B. & Jacie Braden	4890401032	3129 Tallamore Lane	Active
WSW-29	William D. & Betty L. Tyndall	4890401033	3121 Tallamore Lane	Active
WSW-30	James K. & Catherine G. North	4890401025	3016 Clover Circle	Active
WSW-31	Debra L. Goransson	4890401026	3022 Clover Circle	Active
WSW-32	Jeffery V. & Rebecca Laney	4530101002	2111 Old McKinney Road	Active
WSW-33	John E. & Sally Schimepfinig	4540000024	2131 Old McKinney Road	Active
WSW-34	Frontis T. & Etta H. Hemphill	4560000003	2146 Old McKinney Road	Active
WSW-35	William & Daisy Lowery	4560000007	2143 Old Son Lowery Road	Active
WSW-36	Frontis Tyree Hemphill	4560000008	2140 Old Son Lowery Road	Active
WSW-37	Frontis Tyree Hemphill	4560000040	2140 Old Son Lowery Road	Active
WSW-38	Forest L. & Helen W. Montgomery	4560000010	3243 Charlotte Highway	Active
WSW	Byrum Boyd (Life Estate)	4560000043	3176 Charlotte Highway (On-Site)	Inactive

The results of the laboratory analyses are summarized in Table 3 & 3A and presented in Appendix B.

3.7 INFLOW PERMEABILITY TESTS

Inflow permeability tests were performed on monitoring wells MW-7R and MW-11R on September 26, 2012 to estimate the hydraulic conductivity of the formation materials exposed to the well screen at each location. Inflow test methodology and calculations are included in Appendix C.

3.8 SITE SURVEY

Following the well installation, a comprehensive survey was conducted by Construction Support Services of Columbia, SC (Jay S. Joshi PLS# 14811) dated October 18, 2012 to locate the vertical and horizontal positions of the monitoring wells and relevant structures. A signed/stamped copy of the comprehensive survey is attached in Appendix A. See Table 2 and Figure 5 for monitoring well elevation data.

4.0 AREA GEOLOGY AND HYDROGEOLOGY

The mean elevation of the property, as depicted on the local USGS quadrangle (Clover, South Carolina), appears to be approximately 226.5 meters (743 feet) above sea level. The site is located in the Piedmont Physiographic Province of South Carolina, an area underlain by ancient igneous and metamorphic rocks. The soils in this province are generally residual soils that are underlain by rock at highly varying depths.

The soils encountered in this area are the product of in-place weathering of rocks similar to the rocks underlying the site. In areas not altered by erosion or disturbed by the activities of man, the typical residual soil profile consists of near surface clayey soils and underlying sandy silt and sand. The boundary between soil and rock is gradational. A transitional zone termed "weathered rock" is normally found overlying the parent bedrock. This zone is typically the most transmissive zone for groundwater movement. Consequently, the topography of the bedrock surface is uneven, even over short horizontal distances. It is not unusual to find lenses and boulders of hard rock and zones of weathered rock within the soil mantle well above the general bedrock level.

Local precipitation is the source of practically all of the groundwater in York County. A portion of the precipitation infiltrates into the ground and moves under the influence of gravity to the surficial aquifer. After the water has reached the surficial aquifer, the direction of movement is generally parallel to the hydraulic gradient. In the Piedmont Province, the slope of the surficial aquifer's surface under static conditions (no pumping interference) approximates the topography of an area. Thus, the movement of groundwater within the soil mantel is typically in the direction of the topographic slope. Local groundwater flow patterns may be affected by disturbed areas such as tank pits, utility trenches, building foundations, borings, wells, etc. Groundwater flow in fractured rock is often difficult to interpret due to the variability of fracture connectivity and orientation.

Locally, in the surficial aquifer, groundwater discharges into streams, lakes or springs where the groundwater table intersects lows occupied by these water bodies. The apparent direction (based on hydraulic gradient) of groundwater flow from the release is to the east towards an intermittent stream associated with the Big Branch.

4.1 LOCAL SUBSURFACE CONDITIONS

Piedmont soils were encountered during drilling activities conducted at the site. The soils encountered in our borings generally consisted of micaceous clays and silts of the Piedmont

Physiographic Province, underlain by saprolite and competent bedrock. Test Boring Records, which depict the materials encountered in each boring, are located in Appendix B.

Generalized subsurface conditions encountered in selected borings are illustrated in profile on Figures 4 and 5. The locations of the profile lines are shown on Figure 3.

On September 26, 2012 stabilized groundwater levels were measured in the surrounding monitoring wells. Depth to groundwater ranged from 31.40 to 49.13 feet below top of casing in the wells measured. The groundwater measurements are summarized in tabular form in Table 2 and on Figure 5. A groundwater contour map illustrating the groundwater flow direction within the surficial aquifer at the site is also depicted on Figure 5. Groundwater levels may fluctuate several feet with seasonal and rainfall variations and with change in the water level of adjacent drainage features. Normally, the highest groundwater levels occur in late winter and spring. The lowest levels occur in late summer and fall.

The above descriptions provide a general summary of the subsurface conditions encountered. The attached Test Boring Records (Appendix E) contain detailed information recorded at each new monitoring well location. The Test Boring Records represent our interpretation of the field logs based on examination of the field samples. The lines designating the interfaces between various strata represent approximate boundaries, and the transition between strata may be gradational.

5.0 TEST RESULTS AND EVALUATION

The following sections discuss groundwater test results for the subject site.

5.1 GROUNDWATER ANALYTICAL RESULTS

As discussed in Section 3.4, groundwater samples obtained from the monitoring wells were analyzed for dissolved phase petroleum constituents. The analytical results indicate petroleum impact to the surficial aquifer (Shallow Zone), with the highest dissolved concentrations being detected in the area east of the former dispenser island. The analytical results indicate dissolved Total BTEX concentrations ranged from levels below detection limits (BDL) to 114,600 micrograms per liter in IW-2. Dissolved Benzene concentrations range from levels below detection limits (BDL) to 25,000 micrograms per liter in IW-2. Dissolved Toluene concentrations range from levels below detection limits (BDL) to 60,000 micrograms per liter in IW-2 and IW-5. Dissolved Ethylbenzene concentrations range from levels below detection limits (BDL) to 5,800 micrograms per liter in MW-1R. Dissolved Total Xylenes concentrations range from levels below detection limits (BDL) to 33,000 micrograms per liter in MW-1R. Dissolved Naphthalene concentrations range from levels below detection limits (BDL) to 1,000 micrograms per liter in MW-1R. Dissolved MTBE concentrations range from levels below detection limits (BDL) to 410 micrograms per liter in IW-3. Dissolved 1,2 DCA concentrations range from levels below detection limits (BDL) to 260 micrograms per liter in MW-10R. Dissolved EDB concentrations range from levels below detection limits (BDL) to 90 micrograms per liter in IW-3.

Based on the review of historical test boring logs completed by CBM Environmental Services in January and September of 2000, monitoring wells TW-1, TW-2, and TW-3 appear to have been completed to depths to monitor the saprolite aquifer at the site. The highest concentrations of dissolved petroleum constituents from these monitoring wells ranged from 406.3 micrograms per liter of Total BTEX in TW-3 to 41,000 micrograms per liter in TW-1.

Analytical results from the wells installed to monitor fractured rock aquifer indicate petroleum impact with the highest concentrations detected in TW-1ABC. Benzene concentrations were detected above Risk Based Screening Levels (RBSL's) in wells TW-1ABC and in TW-2B. Additionally, Naphthalene concentrations were detected above RBSL's in TW-1A. Benzene concentrations were detected at 1,700 micrograms per liter in TW-1A (110.0'-120.0'), 17 micrograms per liter in TW-1B (151.0'-161.0'), 25 micrograms per liter in TW-1C (190.0'-200.0'), and in TW-2B (150.0'-160.0') at 8.7 micrograms per liter. Naphthalene concentration were detected in TW-1A at 84 micrograms per liter. All other petroleum constituents analyzed from the wells installed into the fractured rock aquifer indicated results below RBSL's.

The results of the analyses for each monitoring well and specific parameters are listed on Tables 3, 3A, and the detection limit for each parameter is provided in the laboratory reports (Appendix B).

5.2 WATER SUPPLY WELL ANALYTICAL RESULTS

The samples obtained from WSW-1 through WSW-38 were analyzed for petroleum constituents. Analytical data indicates potential petroleum impact to water supply wells WSW-2 (WSW-Swift), WSW-3 (WSW-Hill), WSW-4, WSW-5, WSW-22, WSW-23, WSW-24, WSW-28, and WSW-38. The laboratory analytical results from the water supply well samples obtained from the remainder of the water supply wells samples do not indicate petroleum impact.

The following table presents petroleum constituents detected in the water supply wells sampled:
The results of the analysis for the water supply wells and specific parameters are listed on Table 3 and Table 3A, and the detection limits for each parameter are provided in the laboratory reports (Appendix B).

WSW ID	Benzene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Naphthalene (ug/l)	MTBE (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
WSW-2 (Pre-Gac)	400	0.47J	81	28B	0.64J	34	0.63
WSW-2 (Post-Gac)	0.47J	<1.0	<1.0	0.99BJ	<1.0	1.8	<0.020
WSW-3 (Pre-Gac)	<1.0	<1.0	<1.0	<1.0	<1.0	0.82J	<0.020
WSW-4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.028
WSW-5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.036
WSW-22	0.21J	<1.0	<1.0	0.40J	<1.0	<1.0	<0.020
WSW-23	0.15J	<1.0	<1.0	0.36J	<1.0	<1.0	<0.020
WSW-24 (Pre-Gac)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.049
WSW-28	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.045
WSW-38	<1.0	<1.0	<1.0	<1.0	0.62J	<1.0	<0.019S

5.3 HYDRAULIC CONDUCTIVITY

Hydraulic gradient at the site was determined to be 2.14 x 10^{-2} ft/ft in the local aquifer based on data recorded during field testing. The average shallow zone hydraulic conductivity for the site was 1.51 x 10^{-1} cm/sec in the shallow aquifer. The test results are as follows:

Well Number	Type of Material Exposed to Screened Interval	Hydraulic Conductivity (K) (cm/sec)
MW-7R	Sandy SILT	2.32 x 10^{-6}
MW-11R	Sandy SILT	1.04 x 10^{-4}

Notes: Field tests were reduced and the hydraulic conductivities computed using Techniques described in NAVFAC Soil Mechanics Design Manual 7.1, May, 1982
MW-7R & MW-11R Condition A

5.4 GROUNDWATER MOVEMENT

Groundwater movement is often related to topography, lithology, and elevation of recharge and discharge areas and man-made influences. Referenced groundwater elevations were determined by measuring the top of the monitoring well casing relative to a nearby datum elevation (see Figure 5) measuring the water level in the monitoring well, and computing the reference elevation of the groundwater at the time of measurement. Groundwater levels typically fluctuate with seasonal and rainfall variations.

Directions of groundwater flow were interpolated between monitoring wells by comparing the groundwater elevations at those locations considering the factors listed above. Locally, in the surficial aquifer, groundwater discharges into streams, lakes or springs where the groundwater table intersects lows occupied by these water bodies.

Groundwater elevation data from the September 26, 2012 gauging event was plotted and a groundwater contour map of the surficial aquifer was prepared. The data used to prepare the groundwater contour map (groundwater elevations in site monitoring wells) are summarized on Figure 5.

The average hydraulic gradient at the site was computed to be approximately 2.14 x 10^{-2} ft/ft for the shallow aquifer. In addition to hydraulic gradients (i), the rates of groundwater movement (v) are a function of hydraulic conductivity (k) and effective porosity (ne), as indicated by the equation v = ki/ne. The effective porosity can be expected to be approximately thirty percent for Sandy SILT. Based on those parameters, the average lateral groundwater movement in the shallow aquifer at the site can be expected to be approximately 3.93 feet per year in surficial aquifer. The rate of migration of the dissolved organic constituent(s), however, may be substantially slower than groundwater itself, due to retardation (Freeze and Cherry, 1979, pp. 402-408) and intrinsic aerobic biodegredation (Bucheck et. al., 1993). The hydraulic gradient and groundwater velocity calculations are provided in Appendix F.

6.0 ASSESSMENT SUMMARY

Based on the results of our assessment activities, it appears that impact to the surficial aquifer has occurred due to a release of petroleum hydrocarbons. The analytical results indicate petroleum

impact to the surficial aquifer (Shallow Zone), with the highest dissolved concentrations being detected in the area east of the former dispenser island. Groundwater appears to be moving in an easterly direction towards an intermittent stream associated with the Big Branch and the plume appears to have moved off the subject property.

Observations from the downhole camera advanced in WSW-2 (WSW-Swift) revealed that the casing is impaired at approximately 46.2' from the top of casing. The downhole camera also showed evidence of "streaky flow features" visible at this impairment in the casing. This evidence may indicate that contaminants within the surficial aquifer are infiltrating into the rock interface through the damaged casing.

Analytical results from the wells installed to monitor fractured rock aquifer indicate petroleum constituents with the highest concentrations detected in TW-1ABC. Benzene concentrations were detected above Risk Based Screening Levels (RBSL's) in wells TW-1A, TW-1B, TW-1C and in TW-2B. Additionally, Naphthalene concentrations were detected above RBSL's in TW-1A. Benzene concentrations were detected at 1,700 micrograms per liter in TW-1A (110.0'-120.0'), 17 micrograms per liter in TW-1B (151.0'-161.0), 25 micrograms per liter in TW-1C (190.0'-200.0'), and in TW-2B (150.0'-160.0') at 8.7 micrograms per liter. Naphthalene concentrations were detected in TW-1A at 84 micrograms per liter. All other petroleum constituents analyzed from the wells installed into the fractured rock aquifer indicated results below RBSL's.

Review of historical test boring logs completed by CBM Environmental Services in January and September of 2000 reveal that monitoring wells TW-1, TW-2, and TW-3 appear to have been completed to depths to monitor the saprolite aquifer at the site. The highest concentrations of dissolved petroleum constituents from these monitoring wells ranged from 406.3 micrograms per liter of Total BTEX in TW-3 to 41,000 micrograms per liter in TW-1. Furthermore, direct push field screening data advanced in the saprolite aquifer indicate that the plume does not appear to be traveling within this zone at a significant rate; however the presence of elevated petroleum concentrations in TW-1, TW-2, and TW-3 may be interconnected with vertical fractures within the upper rock interface allowing vertical migration to occur. Visual evidence from the downhole camera advanced into the six open rock wells show that there is potential for vertical migration to occur within the upper portion of the rock interface.

The analytical results indicate dissolved Total BTEX concentrations ranged from levels below detection limits (BDL) to 114,600 micrograms per liter in IW-2 in shallow, surficial aquifer. Dissolved Benzene concentrations range from levels below detection limits (BDL) to 25,000 micrograms per liter in IW-2. Dissolved Toluene concentrations range from levels below detection limits (BDL) to 60,000 micrograms per liter in IW-2 and IW-5. Dissolved Ethylbenzene concentrations range from levels below detection limits (BDL) to 5,800 micrograms per liter in MW-1R. Dissolved Total Xylenes concentrations range from levels below detection limits (BDL) to 33,000 micrograms per liter in MW-1R. Dissolved Naphthalene concentrations range from levels below detection limits (BDL) to 1,000 micrograms per liter in MW-1R. Dissolved MTBE concentrations range from levels below detection limits (BDL) to 410 micrograms per liter in IW-3. Dissolved 1,2 DCA concentrations range from levels below detection limits (BDL) to 260 micrograms per liter in MW-10R. Dissolved EDB concentrations range from levels below detection limits (BDL) to 90 micrograms per liter in IW-3.

Based on the current analytical results, the extent of Benzene, Toluene, Ethylbenzene, Total Xylenes, Naphthalene, 1,2 DCA, and MTBE concentrations in surficial aquifer appear to be defined in relation

to RBSL's. EDB concentrations detected in the eastern and southeast quadrant of the contaminant plume does not appear to be defined in relation to RBSL's at this time. Analytical results indicate EDB concentrations in MW-11R at 0.051 micrograms per liter and in MW-15R at 0.76 micrograms per liter. It is MECI's professional opinion that the current EDB results may be spurious in nature and that additional groundwater sampling events should be conducted to verify these results.

Figure 4 depicts graphically the concentrations of Total BTEX in the monitoring wells at the site. Figure 4A depicts graphically the concentrations of Benzene in the monitoring wells at the site. Figure 4B depicts graphically the concentrations of Toluene in the monitoring wells at the site. Figure 4C depicts graphically the concentrations of Ethylbenzene in the monitoring wells at the site. Figure 4D depicts graphically the concentrations of Total Xylenes in the monitoring wells at the site. Figure 4E depicts graphically the concentrations of Naphthalene in the monitoring wells at the site. Figure 4F depicts graphically the concentrations of EDB in the monitoring wells at the site. Figure 4G depicts the concentrations of Oxygenates dissolved in the groundwater at the site.

7.0 RECOMMENDATIONS AND CLASSIFICATION

Based on our Tier II Site Evaluation, corrective action appears necessary at the subject site. MECI recommends that the impacted soil in the area of the former UST basin be treated and that a groundwater remediation program be initiated to stem the off-site spread of dissolved phase petroleum product. The recommended remediation at the site should include the treatment of the source area groundwater to the SSTL's as developed by SCDHEC and the clean-up of the impacted soils associated with this release.

Prior to the initiation of correct action efforts, MECI recommends abandoning and replacing water supply wells WSW-2 and WSW-3. Furthermore, MECI recommends conducting additional sampling events to confirm results detected in several water supply wells which currently do not have GAC units installed.

Based on the SCDHEC document "Risk-Based Corrective Action for Petroleum Releases" dated May 15, 2001, Appendix A - RBCA Classification/Priority System, MECI classifies the site as 1. This classification is due CoC concentrations being detected in several water supply wells.

8.0 QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assessment are consistent with those normally employed in hydrogeological assessment and waste management projects of this type. Our evaluation of site conditions has been based on our understanding of the site, project information provided to us, and data obtained in our exploration. The general subsurface conditions utilized in our evaluation have been based on interpretation of subsurface data between borings. Contents of this report are intended for the sole use of Ms. Lois Smith and SCDHEC under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

-oOo-

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS
SITE NAME
SITE LOCATION, SOUTH CAROLINA
MECI PROJECT NUMBER ##-####
SCDHEC SITE ID NUMBER

Boring Number	Sample Date	Depth (feet BGS)	Benzene (µg/kg)	Toluene (µg/kg)	Ethylbenzene (µg/kg)	Total Xylenes (µg/kg)	MTBE (µg/kg)	Naphthalene (µg/kg)

Soil Samples for chemical analysis were not obtained during this assessment. In order to conform with formatting guidelines provided by the SCDHEC UST Management Division Programmatic Quality Assurance Program Plan (QAPP), this filler table is included to provide report continuity.

Notes:

1. BGS = Below Ground Surface
2. µg/kg = micrograms per kilogram
3. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
4. Soil Samples collected from discrete split samples during installation of Monitoring wells.

TABLE 1A
FIELD SCREENING ANALYTICAL RESULTS
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC ID NUMBER 09322

Well Number	Sample Depth (ft)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Naphthalene (µg/l)	MTBE (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
GPW-1	68-72PR	**1,100E**	**1,100E**	**130**	**1,600E**	**3,930E**	**130**	**27**	NT	NT
GPW-2	62-66PR	**37**	**6.1**	<5.0	**29**	**72.1**	**3.8J**	<5.0	NT	NT
GPW-3	66-70PR	**0.91J**	<5.0	<5.0	<5.0	**0.91J**	<5.0	<5.0	NT	NT
GPW-4	76-80PR	**590E**	<5.0	<5.0	**1.8J**	**591.8EJ**	**6.6**	**3.3J**	NT	NT
GPW-5	71-75PR	**10**	<5.0	**29**	**120**	**159**	**2.1J**	<5.0	NT	**0.31**
GPW-6	71-75PR	**0.68J**	<5.0	<5.0	<5.0	**0.68J**	<5.0	<5.0	NT	<0.020
GPW-7	71-75PR	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
GPW-8	71-75PR	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
GPW-9	31-35PR	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
GPW-10	31-35PR	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
GPW-11	36-40PR	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
WSW-2 Pre (Formally WSW-Swift)	***	**22**	<1.0	<1.0	**25**	**47**	**4.5**	**0.46J**	**15**	**0.43**
WSW-2 Post1	***	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-2 Post2	***	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-3 Pre (Formally WSW-Hill)	***	**54**	<1.0	<1.0	**8.4**	**62.4**	<1.0	<1.0	**7.9**	**0.42**
WSW-3 Post1	***	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-3 Post2	***	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. MTBE = Methyl-Tertiary-Butyl Ether
4. 1,2 DCA = 1,2-Dichloroethane
5. EDB = Ethylene Dibromide
6. NT = Not Tested
7. PR = Probe Refusual
8. "E" Values indicate the Quanitation of the Compound exceeded the Calibration Range of the Instrument.
9. "J" Values used in Total BTEX Calculations
10. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

TABLE 1B
FRACTURED ROCK FIELD SCREENING ANALYTICAL RESULTS
AUGUST 28, 2012 SAMPLING EVENT
SMITHS GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC ID NUMBER 09322

Well Number	Sample Depth (ft. BGS)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	Naphthalene (ug/l)	MTBE (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
FR-1	120'	**2,400**	<20	<20	**450**	**2,850**	**31**	**15J**	<20	**0.041P**
FR-1	161'	**17**	<1.0	<1.0	**5.0**	**22.0**	<1.0	<1.0	<1.0	<0.020
FR-1	200'	**1,900**	<10	<10	**160**	**2,060**	**7.1J**	**14**	<10	**0.051**
FR-2	137'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
FR-2	160'	**2.7**	<1.0	<1.0	**1.2**	**3.9**	<1.0	<1.0	<1.0	<0.020
FR-2	203'	**2.1**	<1.0	<1.0	**2.0**	**4.1**	<1.0	<1.0	<1.0	<0.020
FR-3	135'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.022
FR-3	167'	**7.7**	<1.0	<1.0	**5.3**	**13**	<1.0	<1.0	<1.0	<0.019
FR-3	198'	**30**	<1.0	<1.0	**9.0**	**39.0**	<1.0	<1.0	<1.0	<0.020
FR-4	140'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	**0.022**
FR-4	170'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	**0.023**
FR-4	200'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
FR-5	120'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	**0.065**
FR-5	157'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	**0.85J**	**0.065**
FR-5	197'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	**0.87J**	**0.077**
FR-6	118'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
FR-6	153'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.021
FR-6	200'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020

Notes:

1. BDL = Below Practical Quantitative Limits
2. ug/l = micrograms per liter
3. MTBE = Methyl-Tertiary-Butyl Ether
4. 1,2 DCA = 1,2-Dichloroethane
5. "J" Values included in Total BTEX Calculations.
6. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
7. BGS = Below Ground Surface

TABLE 2
FIELD PARAMETERS
PAGE 1 OF 5
SEPTEMBER 25, 26 & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	Dissolved Oxygen (mg/l)	Temperature (^{o} Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well-head Elevation (ft)	Groundwater Elevation (ft)
MW-1R	10/26/2010	4.17	19.0	6.19	5.77	79.8	65.9	29-39	***	32.33	***	96.56	64.23
	2/1/2011	2.46	17.3	5.04	NT	57.7	NT	-	***	33.64	***	96.56	62.92
	10/3/2011	1.48	18.6	4.58	NT	59.6	NT	-	***	34.08	***	96.56	62.48
	9/26/2012	1.68	19.7	5.04	5.22	66.7	68.9	-	***	35.04	***	96.56	61.52
MW-2	10/26/2010	0.69	21.5	6.31	NT	117.1	NT	23-38	***	35.45	***	99.67	64.22
	2/1/2011	3.12	18.2	5.31	NT	96.9	NT	-	***	36.80	***	99.67	62.87
	10/3/2011	INS	INS	INS	INS	INS	INS	-	***	37.21	***	99.67	62.46
	9/26/2012	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	99.67	DRY
MW-3	10/26/2010	2.93	18.8	6.88	NT	31.9	NT	25-35	***	32.59	***	97.10	64.51
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	34.67	***	97.10	62.43
	10/3/2011	INS	INS	INS	INS	INS	INS	-	***	34.48	***	97.10	62.62
	9/26/2012	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	97.10	DRY
MW-4R	10/26/2010	6.81	17.8	5.89	5.56	45.2	33.9	24-34	***	28.38	***	92.55	64.17
	2/1/2011	6.21	17.5	5.73	NT	38.9	NT	-	***	29.43	***	92.55	63.12
	10/3/2011	2.45	17.1	4.96	NT	27.9	NT	-	***	30.03	***	92.55	62.52
	9/26/2012	1.16	22.4	5.63	NT	176.0	NT	-	***	31.40	***	92.55	61.15
MW-5	10/26/2010	INS	INS	INS	INS	INS	INS	20-30	***	29.84	***	94.36	64.52
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	30.10	***	94.36	64.26
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	94.36	DRY
MW-5R	9/26/2012	4.07	17.7	6.29	5.22	47.5	46.4	30.5-40.5	***	32.84	***	93.85	61.01
MW-6	10/26/2010	INS	INS	INS	INS	INS	INS	27-37	***	35.57	***	98.93	63.36
	2/1/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	36.95	***	98.93	61.98
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	98.93	DRY
MW-6R	9/25/2012	4.52	19.0	5.71	5.63	37.1	55.3	34-44	***	38.15	***	98.90	60.75
MW-7	10/26/2010	INS	INS	INS	INS	INS	INS	21-36	***	34.19	***	96.71	62.52
	2/1/2011	PROD	PROD	PROD	PROD	PROD	PROD	-	35.48	35.57	0.09	96.71	61.22
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	96.71	DRY
MW-7R	9/25/2012	1.56	18.7	5.47	5.49	89.9	98.7	34-44	***	37.32	***	97.42	60.10
MW-8	10/26/2010	0.54	19.7	6.24	NT	119.9	NT	23-38	***	35.94	***	100.14	64.20
	2/1/2011	1.35	17.9	6.14	NT	108.1	NT	-	***	37.31	***	100.14	62.83
	10/3/2011	3.77	19.1	5.08	NT	170.1	NT	-	***	37.71	***	100.14	62.43
	9/26/2012	1.98	19.9	5.67	5.71	141.8	150.1	-	***	38.66	***	100.14	61.48

Notes:

1. mg/l = milligrams per liter.
2. Groundwater depths were measured from the top of the PVC riser pipe.
3. Stabalized groundwater levels measured Sept. 25-27, 2012
4. NT = Not Tested
5. INS = Insufficient Water for Field Measurements
6. DRY = Monitoring well Dry at time of Sampling
7. NS = Not Sampled
8. TD = Total Depth
9. PROD = Free Phase Petroleum Product
10. NL = Not Located
11. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on Sept. 25-27, 2012.
12. Groundwater elevation for MW-7 corrected for the presence of free phase petroleum product using a specific gravity for fuel of 0.85.

TABLE 2
FIELD PARAMETERS
PAGE 2 OF 5
SEPTEMBER 25, 26 & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	Dissolved Oxygen (mg/l)	Temperature (^{o} Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well-head Elevation (ft)	Groundwater Elevation (ft)
MW-9R	10/26/2010	5.91	18.5	6.64	5.63	33.2	25.5	28-38	***	32.50	***	94.95	62.45
	2/1/2011	2.15	16.3	4.48	NT	34.9	NT	-	***	33.77	***	94.95	61.18
	10/3/2011	2.73	17.3	5.63	NT	53.2	NT	-	***	34.13	***	94.95	60.82
	9/25/2012	2.72	18.8	5.38	NT	85.3	NT	-	***	35.00	***	94.95	59.95
MW-10	10/27/2010	INS	INS	INS	INS	INS	INS	29-44	***	41.12	***	104.83	63.71
	2/1/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	42.41	***	104.83	62.42
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	104.83	DRY
MW-10R	9/25/2012	1.80	19.9	5.43	NT	79.6	NT	40.5-50.5	***	43.26	***	103.98	60.72
MW-11	10/26/2010	INS	INS	INS	INS	INS	INS	29-44	***	31.95	***	105.51	73.56
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	43.42	***	105.51	62.09
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	105.51	DRY
MW-11R	9/26/2012	2.76	18.5	5.94	5.75	69.0	63.6	44-54	**	45.05	***	105.46	60.41
MW-12	10/26/2010	INS	INS	INS	INS	INS	INS	29-44	***	43.45	***	104.56	61.11
	2/1/2011	7.03	13.9	3.28	NT	124.5	NT	-	***	42.75	***	104.56	61.81
	10/3/2011	INS	INS	INS	INS	INS	INS	-	***	43.22	***	104.56	61.34
	9/25/2012	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	104.56	DRY
MW-13	10/26/2010	NS	NS	NS	NS	NS	NS	32-47	***	NS	***	105.35	NS
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	45.85	***	105.35	59.50
	10/3/2011	INS	INS	INS	INS	INS	INS	-	***	46.45	***	105.35	58.90
	9/25/2012	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	105.35	DRY
MW-14	10/26/2010	INS	INS	INS	INS	INS	INS	35-50 (TD=46.50)	***	44.51	***	103.95	59.44
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	44.67	***	103.95	59.28
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	103.95	DRY
MW-14R	9/25/2012	2.36	17.6	5.28	5.25	70.6	68.6	48-58	***	47.60	***	103.91	56.31
MW-15	10/26/2010	DRY	DRY	DRY	DRY	DRY	DRY	35-50 (TD=47.60)	***	DRY	***	105.28	DRY
	2/1/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	105.28	DRY
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	105.28	DRY
MW-15R	9/25/2012	4.21	18.6	5.57	5.55	54.3	57.4	48-58	***	49.13	***	106.23	57.10
MW-16	10/26/2010	1.28	17.4	6.09	NT	27.6	NT	22-37	***	33.81	***	95.06	61.25
	2/1/2011	4.20	14.9	3.35	NT	33.3	NT	-	***	35.06	***	95.06	60.00
	10/3/2011	INS	INS	INS	INS	INS	INS	-	***	35.35	***	95.06	59.71
	9/25/2012	INS	INS	INS	INS	INS	INS	-	***	36.25	***	95.06	58.81

Notes:

1. mg/l = milligrams per liter.
2. Groundwater depths were measured from the top of the PVC riser pipe.
3. Stabalized groundwater levels measured Sept. 25-27, 2012
4. NT = Not Tested
5. INS = Insufficient Water for Field Measurements
6. DRY = Monitoring well Dry at time of Sampling
7. NS = Not Sampled
8. TD = Total Depth
9. PROD = Free Phase Petroleum Product
10. NL = Not Located
11. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on Sept. 25-27, 2012.
12. Groundwater elevation for MW-7 corrected for the presence of free phase petroleum product using a specific gravity for fuel of 0.85.

TABLE 2
FIELD PARAMETERS
PAGE 3 OF 5
SEPTEMBER 25, 26 & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	Dissolved Oxygen (mg/l)	Temperature (^{o} Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well-head Elevation (ft)	Groundwater Elevation (ft)
MW-17	10/26/2010	INS	INS	INS	INS	INS	INS	25-40	***	38.27	***	99.52	61.25
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	39.60	***	99.52	59.92
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	99.52	DRY
MW-17R	9/25/2012	1.92	17.7	5.56	5.46	38.2	39.7	38-48	***	42.24	***	99.69	57.45
MW-18	10/26/2010	INS	INS	INS	INS	INS	INS	31-46	***	43.79	***	103.17	59.38
	2/1/2011	INS	INS	INS	INS	INS	INS	-	***	45.22	***	103.17	57.95
	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	103.17	DRY
MW-18R	9/25/2012	2.25	18.3	5.82	5.72	41.2	39.7	45-55	***	46.15	***	103.03	56.88
MW-19	10/26/2010	INS	INS	INS	INS	INS	INS	35-50	***	46.65	***	103.32	56.67
	2/1/2011	3.84	16.8	5.79	NT	113.0	NT	-	***	47.99	***	103.32	55.33
	10/3/2011	INS	INS	INS	INS	INS	INS	-	***	48.55	***	103.32	54.77
	9/25/2012	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	103.32	DRY
MW-20	10/26/2010	4.13	19.0	5.35	NT	30.1	NT	20-35	***	30.84	***	93.39	62.55
	2/1/2011	5.13	15.7	4.62	NT	22.6	NT	-	***	32.13	***	93.39	61.26
	10/3/2011	4.69	17.2	5.05	NT	28.1	NT	-	***	32.45	***	93.39	60.94
	9/25/2012	INS	INS	INS	INS	INS	INS	-	***	33.27	***	93.39	60.12
MW-21	9/25/2012	1.87	19.2	5.97	5.83	80.3	97.4	44-54	***	47.63	***	107.18	59.55
TW-1	10/26/2010	0.94	20.3	6.51	6.18	191.3	190.6	56-61	***	35.30	***	99.79	64.49
	2/1/2011	1.69	18.0	5.10	5.28	160.6	276.7	-	***	36.92	***	99.79	62.87
	10/3/2011	1.77	21.1	5.67	5.25	327.6	305.7	-	***	37.34	***	99.79	62.45
	9/26/2012	4.13	20.0	5.77	5.90	91.0	153.3	-	***	37.58	***	99.79	62.21
TW-2	10/26/2010	1.00	20.0	9.38	6.64	213.5	296.8	86-88	***	35.72	***	99.79	64.07
	2/1/2011	1.81	17.5	5.63	5.07	270.1	302.3	-	***	37.08	***	99.79	62.71
	10/3/2011	4.68	20.0	8.14	7.42	143.0	352.1	-	***	37.40	***	99.79	62.39
	9/26/2012	2.02	20.9	10.21	9.05	216.5	201.4	-	***	38.50	***	99.79	61.29
TW-3	10/26/2010	0.72	20.5	5.72	5.41	51.3	63.1	66-71	***	40.38	***	104.17	63.79
	2/1/2011	6.84	16.9	5.82	4.22	54.3	60.2	-	***	41.83	***	104.17	62.34
	10/3/2011	1.10	18.8	5.89	5.42	53.8	63.2	-	***	42.24	***	104.17	61.93
	9/25/2012	2.08	20.2	6.03	5.53	77.1	79.0	-	***	42.90	***	104.17	61.27
TW-1A	9/26/2012	2.42	23.6	6.46	6.38	217.1	126.0	110-120	***	41.29	***	101.85	60.56
TW-1B	9/27/2012	0.61	21.5	7.04	7.26	171.1	148.0	151-161	***	41.00	***	101.83	60.83
TW-1C	9/27/2012	0.65	19.3	6.88	7.17	238.3	250.4	190-200	***	42.06	***	101.84	59.78

Notes:

1. mg/l = milligrams per liter.
2. Groundwater depths were measured from the top of the PVC riser pipe.
3. Stabalized groundwater levels measured Sept. 25-27, 2012
4. NT = Not Tested
5. INS = Insufficient Water for Field Measurements
6. DRY = Monitoring well Dry at time of Sampling
7. NS = Not Sampled
8. TD = Total Depth
9. PROD = Free Phase Petroleum Product
10. NL = Not Located
11. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on Sept. 25-27, 2012.
12. Groundwater elevation for MW-7 corrected for the presence of free phase petroleum product using a specific gravity for fuel of 0.85.

TABLE 2
FIELD PARAMETERS
PAGE 4 OF 5
SEPTEMBER 25, 26 & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	Dissolved Oxygen (mg/l)	Temperature (^{o} Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well-head Elevation (ft)	Groundwater Elevation (ft)
TW-2A	9/26/2012	1.91	23.4	6.43	6.73	162.3	175.2	127-137	***	42.75	***	102.33	59.58
TW-2B	9/27/2012	5.32	18.1	7.10	7.09	128.6	257.7	150-160	***	42.74	***	102.40	59.66
TW-2C	9/27/2012	3.23	18.0	7.57	7.24	150.0	128.6	193-203	***	41.88	***	102.39	60.51
TW-3A	9/26/2012	1.78	23.0	6.42	7.07	265.7	407.7	125-135	***	40.63	***	102.02	61.39
TW-3B	9/26/2012	2.94	20.0	6.74	7.36	171.6	258.8	157-167	***	40.83	***	101.98	61.15
TW-3C	9/26/2012	3.76	23.4	6.15	6.57	77.6	193.5	188-198	***	40.60	***	101.97	61.37
TW-4A	9/26/2012	3.79	19.3	7.35	6.50	86.8	79.9	131-141	***	41.86	***	97.04	55.18
TW-4B	9/26/2012	4.31	24.4	6.62	6.59	137.7	67.1	160-170	***	42.94	***	97.26	54.32
TW-4C	9/26/2012	3.72	24.7	6.33	6.73	101.3	132.9	190-200	***	42.54	***	97.26	54.72
TW-5A	9/25/2012	3.51	19.0	7.38	6.45	96.5	87.7	110-120	***	45.66	***	97.80	52.14
TW-5B	9/25/2012	0.90	17.6	6.54	6.79	138.8	163.8	147-157	***	45.68	***	97.86	52.18
TW-5C	9/26/2012	1.27	21.7	6.54	7.02	145.8	143.7	187-197	***	45.98	***	97.85	51.87
TW-6A	9/25/2012	4.37	21.9	6.79	7.36	108.9	116.4	108-118	***	44.60	***	96.83	52.23
TW-6B	9/25/2012	1.44	21.1	6.81	7.20	316.9	197.1	143-153	***	44.62	***	96.85	52.23
TW-6C	9/25/2012	5.01	20.6	7.51	7.83	210.0	178.2	190-200	***	45.00	***	96.86	51.86
IW-2	10/3/2011	1.72	20.9	5.42	NT	226.1	NT	15-45	***	37.30	***	99.69	62.39
	9/26/2012	1.41	20.2	6.77	6.12	112.6	136.1	-	***	38.25	***	99.69	61.44
IW-3	10/3/2011	Sheen	Sheen	Sheen	Sheen	Sheen	Sheen	15-45	***	37.21	***	99.60	62.39
	9/26/2012	1.64	20.2	5.50	5.42	148.6	146.7	-	***	38.13	***	99.60	61.47

Notes:

1. mg/l = milligrams per liter.
2. Groundwater depths were measured from the top of the PVC riser pipe.
3. Stabalized groundwater levels measured Sept. 25-27, 2012
4. NT = Not Tested
5. INS = Insufficient Water for Field Measurements
6. DRY = Monitoring well Dry at time of Sampling
7. NS = Not Sampled
8. TD = Total Depth
9. PROD = Free Phase Petroleum Product
10. NL = Not Located
11. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on Sept. 25-27, 2012.
12. Groundwater elevation for MW-7 corrected for the presence of free phase petroleum product using a specific gravity for fuel of 0.85.

TABLE 2
FIELD PARAMETERS
PAGE 5 OF 5
SEPTEMBER 25, 26 & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	Dissolved Oxygen (mg/l)	Temperature (^{o} Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well-head Elevation (ft)	Groundwater Elevation (ft)
IW-4	10/3/2011	1.81	19.8	5.14	NT	86.9	NT	15-45	***	37.50	***	99.22	61.72
	9/26/2012	2.80	19.9	5.28	5.55	135.3	152.4	-	***	38.41	***	99.22	60.81
IW-5	10/3/2011	2.07	18.9	5.28	NT	189.5	NT	15-45	***	34.74	***	97.26	62.52
	9/26/2012	3.93	19.1	5.09	5.38	148.8	149.3	-	***	35.69	***	97.26	61.57
IW-6	10/3/2011	1.57	17.5	5.43	NT	145.1	NT	15-45	***	34.95	***	96.89	61.94
	9/25/2012	1.42	18.1	5.64	5.63	113.1	113.8	-	***	36.83	***	96.89	60.06
IW-8	10/3/2011	1.89	18.5	5.44	NT	184.4	NT	15-45	***	37.40	***	99.10	61.70
	9/25/2012	4.30	19.1	5.50	5.38	58.3	135.6	-	***	38.30	***	99.10	60.80
IW-9	10/26/2010	0.84	20.5	6.28	NT	124.5	NT	15-45	***	34.55	***	98.87	64.32
	2/1/2011	4.88	16.4	2.79	3.58	92.7	256.6	-	***	35.80	***	98.87	63.07
	10/3/2011	4.05	18.3	4.91	NT	87.3	NT	-	***	36.30	***	98.87	62.57
	9/25/2012	1.19	18.1	5.50	5.41	93.0	99.2	-	***	37.15	***	98.87	61.72
IW-10	10/3/2011	INS	INS	INS	INS	INS	INS	15-45	***	43.22	***	104.70	61.48
	9/25/2012	INS	INS	INS	INS	INS	INS	-	***	44.12	***	104.70	60.58
IW-11	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	15-45	***	DRY	***	106.04	DRY
	9/25/2012	DRY	DRY	DRY	DRY	DRY	DRY	-	***	DRY	***	106.04	DRY
IW-16	10/3/2011	DRY	DRY	DRY	DRY	DRY	DRY	15-45	***	DRY	***	107.04	DRY
IW-18	10/3/2011	3.23	19.3	5.37	NT	613.0	NT	15-45	***	43.07	***	103.87	60.80
	9/25/2012	INS	INS	INS	INS	INS	INS	-	***	43.10	***	103.87	60.77
IW-19	10/3/2011	1.95	19.0	5.75	NT	335.2	NT	15-45	***	39.93	***	101.64	61.71
	9/25/2012	NL	NL	NL	NL	NL	NL	NL	***	NL	***	101.64	NL
IW-20	10/3/2011	2.36	19.2	6.02	NT	296.5	NT	15-45	***	40.22	***	102.19	61.97
	9/25/2012	INS	INS	INS	INS	INS	INS	-	***	41.15	***	102.19	61.04

Notes:

1. mg/l = milligrams per liter.
2. Groundwater depths were measured from the top of the PVC riser pipe.
3. Stabalized groundwater levels measured Sept. 25-27, 2012
4. NT = Not Tested
5. INS = Insufficient Water for Field Measurements
6. DRY = Monitoring well Dry at time of Sampling
7. NS = Not Sampled
8. TD = Total Depth
9. PROD = Free Phase Petroleum Product
10. NL = Not Located
11. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on Sept. 25-27, 2012.
12. Groundwater elevation for MW-7 corrected for the presence of free phase petroleum product using a specific gravity for fuel of 0.85.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
PAGE 1 OF 9
SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Naphthalene (µg/l)	MTBE (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-1R	10/26/10	7,360	30,200	5,060	28,800	71,420	1,190J	4.3J	26.3	18.3
	02/01/11	7,900	28,100	6,080	28,100	70,180	583	<250	<250	20.1
	10/03/11	8,200	32,000	6,500	37,000	83,700	850J	<2,000	200J	18
	09/26/12	7,200	33,000	5,800	33,000	79,000	1,000	<50	130	16
MW-2	10/26/10	2,860	3,630	390	3,710	10,590	110	79.5J	112	15.1
	02/01/11	2,100	2,590	174	1,750	6,614	<125	199	224	18.2
	10/03/11	11,000	19,000	1,600	11,000	42,600	<1,000	570J	710J	20
	09/26/12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-3	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
	09/26/12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-4R	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-5	10/26/10	<5.0	101	1.9J	11.5	114.4J	3.5J	<5.0	<5.0	<0.020
	02/01/11	<5.0	4.8J	<5.0	<10.0	4.8J	<5.0	<5.0	<5.0	NT
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-5R	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-6	10/26/10	18.2	2.2J	14.8	74.4	109.6J	5.6	<5.0	<5.0	0.13
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-6R	09/25/12	2,000	150	1,200	4,200	7,550	350	<5.0	40	2.0
MW-7	10/26/10	<250	875	2,120	21,500	24,495	1,150	<250	<250	1.1
	02/01/11	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7R	09/25/12	200	12	15	1,000	1,227	27	<1.0	5.8	<0.019
MW-8	10/26/10	10,100	37,700	4,420	26,100	78,320	866	<500	<500	29.2
	02/01/11	11,400	52,000	5,360	29,900	98,660	978J	<1,250	<1,250	18.0
	10/03/11	11,000	55,000	5,400	32,000	103,400	970J	<2,000	370J	22
	09/26/12	9,300	47,000	4,600	26,000	86,900	960	<200	210	14

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "B" Indicates Parametes Detected in Method Blank
12. NT = Not Tested
13. "Q" Indicates Surrogate Failure
14. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
15. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS

SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Naphthalene (µg/l)	MTBE (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-9R	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.020
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.025
MW-10	10/27/10	6,280	17,700	5,220	26,000	55,200	813	<250	112J	48.9
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-10R	09/25/12	3,100	3,500	2,200	2,400	11,200	250	<1.0	260	25
MW-11	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	NT
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-11R	09/26/12	2.8	0.34J	4.4	64	71.54J	3.3	<1.0	<1.0	0.051
MW-12	10/26/10	1,870	24.0	479	838	3,211.0	112	<5.0	38.8	0.95
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	1.8J	0.057
	10/03/11	3.5J	<5.0	<5.0	<5.0	3.5J	<5.0	<5.0	2.8J	<0.022
	09/26/12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-13	10/26/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
	09/26/12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-14	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-14R	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-15	10/26/10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	02/01/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-15R	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	12	0.76
MW-16	10/26/10	4.1J	<5.0	<5.0	<10.0	4.1J	3.2J	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	2.8J	2.8J	<5.0	<5.0	<5.0	0.034
	10/03/11	0.31J	<5.0	<5.0	<5.0	0.31J	<5.0	<5.0	<5.0	0.037
	09/25/12	4.9	<1.0	<1.0	4.8	9.7	1.1	<1.0	<1.0	0.025

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "B" Indicates Parametes Detected in Method Blank
12. NT = Not Tested
13. "Q" Indicates Surrogate Failure
14. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
15. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
PAGE 3 OF 9
SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Naphthalene (µg/l)	MTBE (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
MW-17	10/26/10	250	<5.0	<5.0	45.5	295.5	8.7	2.1J	<5.0	0.046
	02/01/11	34.5	<10.0	<10.0	21.5	56.0	<10.0	<10.0	<10.0	NT
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-17R	09/25/12	45	<1.0	<1.0	29	74	4.2	2.8	3.6	0.096
MW-18	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.021
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-18R	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	19	1.8
MW-19	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	253	<5.0	<10.0	253	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
	09/26/12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.020
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
MW-21	09/25/12	34	0.40J	1.1	14	49.5J	<1.0	<1.0	31	0.52
TW-1	10/26/10	8,720	293	2,370	11,900	23,283	559	<250	<250	20.6
	02/01/11	1,920	106	785	4,230	7,041	228	<100	<100	4.0
	10/03/11	10,000	3,100	3,500	17,000	33,600	480J	55J	<500	18
	09/26/12	12,000	11,000	3,000	15,000	41,000	680	48	<20	13
TW-2	10/26/10	12,900	17,400	1,930	9,830	42,060	624	217J	<500	0.062
	02/01/11	12,500	19,400	1,850	9,440	43,190	296J	191J	<500	<0.020
	10/03/11	9,300	17,000	2,100	11,000	39,400	380J	140J	310J	<0.019
	09/26/12	6,200	16,000	1,300	6,400	29,900	390	120	<20	<0.019
TW-3	10/26/10	152	12.9	<5.0	20.5	185.4	5.2	<5.0	3.6J	1.4
	02/01/11	242	9.0	2.1J	37.0	290.1J	6.5	<5.0	13.4	2.1
	10/03/11	74	<5.0	<5.0	14	88	1.7J	<5.0	9.5	0.98
	09/25/12	330	17	7.3	52	406.3	20	<1.0	<1.0	0.64
TW-1A	09/26/12	1,700	1.3	0.69J	610	2,311.99J	84	8.8	<1.0	0.036
TW-1B	09/27/12	17	<1.0	<1.0	3.7	20.7	0.71J	<1.0	<1.0	<0.019
TW-1C	09/27/12	25	<1.0	<1.0	2.9	27.9	0.52J	1.6	<1.0	<0.019

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "B" Indicates Parametes Detected in Method Blank
12. NT = Not Tested
13. "Q" Indicates Surrogate Failure
14. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
15. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS

SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Naphthalene (µg/l)	MTBE (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
TW-2A	09/26/12	**0.19J**	<1.0	<1.0	<1.0	**0.19J**	<1.0	<1.0	<1.0	<0.019
TW-2B	09/27/12	**8.7**	<1.0	<1.0	**0.81J**	**9.51J**	**0.42J**	<1.0	<1.0	<0.019
TW-2C	09/27/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3A	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.023
TW-3B	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3C	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-4A	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	**0.70J**	**0.034**
TW-4B	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	**0.032**
TW-4C	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5A	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5B	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	**0.034**
TW-5C	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	**0.025**
TW-6A	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-6B	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	**0.60J**	**0.038**
TW-6C	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
IW-2	10/03/11	**22,000**	**56,000**	**4,800**	**27,000**	**109,800**	<2,500	<2,500	<2,500	**21**
	09/26/12	**25,000**	**60,000**	**3,600**	**26,000**	**114,600**	**870**	**290**	<20	**33**
IW-3	10/03/11	**19,000**	**39,000**	**3,900**	**22,000**	**83,900**	<2,000	**390J**	<2,000	**120**
	09/26/12	**14,000**	**27,000**	**2,400**	**13,000**	**56,400**	**640**	**410**	<200	**90**
IW-4	10/03/11	**68**	**12**	**4.1J**	**58**	**142.1J**	<5.0	<5.0	<5.0	<0.019
	09/26/12	**4,100**	**9.1**	**160**	**1,100**	**5,369.1**	**190**	**46**	<1.0	<0.020
IW-5	10/03/11	**13,000**	**57,000**	**5,000**	**30,000**	**105,000**	<2,500	<2,500	<2,500	**7.8**
	09/26/12	**12,000**	**60,000**	**4,200**	**25,000**	**101,200**	**860**	<100	<100	**3.9**

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "B" Indicates Parametes Detected in Method Blank
12. NT = Not Tested
13. "Q" Indicates Surrogate Failure
14. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
15. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS

SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Naphthalene (µg/l)	MTBE (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
IW-6	10/03/11	140	18J	87	2,200	2,445J	340	<50	<50	<0.019
	09/25/12	180	18	25	1,500	1,723	370	<1.0	<1.0	<0.020
IW-8	10/03/11	1,900	89J	2,400	8,100	12,489J	480	<200	<200	0.87
	09/25/12	2,000	35	2,200	5,100	9,335	600	<1.0	<1.0	1.4PQ
IW-9	10/26/10	505	562	1,250	5,110	7,427	335	5.8J	<10.0	0.39
	02/01/11	408	642	1,340	6,090	8,480	389	<5.0	<5.0	0.52
	10/03/11	280	250	1,100	5,100	6,730	340	<100	<100	0.38
	09/25/12	490	57	1,300	4,700	6,547	390	<1.0	<1.0	0.15
IW-10	10/03/11	510	<50	210	1,500	2,220	67	<50	<50	1.7
	09/25/12	300	6.4	100	750	1,156.4	78	<1.0	<1.0	NT
IW-11	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	09/25/12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-16	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	10/03/11	490	<10	350	200	1,040	38	<10	58	0.36
	09/25/12	770	<1.0	390	110	1,270	66	<1.0	<1.0	0.41
IW-19	10/03/11	1,500	1,800	880	4,400	8,580	150	<100	50J	11
	09/25/12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-20	10/03/11	3.8J	<5.0	3.2J	22	29.0J	3.6J	<5.0	<5.0	<0.020
	09/25/12	1.8	1.2	2.1	16	21.1	2.6	<1.0	<1.0	<0.025
WSW-1 (Formally WSW-Smith)	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	<0.019
	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-2 Pre (Formally WSW-Swift Pre)	10/26/10	288	<5.0	<5.0	67.6	355.6	11.8	<5.0	23.5	1.3
	02/01/11	7.5	<5.0	<5.0	9.7J	17.2J	<5.0	<5.0	6.7	0.45
	03/15/11	22.7	<5.0	<5.0	17.0	39.7	3.5J	<5.0	8.0	0.57
	10/03/11	190	<5.0	<5.0	75	265	19	0.49J	22	0.71
	02/02/12	25	<5.0	<5.0	23	48	4.8J	<5.0	NT	0.40
	09/25/12	400	<1.0	0.47J	81	481.47J	28B	0.64J	34	0.63

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "B" indicates Parametes Detected in Method Blank
12. NT = Not Tested
13. "Q" Indicates Surrogate Failure
14. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
15. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
PAGE 6 OF 9
SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Naphthalene (µg/l)	MTBE (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
WSW-2 Post (Formally WSW-Swift Post)	10/26/10	**157**	<5.0	**1.6J**	**46.7**	**205.3J**	**13.6**	**3.0J**	**12.5**	**0.60**
	02/01/11	**7.8**	<5.0	<5.0	**8.8J**	**16.6J**	<5.0	<5.0	**7.1**	**0.45**
	03/15/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	**1.2J**	<5.0	<5.0	<5.0	**1.2J**	<5.0	<5.0	**1.2J**	<0.020
	02/02/12	**1.1J**	<5.0	<5.0	<5.0	**1.1J**	<5.0	<5.0	NT	<0.020
	09/25/12	**0.47J**	<1.0	<1.0	<1.0	**0.47J**	**0.99BJ**	<1.0	**1.8**	<0.020
WSW-3 Pre (Formally WSW-Hill Pre)	10/26/10	**14.0**	<5.0	<5.0	<10.0	**14.0**	<5.0	<5.0	**1.6J**	**0.33**
	02/01/11	**27.4**	<5.0	<5.0	**5.9J**	**33.3J**	<5.0	<5.0	**6.0**	**0.33**
	03/15/11	**63.2**	<5.0	<5.0	**12.5**	**75.7**	<5.0	<5.0	**6.8**	**0.60**
	10/03/11	**120**	<5.0	<5.0	**22**	**142**	**2.4J**	<5.0	**13**	**0.68**
	02/02/12	**78**	<5.0	<5.0	**13**	**91**	<5.0	<5.0	NT	**0.52**
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	**0.82J**	<0.020
WSW-3 Post (Formally WSW-Hill Post)	10/26/10	**2.4J**	<5.0	<5.0	<10.0	**2.4J**	<5.0	<5.0	**1.3J**	**0.034**
	02/01/11	**3.7J**	<5.0	<5.0	<10.0	**3.7J**	<5.0	<5.0	<5.0	**0.062**
	03/15/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	<0.020
	10/03/11	**3.4J**	<5.0	<5.0	<5.0	**3.4J**	<5.0	<5.0	**1.0J**	**0.035**
	02/02/12	**18**	<5.0	<5.0	**2.7J**	**20.7J**	<5.0	<5.0	NT	**0.13**
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-4	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	**0.028**
WSW-5	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	**0.036**
WSW-6	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-7	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	**0.93J**	NT	<0.020
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-8	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-9	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-10	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "B" indicates Parametes Detected in Method Blank
12. NT = Not Tested
13. "Q" Indicates Surrogate Failure
14. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
15. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
PAGE 7 OF 9
SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Naphthalene (µg/l)	MTBE (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
WSW-11	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-12	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-13	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-14	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-15	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-16	02/02/12	**0.25J**	<5.0	<5.0	<5.0	**0.25J**	<5.0	<5.0	NT	<0.019
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-17	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-18	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-19	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-20	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-21	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-22 (Formally WSW-Crock)	10/26/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	**0.039**
	02/01/11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0	**0.022**
	10/03/11	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	<5.0	**0.034**
	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
	09/26/12	**0.21J**	<1.0	<1.0	**0.40J**	**0.61J**	<1.0	<1.0	<1.0	<0.020
WSW-23	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	**0.071**
	09/26/12	**0.15J**	<1.0	<1.0	**0.36J**	**0.51J**	<1.0	<1.0	<1.0	<0.020
WSW-24 Pre	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	**0.049**
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	**0.049**

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "B" Indicates Parametes Detected in Method Blank
12. NT = Not Tested
13. "Q" Indicates Surrogate Failure
14. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
15. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
PAGE 8 OF 9
SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Naphthalene (µg/l)	MTBE (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
WSW-24 Post	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-25	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-26	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-27	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-28	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	**0.045**
WSW-29	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-30	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-31	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-32	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-33	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-34	02/02/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-35	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "B" Indicates Parametes Detected in Method Blank
12. NT = Not Tested
13. "Q" Indicates Surrogate Failure
14. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
15. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
PAGE 9 OF 9
SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC ID NUMBER 09322

Well Number	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Naphthalene (µg/l)	MTBE (µg/l)	1,2 DCA (µg/l)	EDB (µg/l)
WSW-36	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-37	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.019
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-38	02/02/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	**0.62J**	<1.0	<0.019S
WSW-2 Pre Dup.	02/02/12	**16**	<5.0	<5.0	**26**	**42**	**5.0**	<5.0	NT	**0.48**
WSW-3 Pre Dup.	02/02/12	**96**	<5.0	<5.0	**15**	**111**	<5.0	<5.0	NT	**0.59**
MW-1R Duplicate	09/26/12	**6,600**	**34,000**	**5,500**	**36,000**	**82,100**	**990**	<20	<20	**17**
MW-5 Duplicate	09/26/12	**0.14J**	<1.0	<1.0	<1.0	**0.14J**	<1.0	<1.0	<1.0	<0.020
MW-8 Duplicate	09/26/12	**9,500**	**55,000**	**4,900**	**30,000**	**99,400**	**1,100**	**55J**	<100	**14Q**
MW-10 Duplicate	09/25/12	**6,100**	**3,900**	**2,500**	**9,900**	**22,400**	**370**	<20	<20	**18**
Field Blank	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	<0.020
Field Blank #1	09/25/12	<1.0	<1.0	<1.0	**0.34J**	**0.34J**	**2.5B**	<1.0	<1.0	<0.019
Field Blank #2	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	**0.84BJ**	<1.0	<1.0	<0.020
Trip Blank	02/02/12	<5.0	<5.0	<5.0	<5.0	BDL	<5.0	<5.0	NT	NT
Trip Blank #1	09/25/12	<1.0	<1.0	<1.0	<1.0	BDL	**0.46BJ**	<1.0	<1.0	NT
Trip Blank #2	09/26/12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	NT

Notes:

1. BDL = Below Practical Quantitative Limits
2. µg/l = micrograms per liter
3. mg/l = milligrams per liter
4. MTBE = Methyl-Tertiary-Butyl Ether
5. See Appendix for Laboratory Detection Limits
6. NS = Not Sampled
7. DRY = Well was Dry at time of Sampling
8. EDB = Ethylene Dibromide
9. 1,2 DCA = 1,2-Dichloroethane
10. "J" Values used in Total BTEX Calculations
11. "B" Indicates Parametes Detected in Method Blank
12. NT = Not Tested
13. "Q" Indicates Surrogate Failure
14. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).
15. "P" values = The Relative Percent Difference between Two Gas Chromatograph columns Exceeds 40%.

TABLE 3A
GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
PAGE 1 OF 5
SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	DIPE (mg/l)	Ethanol (mg/l)	3,3-Dimethyl-1-butanol (mg/l)	ETBE (mg/l)	TAA (mg/l)	TAME (mg/l)	TBA (mg/l)	TBF (mg/l)
MW-1R	10/26/10	**61.1**	**334**	<100	<10.0	**325**	<10.0	<100	<50.0
	10/03/11	<2,000	<40,000	<8,000	<400	<8,000	<4,000	<8,000	<2,000
	09/26/12	**38J**	<50,000	<5,000	<5,000	<5,000	<500	<5,000	<5,000
MW-2	10/26/10	**195**	<4,000	<2,000	<200	<2,000	<200	<2,000	<1,000
	10/03/11	**870J**	<20,000	<4,000	<200	**6,000**	<2,000	**1,700J**	<1,000
	09/26/12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-3	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	<5.0	<100	<20	<1.0	<20	<10	<20	<5.0
	09/26/12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-4R	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	<5.0	<100	<20	<1.0	<20	<10	<20	<5.0
	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
MW-5	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-5R	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
MW-6	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-6R	09/25/12	**28.0J**	<5,000	<500	<500	**1100**	<50	**86.0J**	<500
MW-7	10/26/10	<250	<10,000	<5,000	<500	<5,000	<500	<5,000	<2,500
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-7R	09/25/12	**6.8J**	<1,000	<100	<100	**180**	<10	**150**	<100
MW-8	10/26/10	<500	<20,000	<10,000	<1,000	<10,000	<1,000	<10,000	<5,000
	10/03/11	**210J**	<40,000	<8,000	<400	<8,000	<4,000	<8,000	<2,000
	09/26/12	**180J**	<200,000	<20,000	<20,000	<20,000	<2000	<20,000	<20,000
MW-9R	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	<5.0	<100	<20	<1.0	<20	<10	<20	<5.0
	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
MW-10	10/27/10	**167J**	<10,000	<5,000	<500	<5,000	<500	<5,000	<2,500
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-10R	09/25/12	**370**	<1,000	<100	<100	**5,400**	<10	**290**	<100
MW-11	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-11R	09/26/12	**0.59J**	<1,000L	<100	<100	<100	<10	**120**	<100
MW-12	10/26/10	**65.0**	<200	<100	<10.0	**917**	<10.0	<100	<50.0
	10/03/11	**3.3J**	<100	<20	<1.0	**7.0J**	<10	<20	<5.0
	09/25/12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-13	10/26/10	NS	NS	NS	NS	NS	NS	NS	NS
	10/03/11	<5.0	<100	<20	<1.0	<20	<10	<20	<5.0
	09/25/12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-14	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

Notes:

1. ug/l = micrograms per liter
2. DIPE = Diisopropyl Ether
3. ETBE = Ethyl ter-butyl Ether
4. TAA = tert-Amyl Alcohol
5. TAME = tert-Amyl Methyl Ether
6. TBA = ter-Butyl Alcohol
7. TBF = tert-Butyl Formate
8. NL = Not Located
9. DRY = Well Dry at the time of Sampling
10. "L" vaules indicate LCS/LCSD Failure
11. "S" vaules indicate MS/MSD Failure
12. "B" vaules indicate Parameters detected in Method Blank
13. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

TABLE 3A
GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
PAGE 2 OF 5
SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	DIPE (mg/l)	Ethanol (mg/l)	3,3-Dimethyl-1-butanol (mg/l)	ETBE (mg/l)	TAA (mg/l)	TAME (mg/l)	TBA (mg/l)	TBF (mg/l)
MW-14R	09/25/12	<10	<1,000L	<100	<100	<100	<10	**15.0J**	<100
MW-15	10/26/10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-15R	09/25/12	<10	<1,000L	<100	<100	<100	<10	<100	<100S
MW-16	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	<5.0	<100	<20	<1.0	<20	<10	<20	<5.0
	09/25/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
MW-17	10/26/10	**14.5**	<200	<100	<10.0	**90.5J**	<10.0	<100	<50.0
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-17R	09/25/12	**14.0**	<1,000L	<100	<100	<100	<10	**15.0J**	<100
MW-18	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-18R	09/25/12	**17.0**	<1,000L	<100	<100	<100	<10	<100	<100
MW-19	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	<5.0	<100	<20	<1.0	<20	<10	<20	<5.0
	09/25/12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	<5.0	<100	<20	<1.0	<20	<10	<20	<5.0
	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
MW-21	09/25/12	**70.0**	<1,000L	<100	<100	**190**	<10	**35.0J**	<100
TW-1	10/26/10	**166J**	<10,000	<5,000	<500	<5,000	<500	<5,000	<2,500
	10/03/11	**190J**	<10,000	<2,000	<100	<2,000	<1,000	<2,000	<500
	09/26/12	**180J**	<20,000L	<2,000	<2,000	<2,000	<200	<2,000	<2,000
TW-2	10/26/10	**541**	<20,000	<10,000	<1,000	**6,670J**	<1,000	<10,000	<5,000
	10/03/11	**360J**	<10,000	<2,000	<100	**3,100**	<1,000	<2,000	<500
	09/26/12	**290**	<20,000L	<2,000	<2,000	<2,000	<200	<2,000	<2,000
TW-3	10/26/10	**14.4**	<200	<100	<10.0	**138**	<10.0	<100	<50.0
	10/03/11	**23.0**	<100	<20	<1.0	**130**	<10	<20	<5.0
	09/25/12	**23.0**	<1,000	<100	<100	**540**	<10	**32.0J**	<100
TW-1A	09/26/12	**20.0**	<1,000	<100	<100	**940**	<10	<100	<100
TW-1B	09/27/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-1C	09/27/12	**4.1J**	<1,000	<100	<100	<100	<10	<100	<100
TW-2A	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-2B	09/27/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-2C	09/27/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-3A	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-3B	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100

Notes:

1. ug/l = micrograms per liter
2. DIPE = Diisopropyl Ether
3. ETBE = Ethyl ter-butyl Ether
4. TAA = tert-Amyl Alcohol
5. TAME = tert-Amyl Methyl Ether
6. TBA = ter-Butyl Alcohol
7. TBF = tert-Butyl Formate
8. NL = Not Located
9. DRY = Well Dry at the time of Sampling
10. "L" vaules indicate LCS/LCSD Failure
11. "S" vaules indicate MS/MSD Failure
12. "B" vaules indicate Parameters detected in Method Blank
13. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

TABLE 3A
GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
PAGE 3 OF 5
SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	DIPE (mg/l)	Ethanol (mg/l)	3,3-Dimethyl-1-butanol (mg/l)	ETBE (mg/l)	TAA (mg/l)	TAME (mg/l)	TBA (mg/l)	TBF (mg/l)
TW-3C	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-4A	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-4B	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-4C	09/26/12	<10	<1,000S	<100	<100	<100	<10	<100	<100S
TW-5A	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-5B	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-5C	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-6A	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-6B	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-6C	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
IW-2	10/03/11	**450J**	<50,000	<10,000	<500	**3,600J**	<5,000	<10,000	<2,500
	09/26/12	**760**	<20,000L	<2,000	<2,000	<2,000	<200	**3,000**	<2,000
IW-3	10/03/11	**650J**	<40,000	<8,000	<400	**11,000**	<4,000	<8,000	<2,000
	09/26/12	**660J**	<200,000L	<20,000	<20,000	<20,000	<2,000	<20,000	<20,000
IW-4	10/03/11	**3.4J**	<100	<20	<1.0	**6.7J**	<10	<20	<5.0
	09/26/12	**100**	<1,000L	<100	<100	<100	<10	**360**	<100
IW-5	10/03/11	<2,500	<50,000	<10,000	<500	<10,000	<5,000	<10,000	<2,500
	09/26/12	**120J**	<100,000L	<10,000	<10,000	<10,000	<1,000	<10,000	<10,000
IW-6	10/03/11	<50	<1,000	<200	<10	**110J**	<100	**120J**	<50
	09/25/12	**5.1J**	<1,000L	<100	<100	<100	<10	**150**	<100
IW-8	10/03/11	**21.0J**	<4,000	<800	<40	<800	<400	<800	<200
	09/25/12	**22.0**	<1,000L	<100	<100	<100	<10	<100	<100
IW-9	10/26/10	**8.2J**	<400	<200	<20.0	**168J**	<20.0	<200	<100
	10/03/11	<100	<2,000	<400	<20	<400	<200	<400	<100
	09/25/12	**8.9J**	<1,000L	<100	<100	<100	<10	**150**	<100
IW-10	10/03/11	**28.0J**	<1,000	<200	<10	<200	<100	**170J**	<50
	09/25/12	**18.0**	<1,000L	<100	<100	<100	<10	**200**	<100
IW-11	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-16	10/03/11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	10/03/11	**85.0**	<200	<40	<2.0	**2,900**	<20	**280**	<10
	09/25/12	**110**	<1,000	<100	<100	**4,300**	<10	**400**	<100
IW-19	10/03/11	**42J**	<2,000	<400	<20	**2,000**	<200	**410**	<100
	09/26/12	NL	NL	NL	NL	NL	NL	NL	NL
IW-20	10/03/11	**0.80J**	<100	<20	<1.0	**180**	<10	**26.0**	<5.0
	09/25/12	<10	<1,000L	<100	<100	<100	<10	<100	<100

Notes:

1. ug/l = micrograms per liter
2. DIPE = Diisopropyl Ether
3. ETBE = Ethyl ter-butyl Ether
4. TAA = tert-Amyl Alcohol
5. TAME = tert-Amyl Methyl Ether
6. TBA = ter-Butyl Alcohol
7. TBF = tert-Butyl Formate
8. NL = Not Located
9. DRY = Well Dry at the time of Sampling
10. "L" vaules indicate LCS/LCSD Failure
11. "S" vaules indicate MS/MSD Failure
12. "B" vaules indicate Parameters detected in Method Blank
13. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

TABLE 3A
GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
PAGE 4 OF 5
SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	DIPE (mg/l)	Ethanol (mg/l)	3,3-Dimethyl-1-butanol (mg/l)	ETBE (mg/l)	TAA (mg/l)	TAME (mg/l)	TBA (mg/l)	TBF (mg/l)
WSW-1 (Formally WSW-Smith)	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	<5.0	<100	<20	<1.0	<20	<10	<20	<5.0
	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-2 Pre (Formally WSW-Swift Pre)	10/26/10	**42.0**	<200	<100	<10.0	**506**	<10.0	<100	<50.0
	10/03/11	**41.0**	**61BJ**	<20	<1.0	**740**	<10	<20	<5.0
	09/25/12	**49.0**	<1,000	<100	<100	**990**	<10	**48.0J**	<100
WSW-2 Post (Formally WSW-Swift Post)	10/26/10	**25.5**	<200	**124**	<10.0	**395**	<10.0	<100	<50.0
	10/03/11	**0.44J**	<100	<20	<1.0	**53.0**	<10	**27.0**	<5.0
	09/25/12	**0.71J**	<1,000	<100	<100	**480**	<10	**34.0J**	<100
WSW-3 Pre (Formally WSW-Hill Pre)	10/26/10	**7.8**	<200	<100	<10.0	**66.4J**	<10.0	<100	<50.0
	10/03/11	**19.0**	<100	<20	<1.0	**160**	<10	**10J**	<5.0
	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-3 Post (Formally WSW-Hill Post)	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
	10/03/11	**0.74J**	<100	<20	<1.0	**31.0**	<10	<20	<5.0
	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-4	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-5	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-6	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-7	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-8	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-9	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-10	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-11	09/26/12	<10	<1,000	<100	<100	<100	<10	<100S	<100S
WSW-12	09/26/12	<10	<1,000L	<100	<100	**19.0J**	<10	<100	<100
WSW-13	09/26/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-14	09/26/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-15	09/26/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-16	09/26/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-17	09/26/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-18	09/26/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-19	09/26/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-20	09/26/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-21	09/26/12	<10	<1,000LS	<100S	<100	<100	<10	<100	<100S

Notes:

1. ug/l = micrograms per liter
2. DIPE = Diisopropyl Ether
3. ETBE = Ethyl ter-butyl Ether
4. TAA = tert-Amyl Alcohol
5. TAME = tert-Amyl Methyl Ether
6. TBA = ter-Butyl Alcohol
7. TBF = tert-Butyl Formate
8. NL = Not Located
9. DRY = Well Dry at the time of Sampling
10. "L" vaules indicate LCS/LCSD Failure
11. "S" vaules indicate MS/MSD Failure
12. "B" vaules indicate Parameters detected in Method Blank
13. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

TABLE 3A
GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
PAGE 5 OF 5
SEPTEMBER 25, 26, & 27, 2012 SAMPLING EVENT
SMITH'S GROCERY
YORK, SOUTH CAROLINA
MECI PROJECT NUMBER 12-3850
SCDHEC SITE ID NUMBER 09322

Well Number	Sample Date	DIPE (mg/l)	Ethanol (mg/l)	3,3-Dimethyl-1-butanol (mg/l)	ETBE (mg/l)	TAA (mg/l)	TAME (mg/l)	TBA (mg/l)	TBF (mg/l)
WSW-22	10/26/10	<5.0	<200	<100	<10.0	<100	<10.0	<100	<50.0
(Formally WSW-Crock)	10/03/11	<5.0	<100	<20	<1.0	<20	<10	<20	<5.0
	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-23	09/26/12	<10	<1,000S	<100S	<100	<100S	<10	<100S	<100S
WSW-24 Pre	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-24 Post	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-25	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-26	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-27	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-28	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-29	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-30	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-31	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-32	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-33	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-34	09/25/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-35	09/25/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-36	09/25/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-37	09/25/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-38	09/25/12	<10	<1,000L	<100	<100	<100	<10	<100	<100
MW-1R Duplicate	09/26/12	**44.0J**	<20,000L	<2,000	<2,000	<2,000	<200	<2,000	<2,000
MW-5 Duplicate	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
MW-8 Duplicate	09/26/12	**200J**	<100,000L	<10,000	<10,000	<10,000	<1,000	<10,000	<10,000
MW-10 Duplicate	09/25/12	**340**	<20,000	<2,000	<2,000	**7,300**	<200	**330J**	<2,000
Field Blank #1	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
Field Blank #2	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100
Trip Blank #1	09/25/12	<10	<1,000	<100	<100	<100	<10	<100	<100
Trip Blank #2	09/26/12	<10	<1,000	<100	<100	<100	<10	<100	<100

Notes:

1. ug/l = micrograms per liter
2. DIPE = Diisopropyl Ether
3. ETBE = Ethyl ter-butyl Ether
4. TAA = tert-Amyl Alcohol
5. TAME = tert-Amyl Methyl Ether
6. TBA = ter-Butyl Alcohol
7. TBF = tert-Butyl Formate
8. NL = Not Located
9. DRY = Well Dry at the time of Sampling
10. "L" vaules indicate LCS/LCSD Failure
11. "S" vaules indicate MS/MSD Failure
12. "B" vaules indicate Parameters detected in Method Blank
13. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

SUMMARY of SLUG TEST (Page 1 of 2)

SOUTH CAROLINA
Department of Health and Environmental Control (DHEC)

Site Data

SITE ID # 09322 COUNTY York

FACILITY NAME Smith's Grocery

SLUG DATA

See Appendix _____ Table _____ Figure _____ for a list of all data measurements.
(water level logs, etc.)(Complete as appropriate).
Water Level Recovery Data was measured by ORS Interface Probe .
(Hermit Data Logger, Manually with Water Level Indicator, etc.)(List Method)
Complete the following table for each well tested.
COMPLETE A SECOND SHEET IF MORE THAN FOUR WELLS ARE TESTED

Slug Test Conducted in well(s) number	MW-7R	MW-11R		
Initial Rise/Drawdown in well (feet)	4.32	0.96		
Radius of well casing (feet)	0.083	0.083		
Effective Radius of Well (feet)	0.33	0.33		
Static Saturated Aquifer Thickness (feet)	6.60	8.67		
Length of Well Screen (feet)	10	10		
Static Height of Water Column in Well (ft)	6.60	8.67		

Calculations

See Appendix _____ Table _____ Figure _____ for calculations
The method for aquifer calculations was NAVFAC
Calculated values by well were as follows:

Slug Test Conducted in Well(s) number	MW-7R	MW-11R		
Hydraulic Conductivity	2.32E-06	1.04E-04		cm/sec

Thickness of the aquifer used to calculate hydraulic conductivity was N/A feet.
The aquifer is _____ confined _____ semi-confined _____ water table (Check as Appropriate).
SEE SHEET 3
The estimated seepage velocity is 3.93 feet per year based on a hydraulic conductivity of 5.32E-05 cm/sec, a hydraulic gradient of 2.14E-02 ft/ft, and a porosity of 30 percent for SILT soil.

SUMMARY of SLUG TEST

Groundwater Seepage Velocity Calculations (Page 2 of 2)

SOUTH CAROLINA
Department of Health and Environmental Control (DHEC)

Site Data

SITE ID # 09322 COUNTY York

FACILITY NAME Smith's Grocery

Hydraulic Conductivity (average)

Hydraulic Conductivity Average = 5.32E-05 cm/sec
(MW-1 & MW-3)
1.51E-01 ft./day

1.05E-04 ft./min

Groundwater Seepage Velocity

V = (Ki)/(Ne)
(ft./day)

* Enter Values in Shaded Areas Only

where:

K = Hydraulic Conductivity (ft./day)
I = Hydraulic Gradient (ft./ft.)
Ne = Effective Permeability

K = 1.51E-01 ft./day
I = 2.14E-02 ft./ft.
Ne = 0.30

V = **1.1E-02** ft./day **3.93** ft./year

Groundwater Seepage Velocity Calculations

TABLE 5
SITE CONCEPTUAL MODEL AND POSSIBLE EXPOSURE POINTS
(CURRENT LAND USE)

Potentially Exposed Population	Exposure Route, Medium, and Exposure Point	Pathway Selected for Evaluation?	Reason for Selection or Nonselection
Off-site Resident	Ingestion of groundwater from impacted water well	Yes	Water supply wells identified within search radius
	Direct contact with surface soil	Yes	Some potentially impacted soil not covered with pavement
	Inhalation while showering	Yes	Water supply wells identified within search radius
	Dermal contact while showering	Yes	Water supply wells identified within search radius
	Inhalation of volatiles	Yes	Volatile emissions possible from buried utility conduits
	Ignition of vapors	Yes	Ignition of vapors emanating from buried utility conduits
	Dermal contact with surface water	Yes	Surface waters identified within search radius
On-site Resident	Ingestion of groundwater	No	Site is not residential
	Direct contact with surface soil	No	N/A
	Inhalation while showering	No	N/A
	Dermal contact while showering	No	N/A
	Inhalation of volatiles	No	N/A
	Ignition of vapors	No	N/A
Worker	Ingestion of ground water	Yes	Water supply wells identified within search radius
	Direct contact with surface soil	Yes	Some potentially impacted soil not covered with pavement
	Inhalation while showering	Yes	Water supply wells identified within search radius
	Dermal contact while showering	Yes	Water supply wells identified within search radius
	Inhalation of volatiles	Yes	Volatile emissions possible from buried utility conduits
	Ignition of vapors	Yes	Ignition of vapors emanating from buried utility conduits
Visitor	Ingestion of ground water	Yes	Water supply wells identified within search radius
	Direct contact with surface soil	Yes	Some potentially impacted soil covered with pavement
	Inhalation while showering	Yes	Water supply wells identified within search radius
	Dermal contact while showering	Yes	Water supply wells identified within search radius
	Inhalation of volatiles	Yes	Volatile emissions possible from buried utility conduits
	Ignition of vapors	Yes	Ignition of vapors emanating from buried utility conduits
	Dermal contact with surface water	Yes	Surface waters identified within search radius

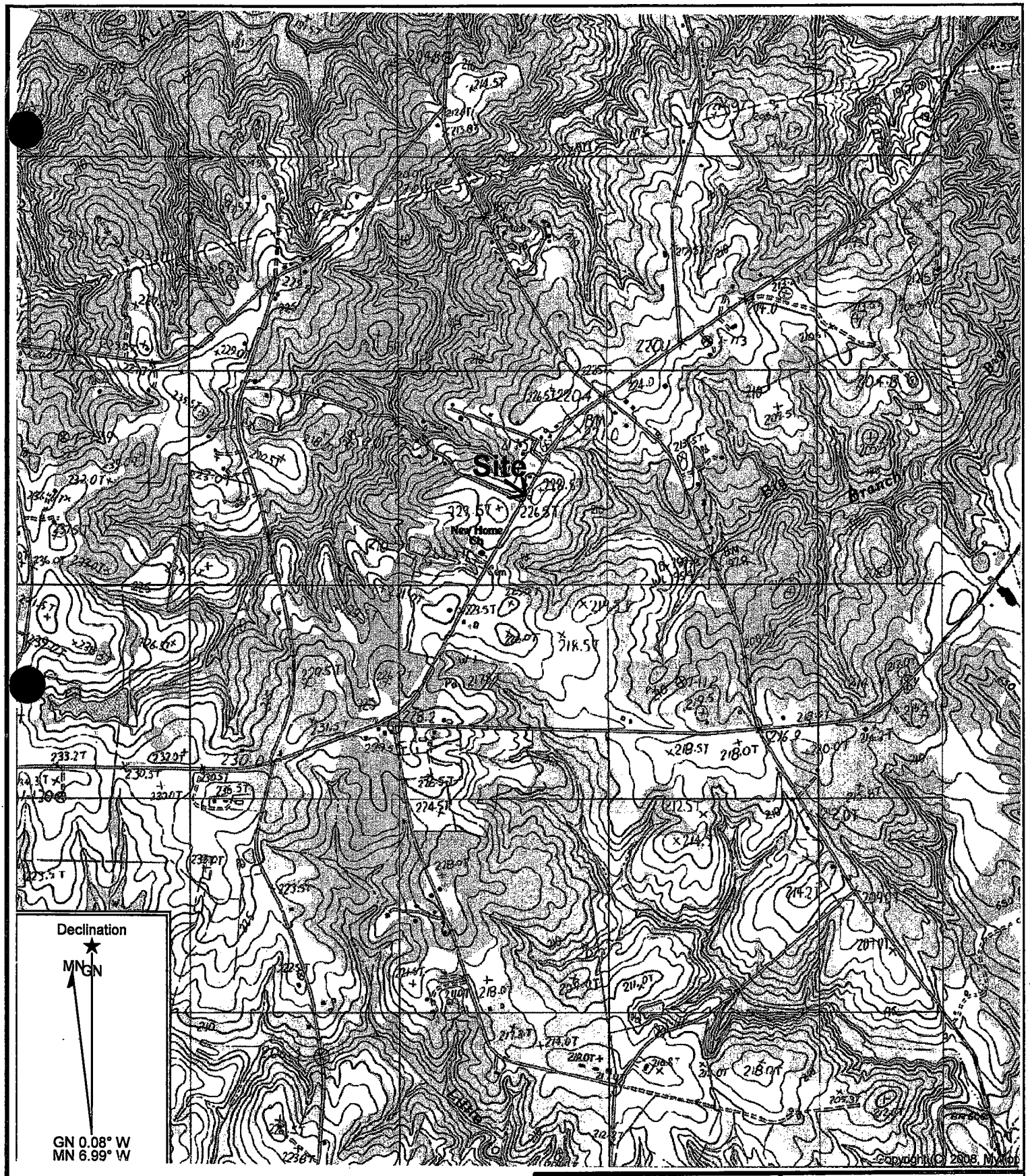
TABLE 5 (cont'd)

SITE CONCEPTUAL MODEL AND POSSIBLE EXPOSURE POINTS

(FUTURE LAND USE)

Potentially Exposed Population	Exposure Route, Medium, and Exposure Point	Pathway Selected for Evaluation?	Reason for Selection or Nonselection
Off-site Resident	Ingestion of groundwater from impacted water well	Yes	Water supply wells identified within search radius
	Direct contact with surface soil	Yes	Some potentially impacted soil not covered with pavement
	Inhalation while showering	Yes	Water supply wells identified within search radius
	Dermal contact while showering	Yes	Water supply wells identified within search radius
	Inhalation of volatiles	Yes	Volatile emissions possible from buried utility conduits
	Ignition of vapors	Yes	Ignition of vapors emanating from buried utility conduits
	Dermal contact with surface water	Yes	Surface waters identified within search radius
On-site Resident	Ingestion of groundwater	No	Site is not residential
	Direct contact with surface soil	No	N/A
	Inhalation while showering	No	N/A
	Dermal contact while showering	No	N/A
	Inhalation of volatiles	No	N/A
	Ignition of vapors	No	N/A
Worker	Ingestion of ground water	Yes	Water supply wells identified within search radius
	Direct contact with surface soil	Yes	Some potentially impacted soil not covered with pavement
	Inhalation while showering	Yes	Water supply wells identified within search radius
	Dermal contact while showering	Yes	Water supply wells identified within search radius
	Inhalation of volatiles	Yes	Volatile emissions possible from buried utility conduits
	Ignition of vapors	Yes	Ignition of vapors emanating from buried utility conduits
Visitor	Ingestion of ground water	Yes	Water supply wells identified within search radius
	Direct contact with surface soil	Yes	Some potentially impacted soil covered with pavement
	Inhalation while showering	Yes	Water supply wells identified within search radius
	Dermal contact while showering	Yes	Water supply wells identified within search radius
	Inhalation of volatiles	Yes	Volatile emissions possible from buried utility conduits
	Ignition of vapors	Yes	Ignition of vapors emanating from buried utility conduits
	Dermal contact with surface water	Yes	Surface waters identified within search radius

FIGURES



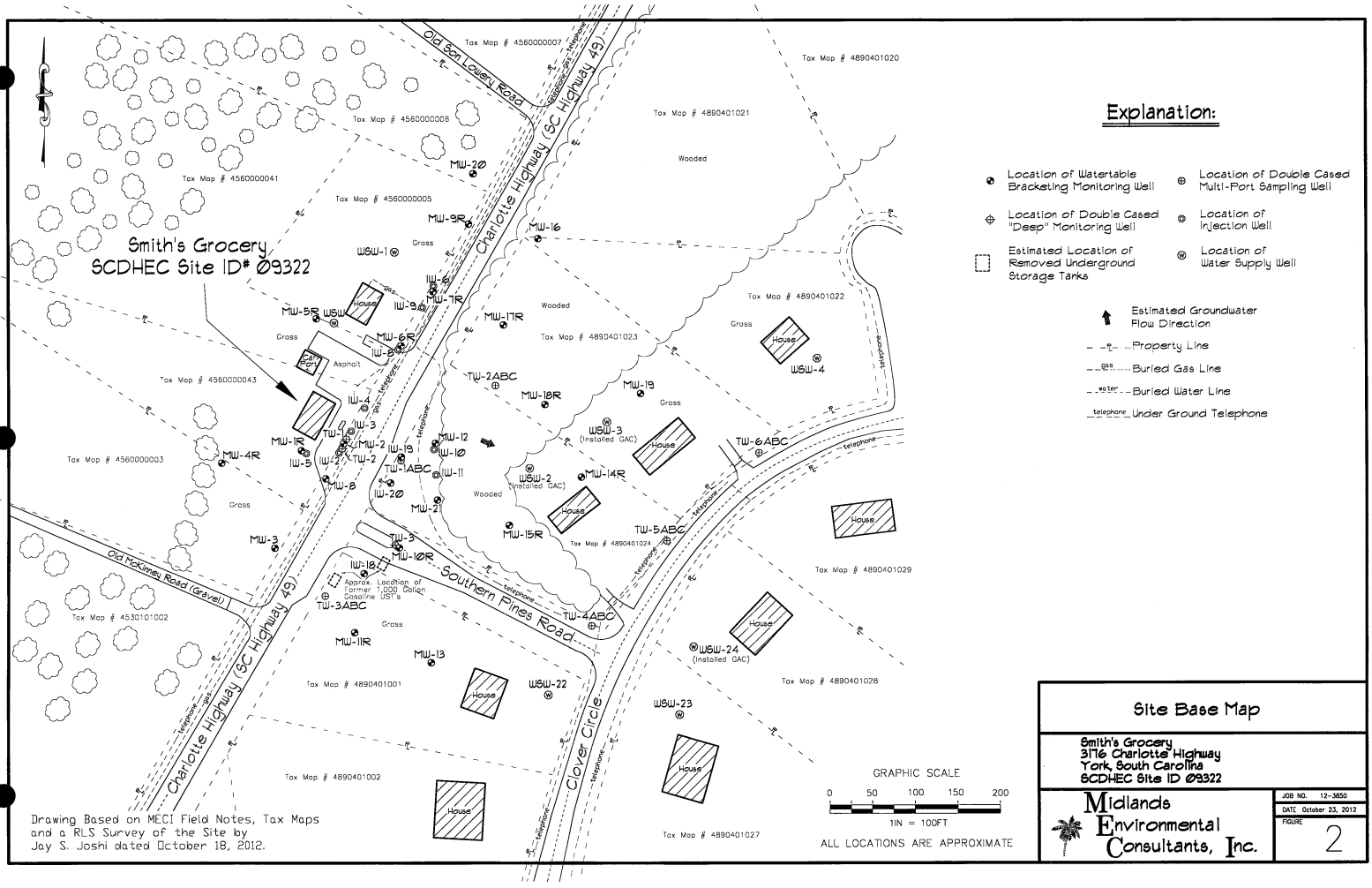
GRAPHIC SCALE

0 1000 2000 4000

1IN = 2000FT

Reference: Clover, South Carolina
USGS 7.5 Min. Quad
Countour Interval – 3 Meters

Midlands Environmental Consultants, Inc.	Site Location
Smith's Grocery South Carolina Highway 49, Clover, SC SCDHEC Site ID# 09322	
Figure 1	MECI 12-3850



Explanation:

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased "Deep" Monitoring Well
- Estimated Location of Removed Underground Storage Tanks
- Location of Double Cased Multi-Port Sampling Well
- Location of Injection Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Under Ground Telephone

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

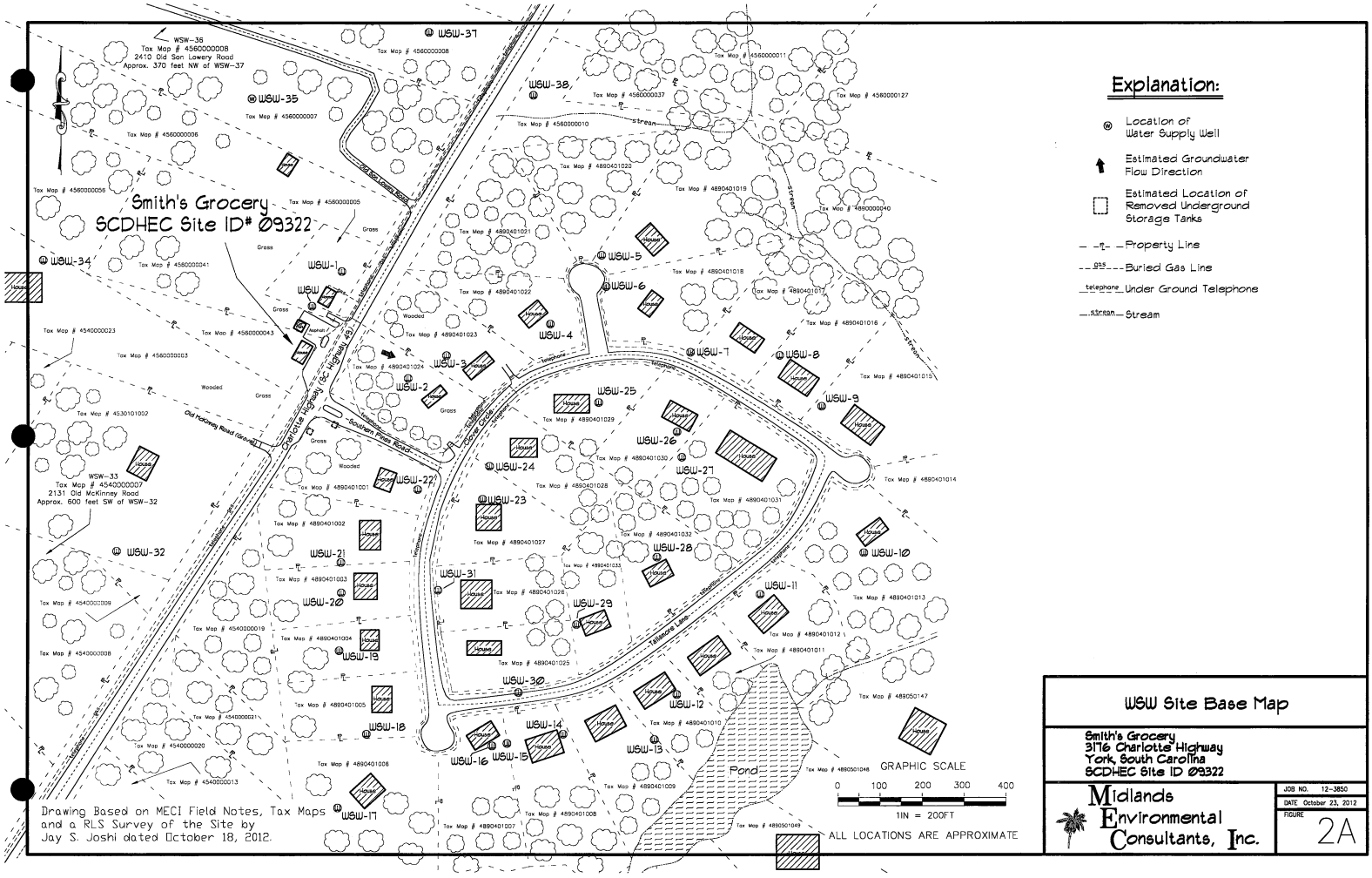
Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated October 18, 2012.

Site Base Map

Smith's Grocery
3716 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3650
DATE October 23, 2012
FIGURE 2



Explanation:

- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Estimated Location of Removed Underground Storage Tanks
- Property Line
- Buried Gas Line
- Under Ground Telephone
- Stream

WSW Site Base Map

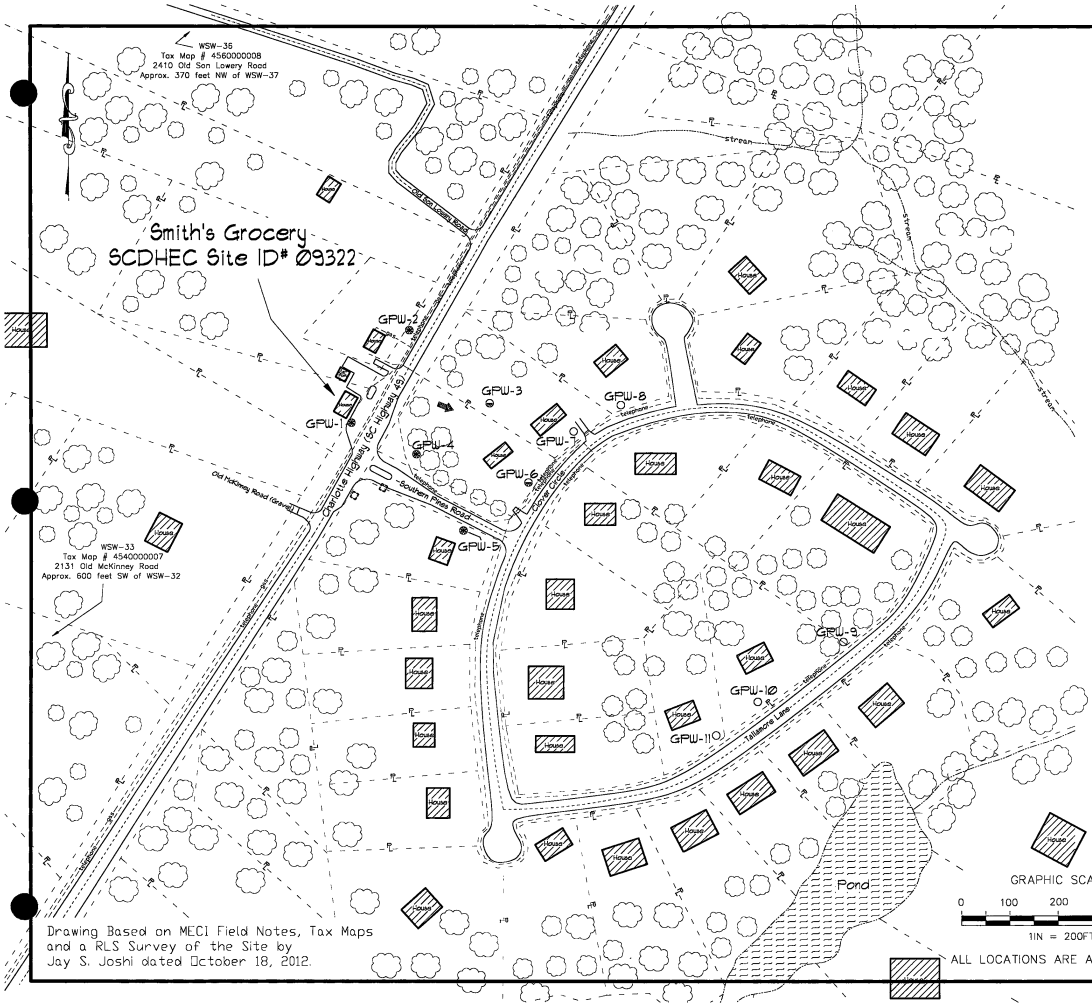
Smith's Grocery
3176 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 2A

Soil Samples for chemical analysis were not obtained during this assessment. In order to conform with formatting guidelines provided by the SCDHEC UST Management Division Programmatic Quality Assurance Program Plan (QAPP), this filler Figure is included to provide report continuity.

Midlands Environmental Consultants, Inc.	Soil CoC Site Map
Site Name Site Location, South Carolina SCDHEC Site ID: *****	
Figure 3	MECI **-****



Explanation:

- ◉ Field Screening Location CoC's Detected Above RBSL's
- ⊖ Field Screening Location CoC's Detected Below RBSL's
- ○ Field Screening Location CoC's Not Detected

Field Screening Results

Sample #	Sample Depth (ft)	Total BTEX (ug/l)	Naphthalene (ug/l)	MTBE (ug/l)	12 DCA (ug/l)	EDB (ug/l)
GPW-1	68-72PR	3,930E	130	27	NT	NT
GPW-2	62-66PR	72.1	3.8J	<5.0	NT	NT
GPW-3	66-70PR	0.91J	<5.0	3.3J	NT	NT
GPW-4	76-80PR	591.8EJ	6.6	<5.0	NT	NT
GPW-5	71-75PR	159	2.1J	<5.0	NT	NT
GPW-6	71-75PR	0.68J	<5.0	<5.0	NT	<0.020
GPW-7	71-75PR	BDL	<5.0	<5.0	NT	<0.019
GPW-8	71-75PR	BDL	<5.0	<5.0	NT	<0.020
GPW-9	31-35PR	BDL	<5.0	<5.0	NT	<0.019
GPW-10	31-35PR	BDL	<5.0	<5.0	NT	<0.020
GPW-11	36-40PR	BDL	<5.0	<5.0	NT	<0.019

Notes: BDL = Below Detection Limits

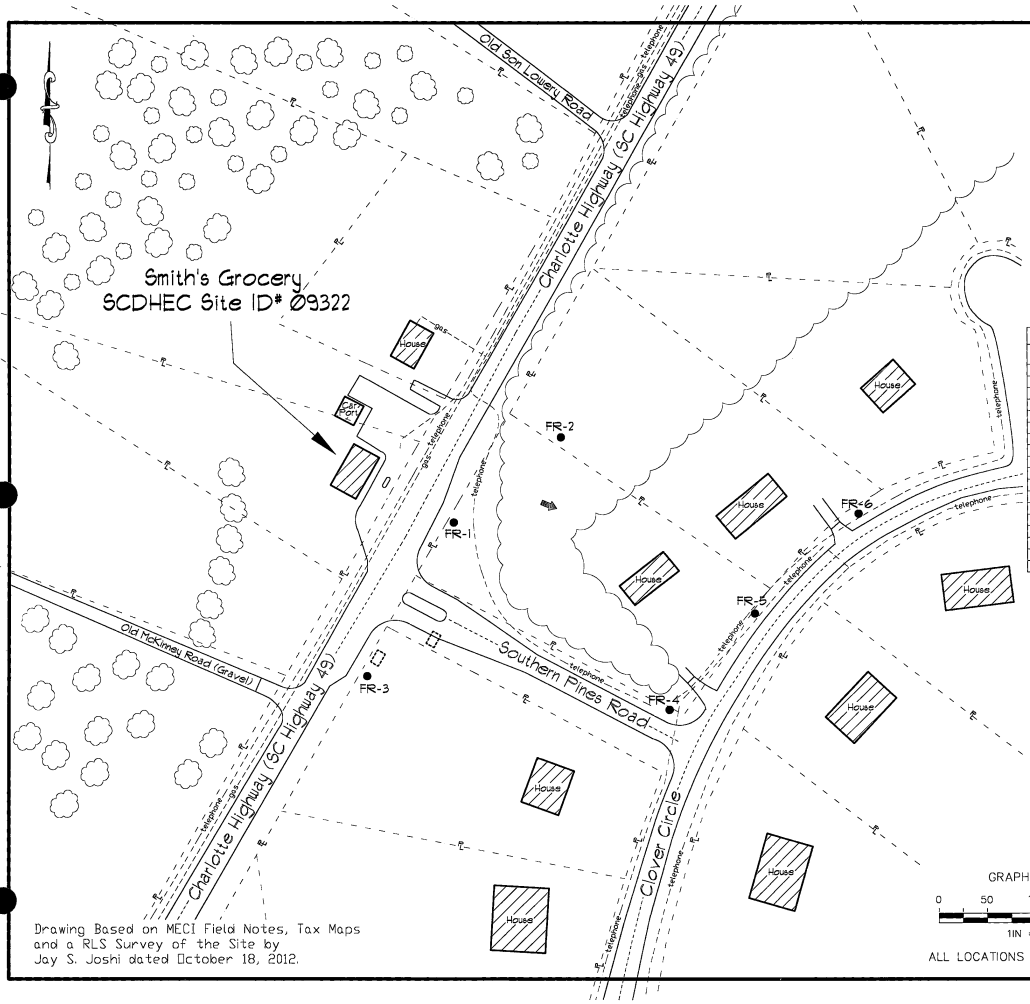
"J" Values report concentrations that are above method detection limits (MDL) but below actual reporting limits (RL).

Field Screening Results (Direct Push)

Smith's Grocery
3716 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 3A



Explanation:

- Location of Fractured Rock Field Screening
- Estimated Groundwater Flow Direction
- Estimated Location of Removed Underground Storage Tanks

Fractured Rock Field Screening Results

Sample #	Sample Depth (ft.)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	Naphthalene (ug/l)	MTBE (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
FR-1	120'	2,400	<20	<20	450	2,850	31	15J	<20	0.041P
FR-1	161'	17	<1.0	<1.0	5.0	22.0	<1.0	<1.0	<1.0	<0.020
FR-1	200'	1,900	<10.0	<10.0	150	2,050	7.1J	14	<10.0	0.051
FR-2	137'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
FR-2	160'	2.7	<1.0	<1.0	1.2	3.9	<1.0	<1.0	<1.0	<0.020
FR-2	203'	2.1	<1.0	<1.0	2.0	4.1	<1.0	<1.0	<1.0	<0.020
FR-3	135'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.022
FR-3	167'	7.7	<1.0	<1.0	5.3	13	<1.0	<1.0	<1.0	<0.019
FR-3	198'	30	<1.0	<1.0	9.0	39.0	<1.0	<1.0	<1.0	<0.020
FR-4	140'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.022
FR-4	170'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.023
FR-4	200'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
FR-5	120'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.065
FR-5	157'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.85J	0.065
FR-5	197'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.87J	0.077
FR-6	118'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
FR-6	153'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.021
FR-6	200'	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020

Notes: BDL = Below Detection Limits

"J" Values report concentrations that are above method detection limits (MDL) but below actual reporting limits (RL).

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Field Screening Results (Fractured Rock)

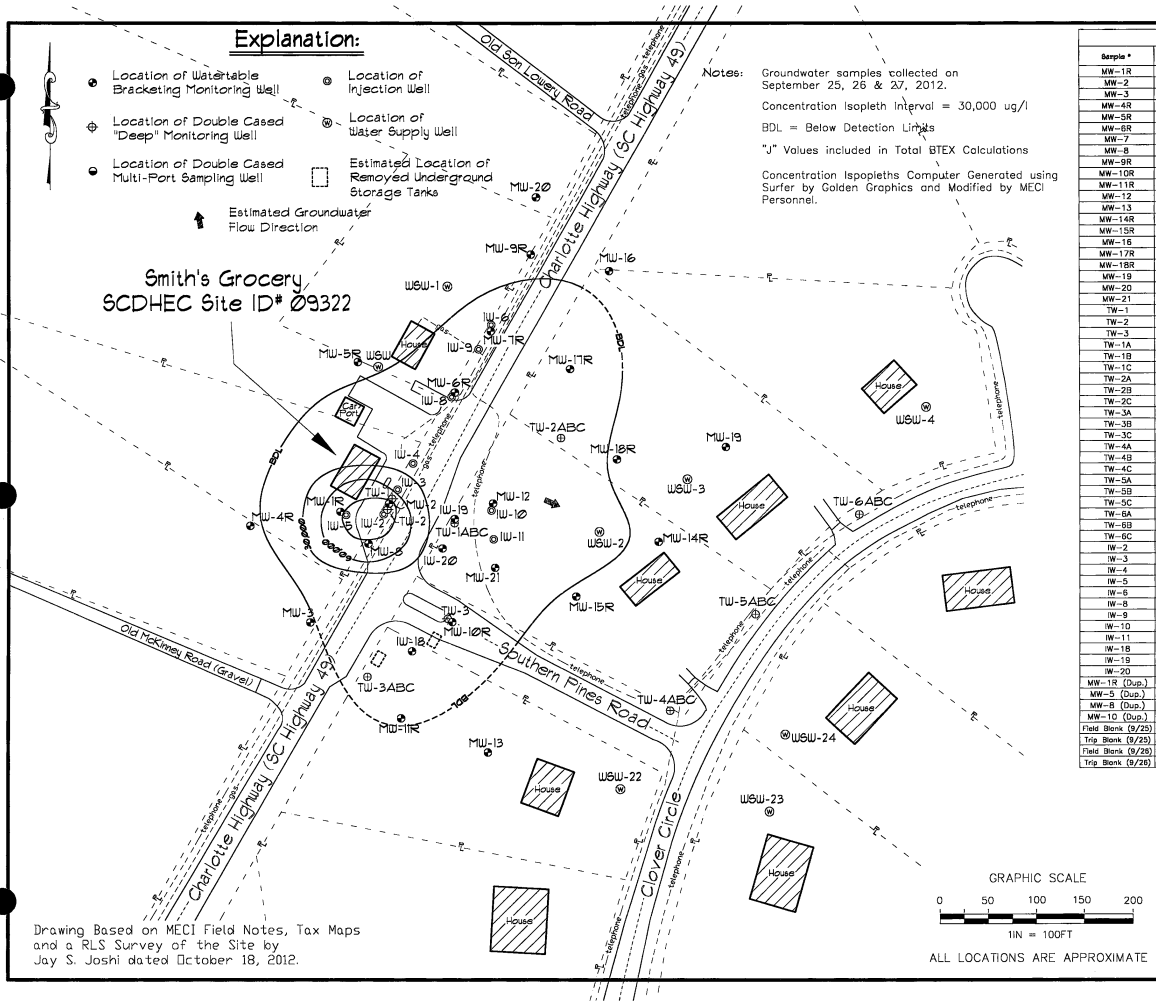
Smith's Grocery
3116 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850

DATE October 23, 2012

FIGURE 3B



Notes:

Groundwater samples collected on September 25, 26 & 27, 2012.

Concentration Isopleth Interval = 30,000 ug/l

BDL = Below Detection Limits

"J" Values included in Total BTEX Calculations

Concentration Ispopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated October 18, 2012.

COC Concentration Data

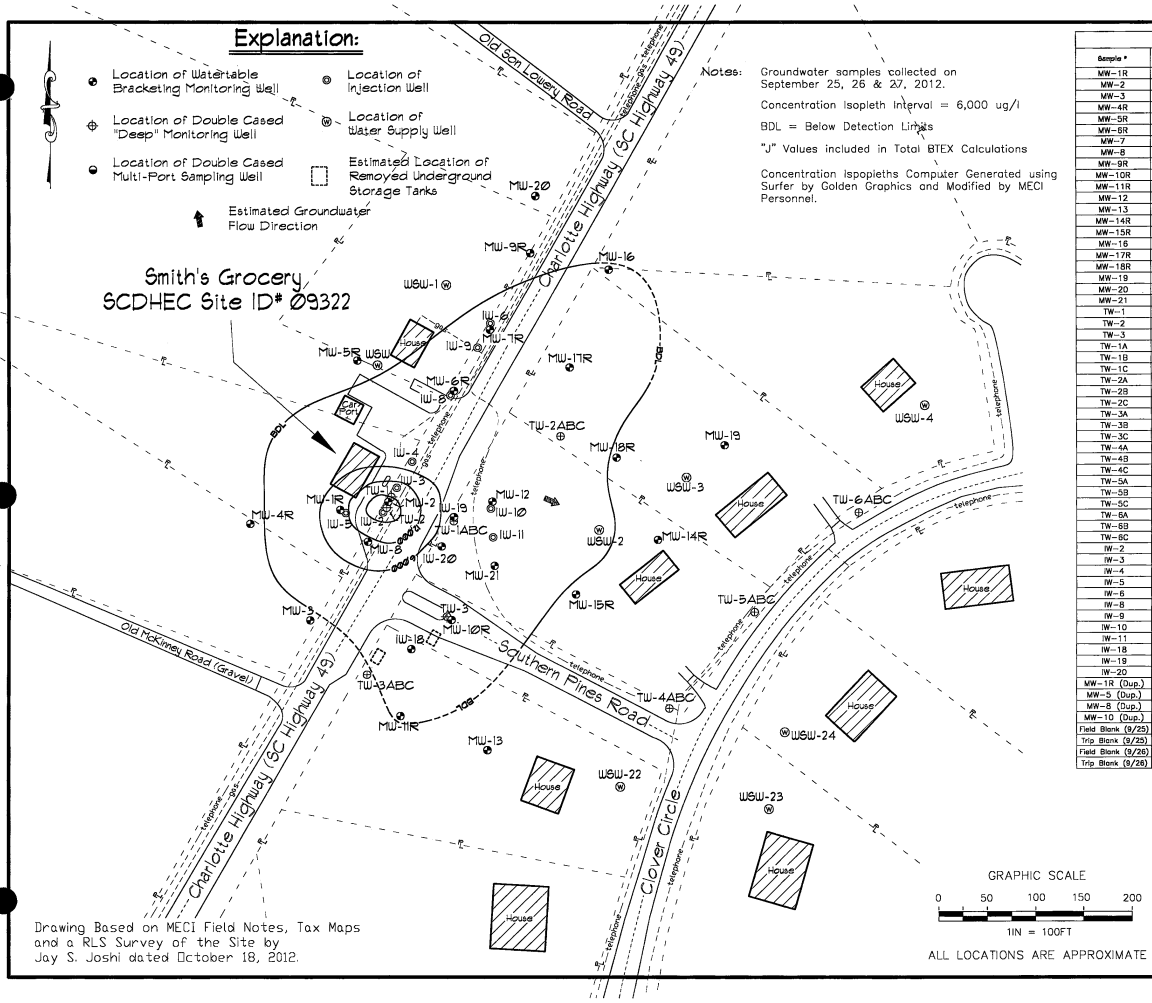
Sample *	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	Naphthalene (ug/l)	MTBE (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
MW-1R	7,200	33,000	5,800	33,000	79,000	1,000	<50	130	18
MW-2	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-3	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-4R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-5R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-6R	2,000	150	1,200	4,200	7,550	350	<5.0	40	2.0
MW-7	200	12	15	1,000	1,227	27	<1.0	5.8	<0.019
MW-8	9,300	47,000	4,600	26,000	86,900	960	<200	210	14
MW-9R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.025
MW-10R	3,100	3,500	2,200	2,400	11,200	250	<1.0	260	25
MW-11R	2.8	0.34J	4.4	64	71.54J	3.3	<1.0	<1.0	0.051
MW-12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-13	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-14R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-15R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	12	0.76
MW-16	4.9	<1.0	<1.0	4.8	9.7	1.1	<1.0	<1.0	0.025
MW-17R	45	<1.0	<1.0	29	74	4.2	2.8	3.6	0.098
MW-18R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	19	1.8
MW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
MW-21	34	0.40J	1.1	14	49.5J	<1.0	<1.0	31	0.52
TW-1	12,000	11,000	3,000	15,000	41,000	880	48	<20	13
TW-2	6,200	16,000	1,300	6,400	29,900	390	120	<20	<0.019
TW-3	330	17	7.3	52	408.3	20	<1.0	<1.0	0.64
TW-1A	1,700	1.3	0.69J	610	2,311.99J	84	8.8	<1.0	0.036
TW-1B	17	<1.0	<1.0	3.7	20.7	0.71J	<1.0	<1.0	<0.019
TW-1C	25	<1.0	<1.0	2.9	27.9	0.52J	1.6	<1.0	<0.019
TW-2A	0.19J	<1.0	<1.0	<1.0	0.19J	<1.0	<1.0	<1.0	<0.019
TW-2B	8.7	<1.0	<1.0	0.81J	9.51J	0.42J	<1.0	<1.0	<0.019
TW-2C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.023
TW-3B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-4A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.76J	0.034
TW-4B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.032
TW-4C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.034
TW-5C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-6A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-6B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.60J	0.038
TW-6C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
IW-2	25,000	60,000	3,600	26,000	114,600	870	290	<20	33
IW-3	14,000	27,000	2,400	13,000	56,400	640	410	<200	90
IW-4	4,100	9.1	160	1,100	5,369.1	190	46	<1.0	<0.020
IW-5	12,000	60,000	4,200	25,000	101,200	860	<100	<100	3.9
IW-6	180	18	25	1,500	1,723	370	<1.0	<1.0	<0.020
IW-8	2,000	35	2,200	5,100	9,335	600	<1.0	<1.0	1.4PQ
IW-9	490	57	1,300	4,700	6,547	390	<1.0	<1.0	0.15
IW-10	300	6.4	100	750	1,156.4	78	<1.0	<1.0	NT
IW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	770	<1.0	390	110	1,270	66	<1.0	<1.0	0.41
IW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-20	1.8	1.2	2.1	16	21.1	2.6	<1.0	<1.0	<0.025
MW-1R (Dup.)	6,600	34,000	5,500	36,000	82,100	990	<20	<20	17
MW-5 (Dup.)	0.14J	<1.0	<1.0	<1.0	0.14J	<1.0	<1.0	<1.0	<0.020
MW-8 (Dup.)	9,500	55,000	4,900	30,000	99,400	1,100	55J	<100	14Q
MW-10 (Dup.)	6,100	3,900	2,500	9,900	22,400	370	<20	<20	18
Field Blank (9/25)	<1.0	<1.0	<1.0	0.34J	0.34J	2.5B	<1.0	<1.0	<0.019
Trip Blank (9/25)	<1.0	<1.0	<1.0	<1.0	BDL	0.46BJ	<1.0	<1.0	NT
Field Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	0.84BJ	<1.0	<1.0	<0.020
Trip Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	NT

Groundwater CoC Site Map
(Total BTEX Isopleth)

Smith's Grocery
3716 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 4



Notes:

Groundwater samples collected on September 25, 26 & 27, 2012.

Concentration Isopleth Interval = 6,000 ug/l

BDL = Below Detection Limits

"J" Values included in Total BTEX Calculations

Concentration Ispopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated October 18, 2012.

COC Concentration Data

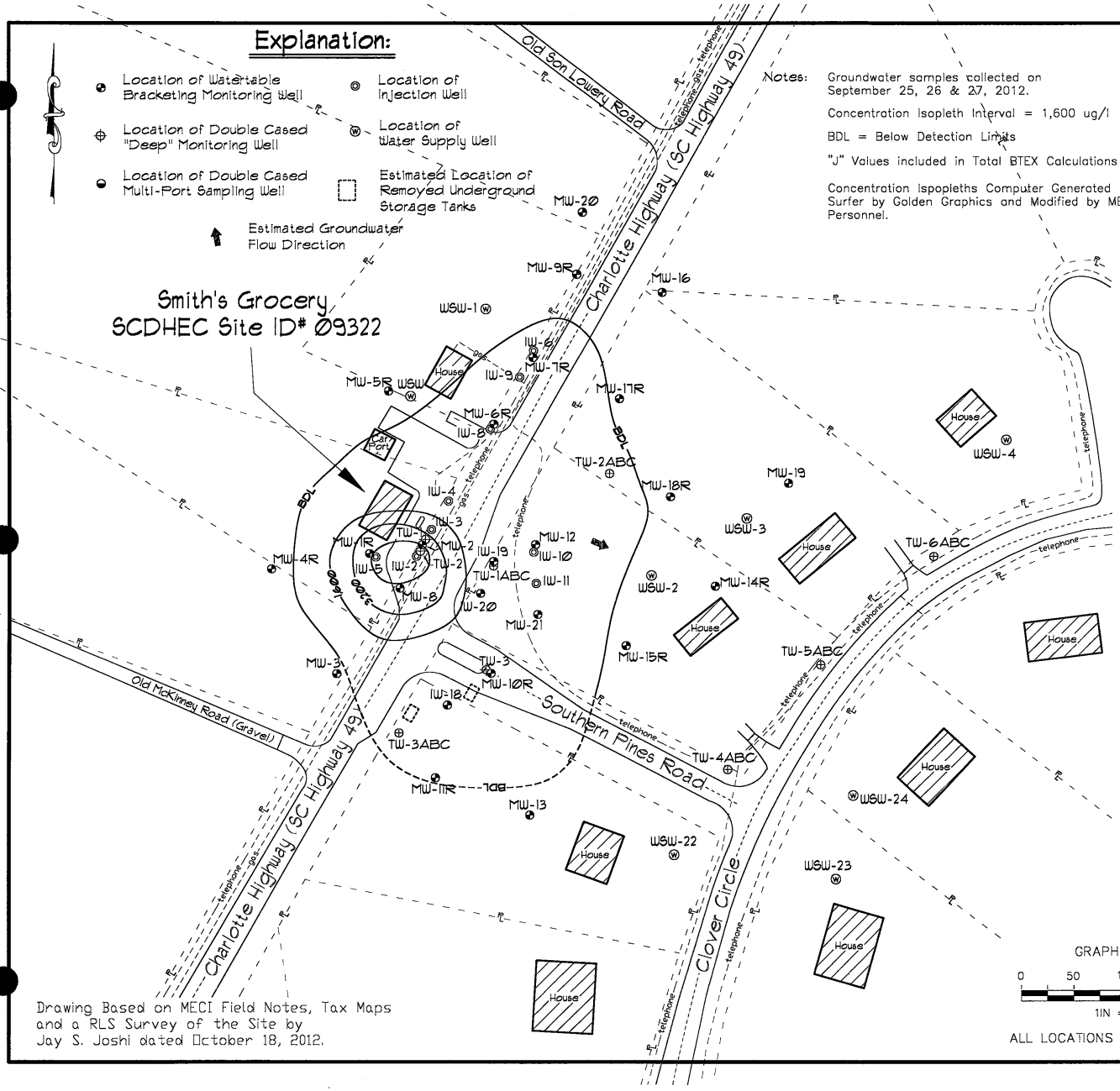
Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	Naphthalene (ug/l)	MTBE (ug/l)	12 DCA (ug/l)	EDB (ug/l)
MW-1R	7,200	33,000	5,800	33,000	79,000	1,000	<50	130	16
MW-2	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-3	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-4R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-5R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-6R	2,000	150	1,200	4,200	7,550	350	<5.0	40	2.0
MW-7	200	12	15	1,000	1,227	27	<1.0	5.8	<0.019
MW-8	9,300	47,000	4,800	26,000	86,900	960	<200	210	14
MW-9R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.025
MW-10R	3,100	3,500	2,200	2,400	11,200	250	<1.0	260	25
MW-11R	2.8	0.34J	4.4	64	71.54J	3.3	<1.0	<1.0	0.051
MW-12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-13	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-14R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-15R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	12	0.76
MW-16	4.9	<1.0	<1.0	4.8	9.7	1.1	<1.0	<1.0	0.025
MW-17R	45	<1.0	<1.0	29	74	4.2	2.8	3.6	0.095
MW-18R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	19	1.8
MW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
MW-21	34	0.40J	1.1	14	49.5J	<1.0	<1.0	31	0.52
TW-1	12,000	11,000	3,000	15,000	41,000	680	48	<20	13
TW-2	6,200	16,000	1,300	6,400	29,900	390	120	<20	<0.019
TW-3	330	17	7.3	52	406.3	20	<1.0	<1.0	0.64
TW-1A	1,700	1.3	0.69J	610	2,311.99J	84	8.8	<1.0	0.036
TW-1B	17	<1.0	<1.0	3.7	20.7	0.71J	<1.0	<1.0	<0.019
TW-1C	25	<1.0	<1.0	2.9	27.9	0.52J	1.6	<1.0	<0.019
TW-2A	0.19J	<1.0	<1.0	<1.0	0.19J	<1.0	<1.0	<1.0	<0.019
TW-2B	8.7	<1.0	<1.0	0.81J	9.51J	0.42J	<1.0	<1.0	<0.019
TW-2C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.023
TW-3B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-4A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.70J	0.034
TW-4B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.032
TW-4C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.034
TW-5C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.025
TW-6A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-6B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.80J	0.038
TW-6C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
IW-2	25,000	60,000	3,600	26,000	114,600	870	290	<20	33
IW-3	14,000	27,000	2,400	13,000	56,400	640	410	<200	90
IW-4	4,100	9.1	160	1,100	5,369.1	190	46	<1.0	<0.020
IW-5	12,000	60,000	4,200	25,000	101,200	860	<100	<100	3.9
IW-6	180	18	25	1,500	1,723	370	<1.0	<1.0	<0.020
IW-8	2,000	35	2,200	5,100	9,335	600	<1.0	<1.0	1.4PQ
IW-9	480	57	1,300	4,700	6,547	390	<1.0	<1.0	0.15
IW-10	300	6.4	100	750	1,156.4	78	<1.0	<1.0	NT
IW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	770	<1.0	390	110	1,270	65	<1.0	<1.0	0.41
IW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-20	1.8	1.2	2.1	16	21.1	2.6	<1.0	<1.0	<0.025
MW-1R (Dup.)	6,600	34,000	5,300	36,000	82,100	990	<20	<20	17
MW-5 (Dup.)	0.14J	<1.0	<1.0	<1.0	0.14J	<1.0	<1.0	<1.0	<0.020
MW-8 (Dup.)	9,500	55,000	4,900	30,000	98,400	1,100	55J	<100	14Q
MW-10 (Dup.)	6,100	3,900	2,500	9,900	22,400	370	<20	<20	18
Field Blank (9/25)	<1.0	<1.0	<1.0	0.34J	0.34J	2.5B	<1.0	<1.0	<0.019
Trip Blank (9/25)	<1.0	<1.0	<1.0	<1.0	BDL	0.46BJ	<1.0	<1.0	NT
Field Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	0.84BJ	<1.0	<1.0	<0.020
Trip Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	NT

Groundwater CoC Site Map
(Benzene Isopleth)

Smith's Grocery
3116 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 4A



Notes:

Groundwater samples collected on September 25, 26 & 27, 2012.

Concentration Isopleth Interval = 1,600 ug/l

BDL = Below Detection Limits

"J" Values included in Total BTEX Calculations

Concentration Ispopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

COC Concentration Data

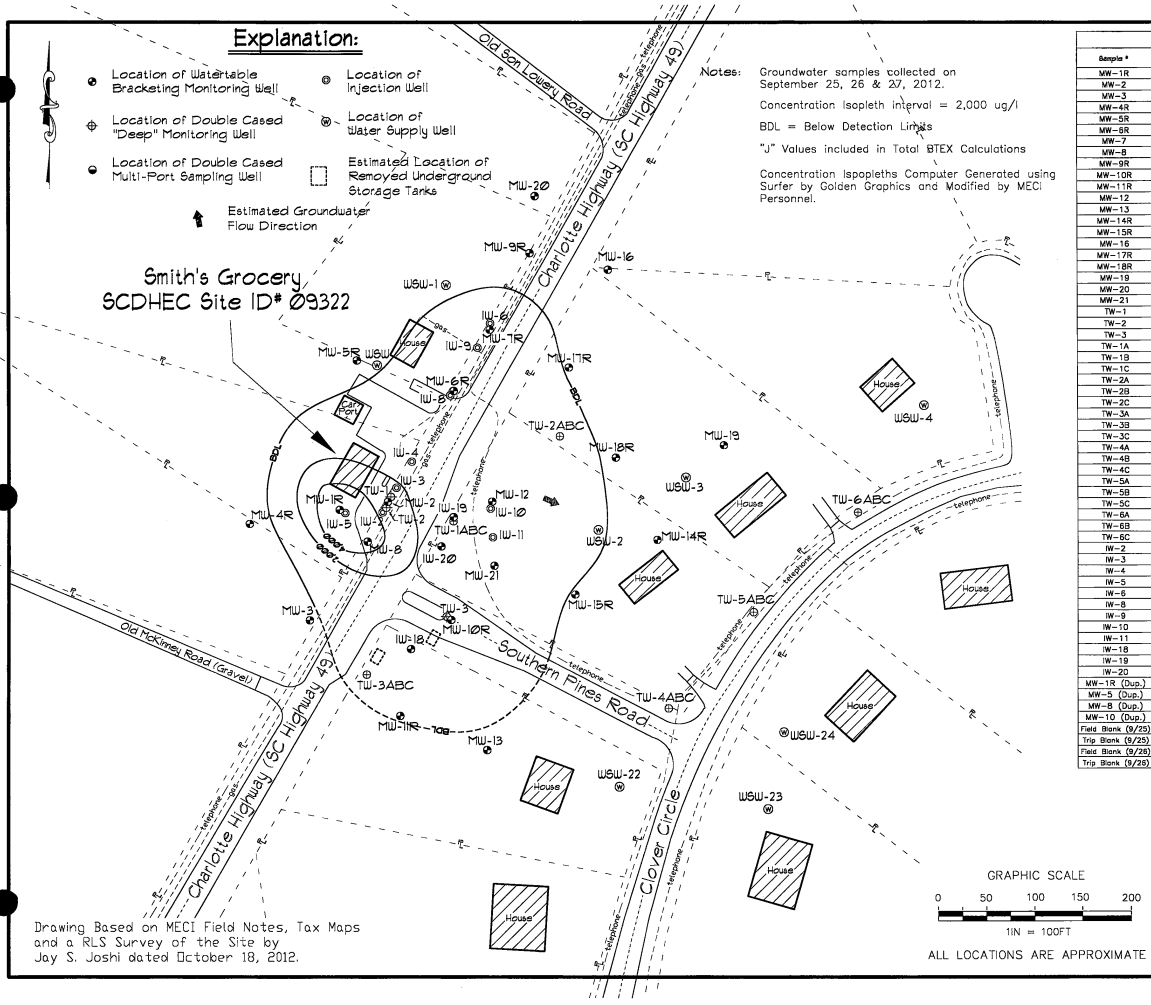
Sample *	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	Naphthalene (ug/l)	MTBE (ug/l)	12 DCA (ug/l)	EDB (ug/l)
MW-1R	7,200	33,000	5,800	33,000	79,000	1,000	<50	130	16
MW-2	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-3	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-4R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-5R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-6R	2,000	150	1,200	4,200	7,550	350	<5.0	40	2.0
MW-7	200	12	15	1,000	1,227	27	<1.0	5.8	<0.019
MW-8	9,300	47,000	4,600	26,000	86,900	960	<200	210	14
MW-9R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.025
MW-10R	3,100	3,500	2,200	2,400	11,200	250	<1.0	260	25
MW-11R	2.8	0.34J	4.4	64	71.54J	3.3	<1.0	<1.0	0.051
MW-12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-13	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-14R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-15R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	12	0.76
MW-16	4.9	<1.0	<1.0	4.8	9.7	1.1	<1.0	<1.0	0.025
MW-17R	45	<1.0	<1.0	29	74	4.2	2.8	3.6	0.096
MW-18R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	19	1.8
MW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
MW-21	34	0.40J	1.1	14	49.5J	<1.0	<1.0	31	0.52
TW-1	12,000	11,000	3,000	15,000	41,000	680	48	<20	13
TW-2	6,200	16,000	1,300	6,400	29,900	390	120	<20	<0.019
TW-3	330	17	7.3	52	406.3	20	<1.0	<1.0	0.64
TW-1A	1,700	1.3	0.69J	610	2,311.99J	84	8.8	<1.0	0.036
TW-1B	17	<1.0	<1.0	3.7	20.7	0.71J	<1.0	<1.0	<0.019
TW-1C	25	<1.0	<1.0	2.9	27.9	0.52J	1.6	<1.0	<0.019
TW-2A	0.19J	<1.0	<1.0	<1.0	0.19J	<1.0	<1.0	<1.0	<0.019
TW-2B	8.7	<1.0	<1.0	0.81J	9.51J	0.42J	<1.0	<1.0	<0.019
TW-2C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.023
TW-3B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-4A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.70J	0.034
TW-4B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.032
TW-4C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.034
TW-5C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.025
TW-6A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-6B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.60J	0.038
TW-6C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
IW-2	25,000	60,000	3,600	26,000	114,600	870	290	<20	33
IW-3	14,000	27,000	2,400	13,000	56,400	640	410	<200	90
IW-4	4,100	9.1	160	1,100	5,369.1	190	46	<1.0	<0.020
IW-5	12,000	60,000	4,200	25,000	101,200	860	<100	<100	3.9
IW-6	180	18	25	1,500	1,723	370	<1.0	<1.0	<0.020
IW-8	2,000	35	2,200	5,100	9,335	600	<1.0	<1.0	1.4PQ
IW-9	490	57	1,300	4,700	6,547	390	<1.0	<1.0	0.15
IW-10	300	6.4	100	750	1,156.4	78	<1.0	<1.0	NT
IW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	770	<1.0	390	110	1,270	66	<1.0	<1.0	0.41
IW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-20	1.8	1.2	2.1	16	21.1	2.6	<1.0	<1.0	<0.025
MW-1R (Dup.)	6,600	34,000	5,500	36,000	82,100	990	<20	<20	17
MW-5 (Dup.)	0.14J	<1.0	<1.0	<1.0	0.14J	<1.0	<1.0	<1.0	<0.020
MW-8 (Dup.)	9,500	55,000	4,900	30,000	99,400	1,100	55J	<100	14Q
MW-10 (Dup.)	6,100	3,900	2,500	9,900	22,400	370	<20	<20	18
Field Blank (9/25)	<1.0	<1.0	<1.0	0.34J	0.34J	2.5B	<1.0	<1.0	<0.019
Trip Blank (9/25)	<1.0	<1.0	<1.0	<1.0	BDL	0.46BJ	<1.0	<1.0	NT
Field Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	0.84BJ	<1.0	<1.0	<0.020
Trip Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	NT

Groundwater CoC Site Map
(Toluene Isopleth)

Smith's Grocery
3716 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 4B



Notes:

Groundwater samples collected on September 25, 26 & 27, 2012.

Concentration Isopleth interval = 2,000 ug/l

BDL = Below Detection Limits

"J" Values included in Total BTEX Calculations

Concentration Ispopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

COC Concentration Data

Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	Naphthalene (ug/l)	MTBE (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
MW-1R	7,200	33,000	5,800	33,000	79,000	1,000	<50	130	16
MW-2	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-3	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-4R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-5R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-6R	2,000	150	1,200	4,200	7,550	350	<5.0	40	2.0
MW-7	200	12	15	1,000	1,227	27	<1.0	5.8	<0.019
MW-8	9,300	47,000	4,600	26,000	86,900	960	<200	210	14
MW-9R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.025
MW-10R	3,100	3,500	2,200	2,400	11,200	250	<1.0	260	25
MW-11R	2.8	0.34J	4.4	64	71.54J	3.3	<1.0	<1.0	0.051
MW-12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-13	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-14R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-15R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	12	0.76
MW-16	4.9	<1.0	<1.0	4.8	9.7	1.1	<1.0	<1.0	0.025
MW-17R	45	<1.0	<1.0	29	74	4.2	2.8	3.6	0.096
MW-18R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	19	1.8
MW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
MW-21	34	0.40J	1.1	14	49.5J	<1.0	<1.0	31	0.52
TW-1	12,000	11,000	3,000	15,000	41,000	680	48	<20	13
TW-2	6,200	16,000	1,300	6,400	29,900	390	120	<20	<0.019
TW-3	330	17	7.3	52	406.3	20	<1.0	<1.0	0.64
TW-1A	1,700	1.3	0.69J	610	2,311.99J	84	8.8	<1.0	0.036
TW-1B	17	<1.0	<1.0	3.7	20.7	0.71J	<1.0	<1.0	<0.019
TW-1C	25	<1.0	<1.0	2.9	27.9	0.52J	1.6	<1.0	<0.019
TW-2A	0.19J	<1.0	<1.0	<1.0	0.19J	<1.0	<1.0	<1.0	<0.019
TW-2B	8.7	<1.0	<1.0	0.81J	9.51J	0.42J	<1.0	<1.0	<0.019
TW-2C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.023
TW-3B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-4A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.70J	0.034
TW-4B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.032
TW-4C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.034
TW-5C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.025
TW-6A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-6B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.60J	0.038
TW-6C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
IW-2	25,000	60,000	3,600	25,000	114,600	870	290	<20	33
IW-3	14,000	27,000	2,400	13,000	56,400	640	410	<200	90
IW-4	4,100	9.1	160	1,100	5,369.1	190	46	<1.0	<0.020
IW-5	12,000	60,000	4,200	25,000	101,200	860	<100	<100	3.9
IW-6	180	18	25	1,500	1,723	370	<1.0	<1.0	<0.020
IW-8	2,000	35	2,200	5,100	9,335	600	<1.0	<1.0	1.4PQ
IW-9	490	57	1,300	4,700	6,547	390	<1.0	<1.0	0.15
IW-10	300	6.4	100	750	1,156.4	78	<1.0	<1.0	NT
IW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	770	<1.0	390	110	1,270	66	<1.0	<1.0	0.41
IW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-20	1.8	1.2	2.1	16	21.1	2.6	<1.0	<1.0	<0.025
MW-1R (Dup.)	6,600	34,000	5,500	36,000	82,100	990	<20	<20	17
MW-5 (Dup.)	0.14J	<1.0	<1.0	<1.0	0.14J	<1.0	<1.0	<1.0	<0.020
MW-8 (Dup.)	9,500	55,000	4,900	30,000	99,400	1,100	55J	<100	14Q
MW-10 (Dup.)	6,100	3,900	2,500	9,900	22,400	370	<20	<20	18
Field Blank (9/25)	<1.0	<1.0	<1.0	0.34J	0.34J	2.5B	<1.0	<1.0	<0.019
Trip Blank (9/25)	<1.0	<1.0	<1.0	<1.0	BDL	0.48BJ	<1.0	<1.0	NT
Field Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	0.84BJ	<1.0	<1.0	<0.020
Trip Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	NT

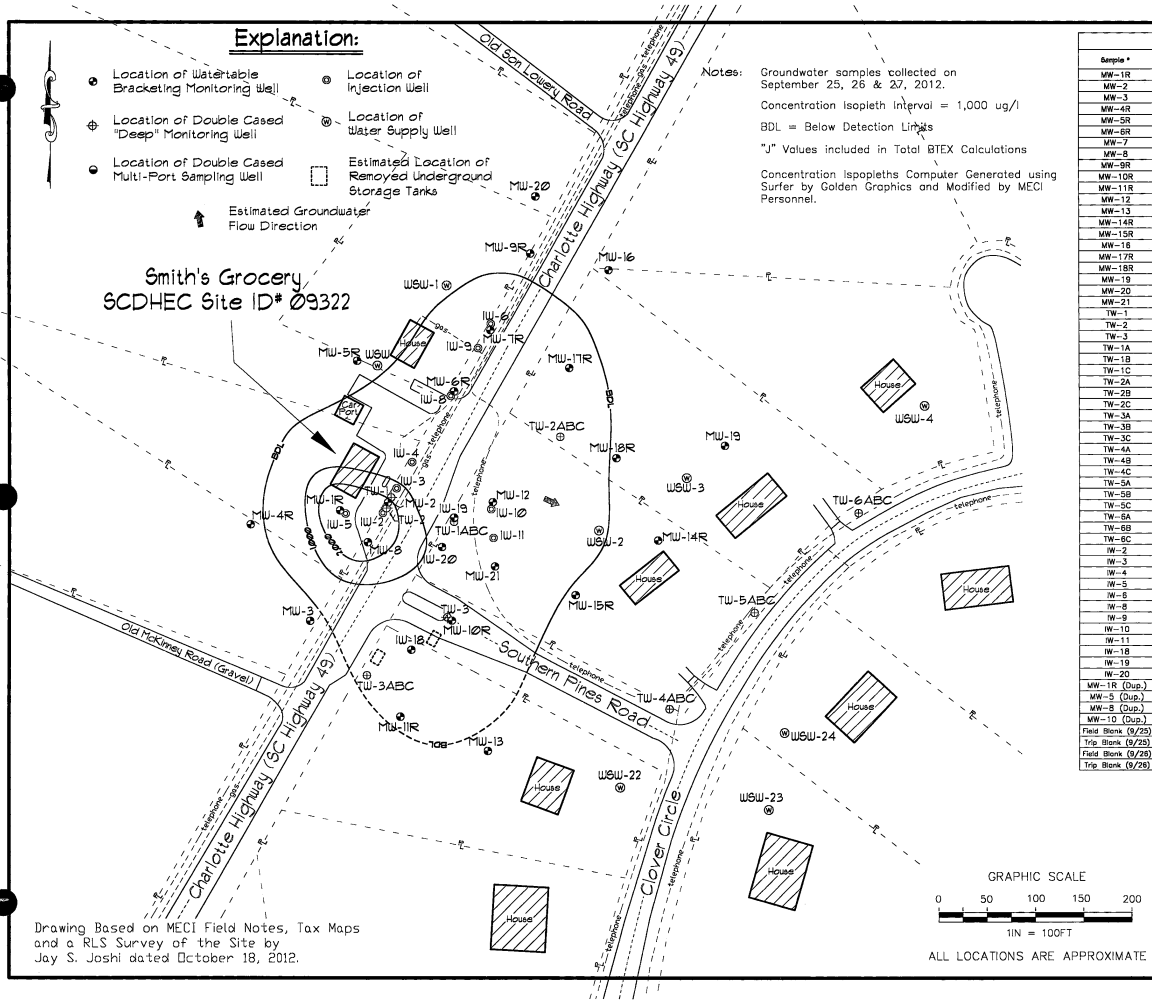
Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated October 18, 2012.

Groundwater CoC Site Map
(Ethylbenzene Isopleth)

Smith's Grocery
3176 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 4C



COC Concentration Data

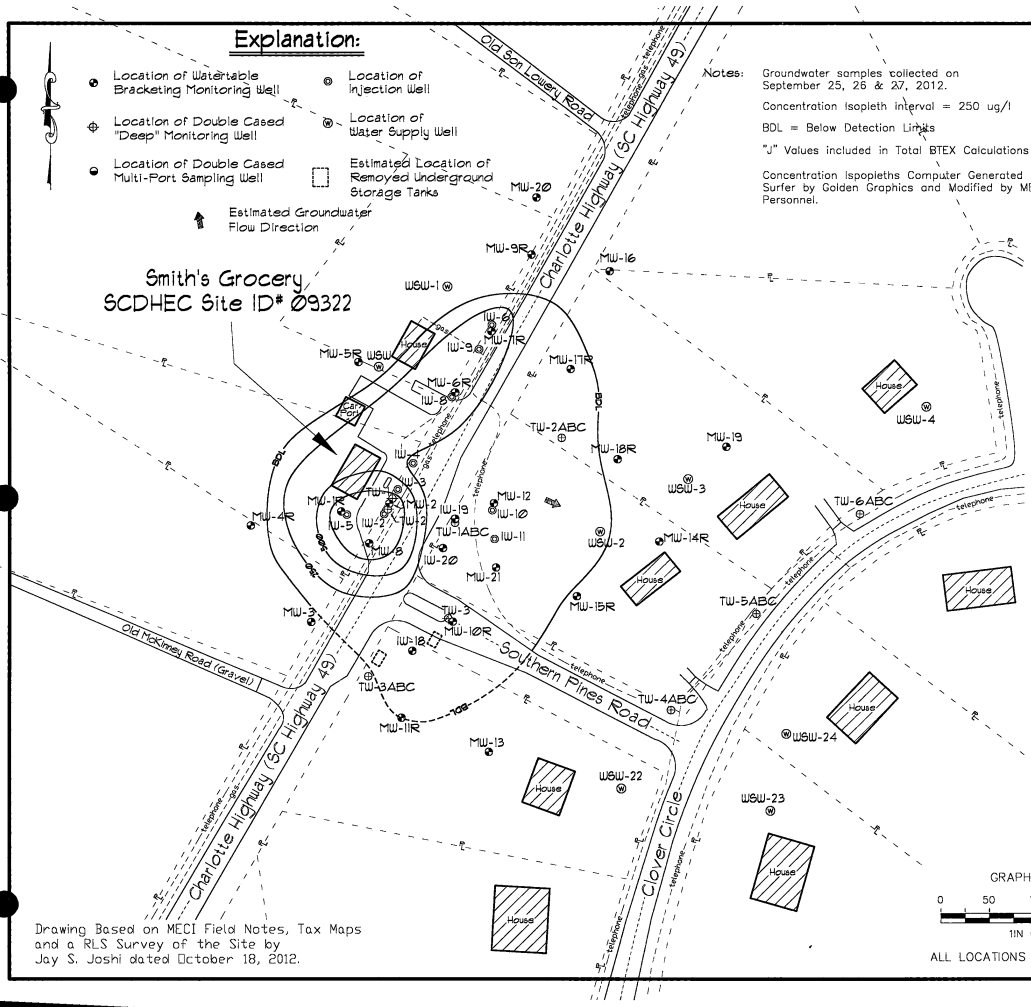
Sample *	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	Naphthalene (ug/l)	MTBE (ug/l)	12 DCA (ug/l)	EDB (ug/l)
MW-1R	7,200	33,000	5,800	33,000	79,000	1,000	<50	130	16
MW-2	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-3	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-4R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-5R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-6R	2,000	150	1,200	4,200	7,550	350	<5.0	40	2.0
MW-7	200	12	15	1,000	1,227	27	<1.0	5.8	<0.019
MW-8	9,300	47,000	4,600	26,000	86,900	960	<200	210	14
MW-9R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.025
MW-10R	3,100	3,500	2,200	2,400	11,200	250	<1.0	260	25
MW-11R	2.8	0.34J	4.4	64	71.54J	3.3	<1.0	<1.0	0.051
MW-12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-13	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-14R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-15R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	12	0.76
MW-16	4.9	<1.0	<1.0	4.8	9.7	1.1	<1.0	<1.0	0.025
MW-17R	45	<1.0	<1.0	29	74	4.2	2.8	3.8	0.096
MW-18R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	19	1.8
MW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
MW-21	34	0.40J	1.1	14	49.5J	<1.0	<1.0	31	0.52
TW-1	12,000	11,000	3,000	15,000	41,000	680	48	<20	13
TW-2	8,200	16,000	1,300	6,400	29,900	390	120	<20	<0.019
TW-3	330	17	7.3	52	406.3	20	<1.0	<1.0	0.84
TW-1A	1,700	1.3	0.69J	610	2,311.99J	84	8.8	<1.0	0.036
TW-1B	17	<1.0	<1.0	3.7	20.7	0.71J	<1.0	<1.0	<0.019
TW-1C	25	<1.0	<1.0	2.9	27.9	0.52J	1.6	<1.0	<0.019
TW-2A	0.19J	<1.0	<1.0	<1.0	0.19J	<1.0	<1.0	<1.0	<0.019
TW-2B	8.7	<1.0	<1.0	0.81J	9.51J	0.42J	<1.0	<1.0	<0.019
TW-2C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.023
TW-3B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-4A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.70J	0.034
TW-4B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.032
TW-4C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.034
TW-5C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.025
TW-6A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-6B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.60J	0.038
TW-6C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
IW-2	25,000	60,000	3,600	26,000	114,600	870	290	<20	33
IW-3	14,000	27,000	2,400	13,000	56,400	640	410	<200	90
IW-4	4,100	9.1	160	1,100	5,369.1	190	45	<1.0	<0.020
IW-5	12,000	50,000	4,200	25,000	101,200	860	<100	<100	3.9
IW-6	180	18	25	1,500	1,723	370	<1.0	<1.0	<0.020
IW-8	2,000	35	2,200	5,100	9,335	600	<1.0	<1.0	1.4PQ
IW-9	490	57	1,300	4,700	6,547	390	<1.0	<1.0	0.15
IW-10	300	6.4	100	750	1,156.4	78	<1.0	<1.0	NT
IW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	770	<1.0	390	110	1,270	66	<1.0	<1.0	0.41
IW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-20	1.8	1.2	2.1	16	21.1	2.6	<1.0	<1.0	<0.025
MW-1R (Dup.)	8,600	34,000	5,500	36,000	82,100	990	<20	<20	17
MW-5 (Dup.)	0.14J	<1.0	<1.0	<1.0	0.14J	<1.0	<1.0	<1.0	<0.020
MW-8 (Dup.)	9,500	55,000	4,900	30,000	99,400	1,100	55J	<100	14Q
MW-10 (Dup.)	8,100	3,900	2,500	9,900	22,400	370	<20	<20	18
Field Blank (9/25)	<1.0	<1.0	<1.0	0.34J	0.34J	2.5B	<1.0	<1.0	<0.019
Trip Blank (9/25)	<1.0	<1.0	<1.0	<1.0	BDL	0.46BJ	<1.0	<1.0	NT
Field Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	0.84BJ	<1.0	<1.0	<0.020
Trip Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	NT

Groundwater CoC Site Map
(Total Xylenes Isopleth)

Smith's Grocery
3176 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 4D



Notes:

Groundwater samples collected on September 25, 26 & 27, 2012.

Concentration Isopleth interval = 250 ug/l

BDL = Below Detection Limits

"J" Values included in Total BTEX Calculations

Concentration Isopleths Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

COC Concentration Data

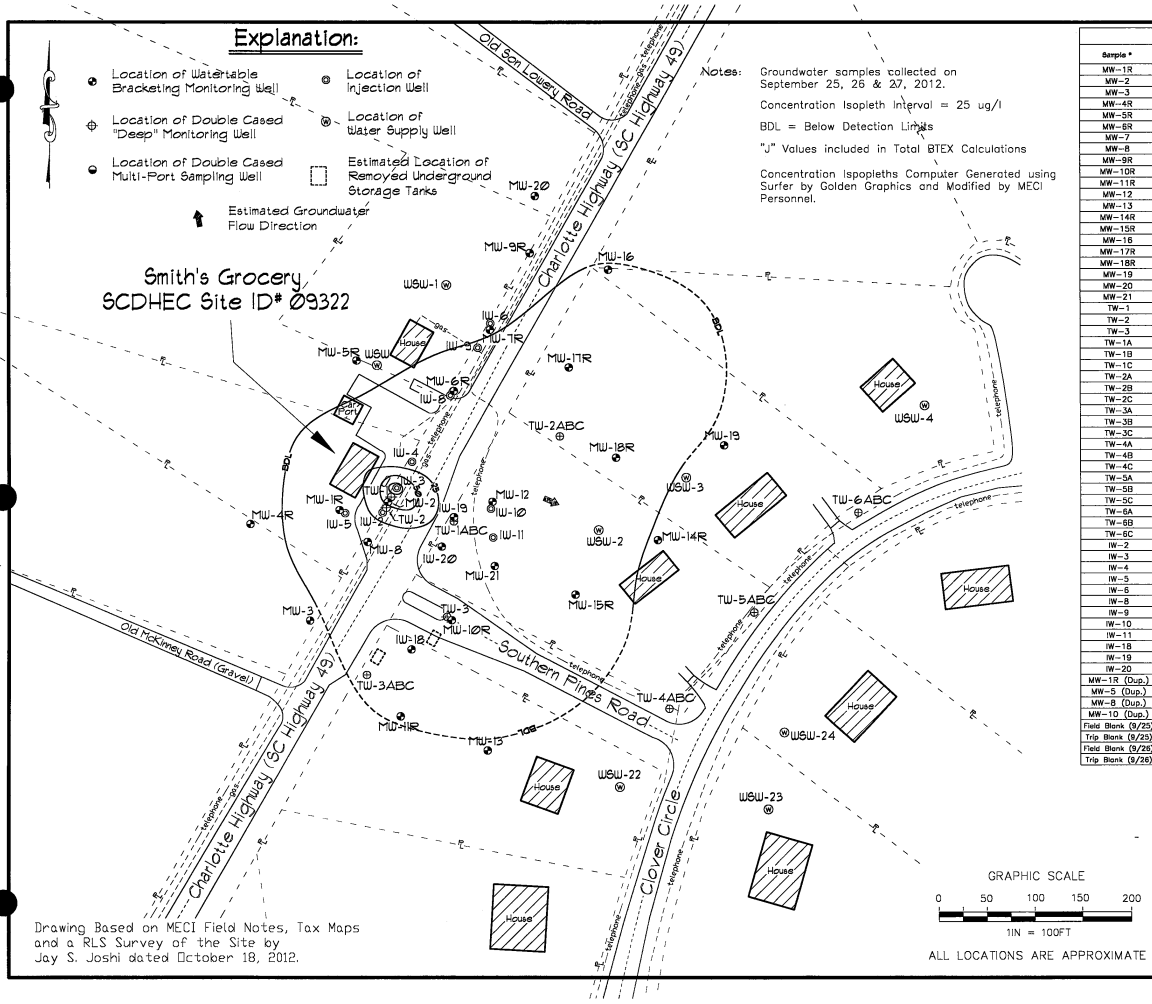
Sample *	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	Naphthalene (ug/l)	MTBE (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
MW-1R	7,200	33,000	5,800	33,000	79,000	1,000	<50	130	16
MW-2	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-3	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-4R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-5R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-6R	2,000	150	1,200	4,200	7,550	350	<5.0	40	2.0
MW-7	200	12	15	1,000	1,227	27	<1.0	5.8	<0.019
MW-8	9,300	47,000	4,600	26,000	86,900	980	<200	210	14
MW-9R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.025
MW-10R	3,100	3,500	2,200	2,400	11,200	250	<1.0	260	25
MW-11R	2.8	0.34J	4.4	64	71.54J	3.3	<1.0	<1.0	0.051
MW-12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-13	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-14R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-15R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	12	0.76
MW-16	4.9	<1.0	<1.0	4.8	9.7	1.1	<1.0	<1.0	0.025
MW-17R	45	<1.0	<1.0	29	74	4.2	2.8	3.6	0.098
MW-18R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	19	1.8
MW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
MW-21	34	0.40J	1.1	14	49.5J	<1.0	<1.0	31	0.52
TW-1	12,000	11,000	3,000	15,000	41,000	680	48	<20	13
TW-2	5,200	16,000	1,300	6,400	28,900	390	120	<20	<0.019
TW-3	330	17	7.3	52	406.3	20	<1.0	<1.0	0.64
TW-1A	1,700	1.3	0.89J	610	2,311.99J	84	8.8	<1.0	0.036
TW-1B	17	<1.0	<1.0	3.7	20.7	0.71J	<1.0	<1.0	<0.019
TW-1C	25	<1.0	<1.0	2.9	27.9	0.52J	1.6	<1.0	<0.019
TW-2A	0.19J	<1.0	<1.0	<1.0	0.19J	<1.0	<1.0	<1.0	<0.019
TW-2B	8.7	<1.0	<1.0	0.81J	9.51J	0.42J	<1.0	<1.0	<0.019
TW-2C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.023
TW-3B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-4A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.70J	0.034
TW-4B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.032
TW-4C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.034
TW-5C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.025
TW-6A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-6B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.60J	0.038
TW-6C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
IW-2	25,000	60,000	3,600	26,000	114,600	870	290	<20	33
IW-3	14,000	27,000	2,400	13,000	56,400	640	410	<200	90
IW-4	4,100	9.1	180	1,100	5,389.1	190	48	<1.0	<0.020
IW-5	12,000	60,000	4,200	25,000	101,200	860	<100	<100	3.9
IW-6	180	18	25	1,500	1,723	370	<1.0	<1.0	<0.020
IW-8	2,000	35	2,200	5,100	9,335	600	<1.0	<1.0	1.4PQ
IW-9	490	57	1,300	4,700	6,547	390	<1.0	<1.0	0.15
IW-10	300	5.4	100	750	1,156.4	78	<1.0	<1.0	NT
IW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	770	<1.0	390	110	1,270	66	<1.0	<1.0	0.41
IW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-20	1.8	1.2	2.1	16	21.1	2.8	<1.0	<1.0	<0.025
MW-1R (Dup.)	6,600	34,000	5,500	36,000	82,100	990	<20	<20	17
MW-5 (Dup.)	0.14J	<1.0	<1.0	<1.0	0.14J	<1.0	<1.0	<1.0	<0.020
MW-8 (Dup.)	9,500	55,000	4,900	30,000	99,400	1,100	55J	<100	14Q
MW-10 (Dup.)	5,100	3,900	2,500	9,900	22,400	370	<20	<20	18
Field Blank (9/25)	<1.0	<1.0	<1.0	0.34J	0.34J	2.5B	<1.0	<1.0	<0.019
Trip Blank (9/25)	<1.0	<1.0	<1.0	<1.0	BDL	0.46BJ	<1.0	<1.0	NT
Field Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	0.84BJ	<1.0	<1.0	<0.020
Trip Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	NT

Groundwater CoC Site Map
(Naphthalene Isopleth)

Smith's Grocery
3116 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 4E



COC Concentration Data

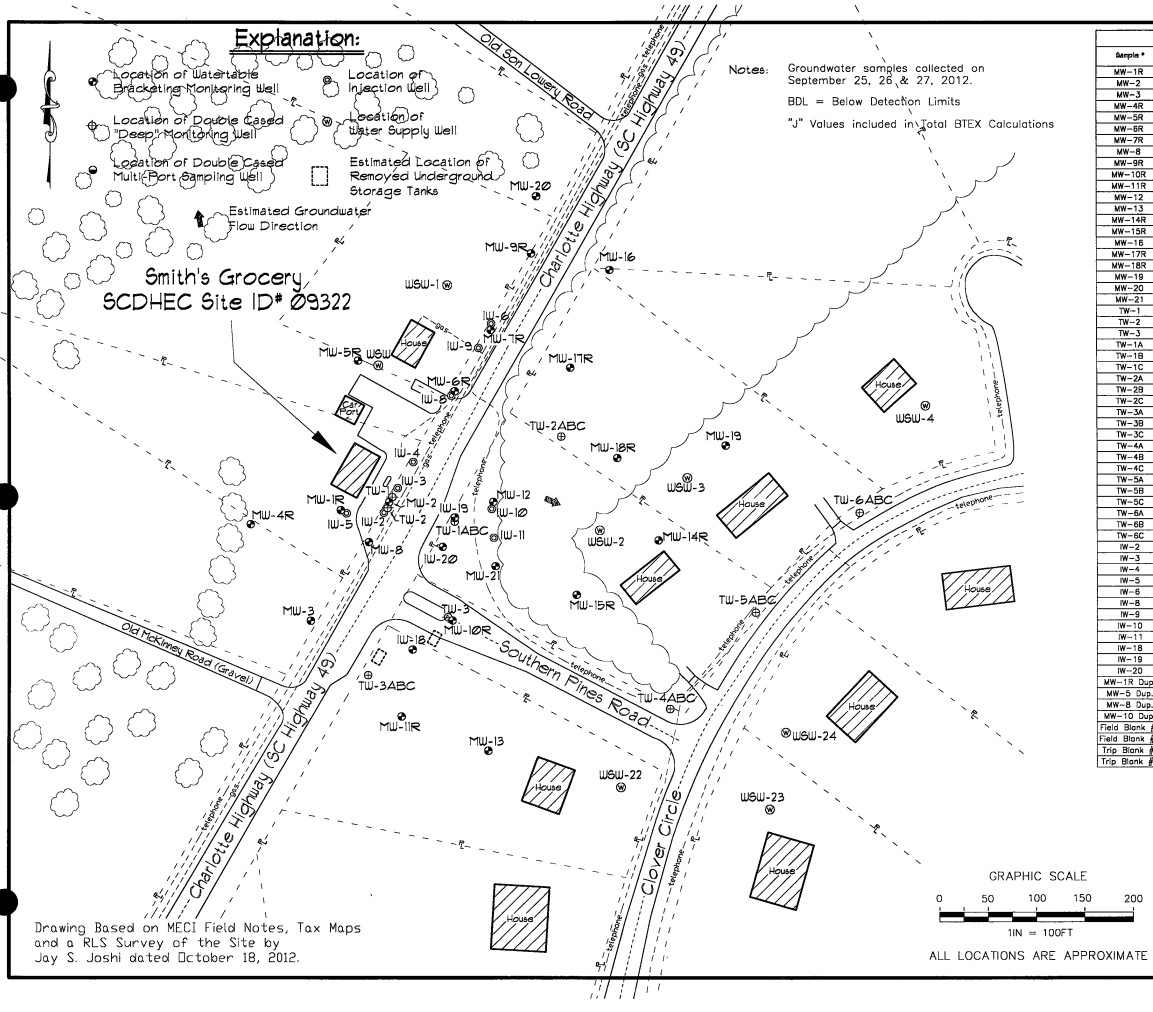
Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	Naphthalene (ug/l)	MTBE (ug/l)	12 DCA (ug/l)	EDB (ug/l)
MW-1R	7,200	33,000	5,800	33,000	79,000	1,000	<50	130	16
MW-2	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-3	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-4R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-5R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-6R	2,000	150	1,200	4,200	7,550	350	<5.0	40	2.0
MW-7	200	12	15	1,000	1,227	27	<1.0	5.8	<0.019
MW-8	9,300	47,000	4,600	26,000	86,900	960	<200	210	14
MW-9R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.025
MW-10R	3,100	3,500	2,200	2,400	11,200	250	<1.0	260	25
MW-11R	2.8	0.34J	4.4	64	71.54J	3.3	<1.0	<1.0	0.051
MW-12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-13	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-14R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
MW-15R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	12	0.78
MW-16	4.9	<1.0	<1.0	4.8	9.7	1.1	<1.0	<1.0	0.025
MW-17R	45	<1.0	<1.0	29	74	4.2	2.8	3.6	0.096
MW-18R	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	19	1.8
MW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
MW-21	34	0.40J	1.1	14	49.5J	<1.0	<1.0	31	0.52
TW-1	12,000	11,000	3,000	15,000	41,000	880	48	<20	13
TW-2	6,200	16,000	1,300	6,400	29,900	390	120	<20	<0.019
TW-3	330	17	7.3	52	406.3	20	<1.0	<1.0	0.64
TW-1A	1,700	1.3	0.69J	610	2,311.99J	84	8.8	<1.0	0.036
TW-1B	17	<1.0	<1.0	3.7	20.7	0.71J	<1.0	<1.0	<0.019
TW-1C	25	<1.0	<1.0	2.9	27.9	0.52J	1.6	<1.0	<0.019
TW-2A	0.19J	<1.0	<1.0	<1.0	0.19J	<1.0	<1.0	<1.0	<0.019
TW-2B	8.7	<1.0	<1.0	0.81J	9.51J	0.42J	<1.0	<1.0	<0.019
TW-2C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.023
TW-3B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-3C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-4A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.70J	0.034
TW-4B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.032
TW-4C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-5B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.034
TW-5C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.025
TW-6A	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
TW-6B	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.60J	0.038
TW-6C	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
IW-2	25,000	80,000	3,600	28,000	114,600	870	280	<20	33
IW-3	14,000	27,000	2,400	13,000	56,400	640	410	<200	90
IW-4	4,100	9.1	160	1,100	5,369.1	190	46	<1.0	<0.020
IW-5	12,000	60,000	4,200	25,000	101,200	860	<100	<100	3.9
IW-6	180	18	25	1,500	1,723	370	<1.0	<1.0	<0.020
IW-8	2,000	35	2,200	5,100	9,335	600	<1.0	<1.0	1.4PQ
IW-9	490	57	1,300	4,700	6,547	390	<1.0	<1.0	0.15
IW-10	300	6.4	100	750	1,156.4	78	<1.0	<1.0	NT
IW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	770	<1.0	390	110	1,270	66	<1.0	<1.0	0.41
IW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-20	1.8	1.2	2.1	16	21.1	2.6	<1.0	<1.0	<0.025
MW-1R (Dup.)	6,600	34,000	5,500	36,000	82,100	990	<20	<20	17
MW-5 (Dup.)	0.14J	<1.0	<1.0	<1.0	0.14J	<1.0	<1.0	<1.0	<0.020
MW-8 (Dup.)	9,500	55,000	4,900	30,000	99,400	1,100	55J	<100	14Q
MW-10 (Dup.)	6,100	3,900	2,500	9,900	22,400	370	<20	<20	18
Field Blank (9/25)	<1.0	<1.0	<1.0	0.34J	0.34J	2.5B	<1.0	<1.0	<0.019
Trip Blank (9/25)	<1.0	<1.0	<1.0	<1.0	BDL	0.46BJ	<1.0	<1.0	NT
Field Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	0.84BJ	<1.0	<1.0	<0.020
Trip Blank (9/26)	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	NT

Groundwater CoC Site Map
(EDB Isopleth)

Smith's Grocery
3716 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 4F



Notes: Groundwater samples collected on September 25, 26 & 27, 2012.

BDL = Below Detection Limits

"J" Values included in Total BTEX Calculations

COC Concentration Data - Oxygenates

Sample #	DIPE (ug/l)	Ethanol (ug/l)	3,3-Dimethyl-1-butanol (ug/l)	ETBE (ug/l)	TAA (ug/l)	TAME (ug/l)	TBA (ug/l)	TBF (ug/l)
MW-1R	38J	<50,000	<5,000	<5,000	<5,000	<500	<5,000	<5,000
MW-2	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-3	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-4R	<10	<1,000	<100	<100	<100	<10	<100	<100
MW-5R	<10	<1,000	<100	<100	<100	<10	<100	<100
MW-6R	28J	<5,000	<500	<500	1,100	<50	86J	<500
MW-7R	6.8J	<1,000	<100	<100	180	<10	150	<100
MW-8	180J	<200,000	<20,000	<20,000	<20,000	<2,000	<20,000	<20,000
MW-9R	<10	<1,000	<100	<100	<100	<10	<100	<100
MW-10R	370	<1,000	<100	<100	5,400	<10	290	<100
MW-11R	0.59J	<1,000L	<100	<100	<100	<10	120	<100
MW-12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-13	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-14R	<10	<1,000L	<100	<100	<100	<10	15J	<100
MW-15R	<10	<1,000L	<100	<100	<100	<10	<100	<100S
MW-16	<10	<1,000L	<100	<100	<100	<10	<100	<100
MW-17R	14	<1,000L	<100	<100	<100	<10	15J	<100
MW-18R	17	<1,000L	<100	<100	<100	<10	<100	<100
MW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	<10	<1,000	<100	<100	<100	<10	<100	<100
MW-21	70	<1,000L	<100	<100	190	<10	35J	<100
TW-1	180J	<20,000L	<2,000	<2,000	<2,000	<200	<2,000	<2,000
TW-2	290	<20,000L	<2,000	<2,000	<2,000	<200	<2,000	<2,000
TW-3	23	<1,000	<100	<100	540	<10	32J	<100
TW-1A	20	<1,000	<100	<100	940	<10	<100	<100
TW-1B	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-1C	4.1J	<1,000	<100	<100	<100	<10	<100	<100
TW-2A	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-2B	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-2C	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-3A	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-3B	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-3C	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-4A	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-4B	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-4C	<10	<1,000S	<100	<100	<100	<10	<100	<100S
TW-5A	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-5B	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-5C	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-6A	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-6B	<10	<1,000	<100	<100	<100	<10	<100	<100
TW-6C	<10	<1,000	<100	<100	<100	<10	<100	<100
IW-2	780	<20,000L	<2,000	<2,000	<2,000	<200	3,000	<2,000
IW-3	660J	<200,000L	<20,000	<20,000	<20,000	<2,000	<20,000	<20,000
IW-4	100	<1,000L	<100	<100	<100	<10	360	<100
IW-5	120J	<100,000L	<10,000	<10,000	<10,000	<1,000	<10,000	<10,000
IW-6	5.1J	<1,000L	<100	<100	<100	<10	150	<100
IW-8	22	<1,000L	<100	<100	<100	<10	<100	<100
IW-9	8.9J	<1,000L	<100	<100	<100	<10	150	<100
IW-10	18	<1,000L	<100	<100	<100	<10	200	<100
IW-11	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
IW-18	110	<1,000	<100	<100	4,300	<10	400	<100
IW-19	NL	NL	NL	NL	NL	NL	NL	NL
IW-20	<10	<1,000L	<100	<100	<100	<10	<100	<100
MW-1R Dup.	44J	<20,000L	<2,000	<2,000	<2,000	<200	<2,000	<2,000
MW-5 Dup.	<10	<1,000	<100	<100	<100	<10	<100	<100
MW-8 Dup.	200J	<100,000L	<10,000	<10,000	<10,000	<1,000	<10,000	<10,000
MW-10 Dup.	340	<20,000	<2,000	<2,000	7,300	<200	330J	<2,000
Field Blank #1	<10	<1,000	<100	<100	<100	<10	<100	<100
Field Blank #2	<10	<1,000	<100	<100	<100	<10	<100	<100
Trip Blank #1	<10	<1,000	<100	<100	<100	<10	<100	<100
Trip Blank #2	<10	<1,000	<100	<100	<100	<10	<100	<100

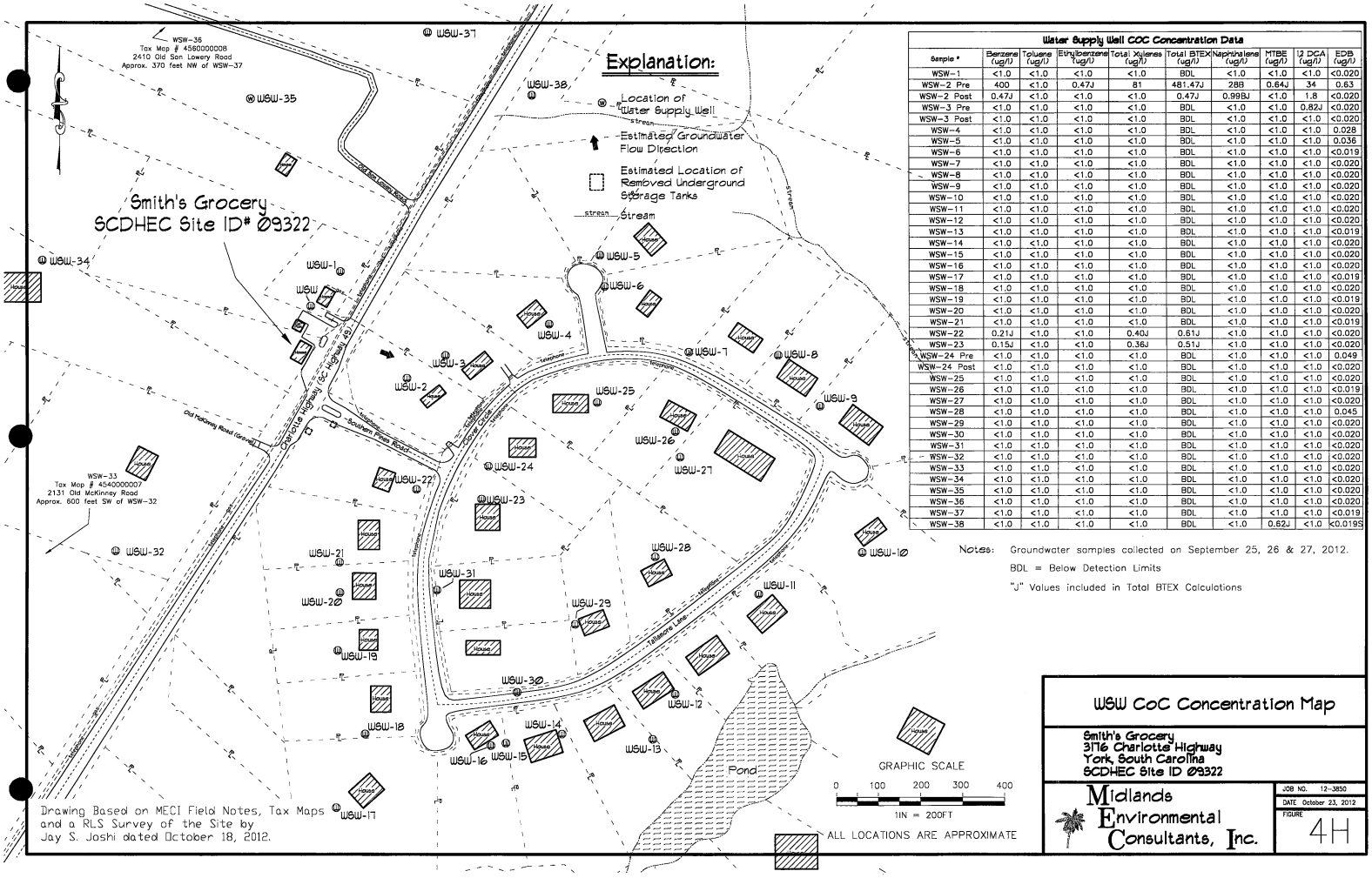
Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated October 18, 2012.

Groundwater CoC Site Map
(Oxygenates)

Smith's Grocery
3176 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 4G



Water Supply Well COC Concentration Data

Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	Naphthalene (ug/l)	MTBE (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
WSW-1	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-2 Pre	400	<1.0	0.47J	81	481.47J	28B	0.64J	34	0.63
WSW-2 Post	0.47J	<1.0	<1.0	<1.0	0.47J	0.99BJ	<1.0	1.8	<0.020
WSW-3 Pre	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	0.82J	<0.020
WSW-3 Post	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-4	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.028
WSW-5	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.036
WSW-6	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-7	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-8	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-9	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-10	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-11	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-12	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-13	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-14	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-15	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-16	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-17	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-18	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-19	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-20	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-21	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-22	0.21J	<1.0	<1.0	0.40J	0.61J	<1.0	<1.0	<1.0	<0.020
WSW-23	0.15J	<1.0	<1.0	0.36J	0.51J	<1.0	<1.0	<1.0	<0.020
WSW-24 Pre	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.049
WSW-24 Post	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-25	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-26	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-27	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-28	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	0.045
WSW-29	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-30	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-31	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-32	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-33	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-34	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-35	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-36	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.020
WSW-37	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	<1.0	<1.0	<0.019
WSW-38	<1.0	<1.0	<1.0	<1.0	BDL	<1.0	0.82J	<1.0	<0.019S

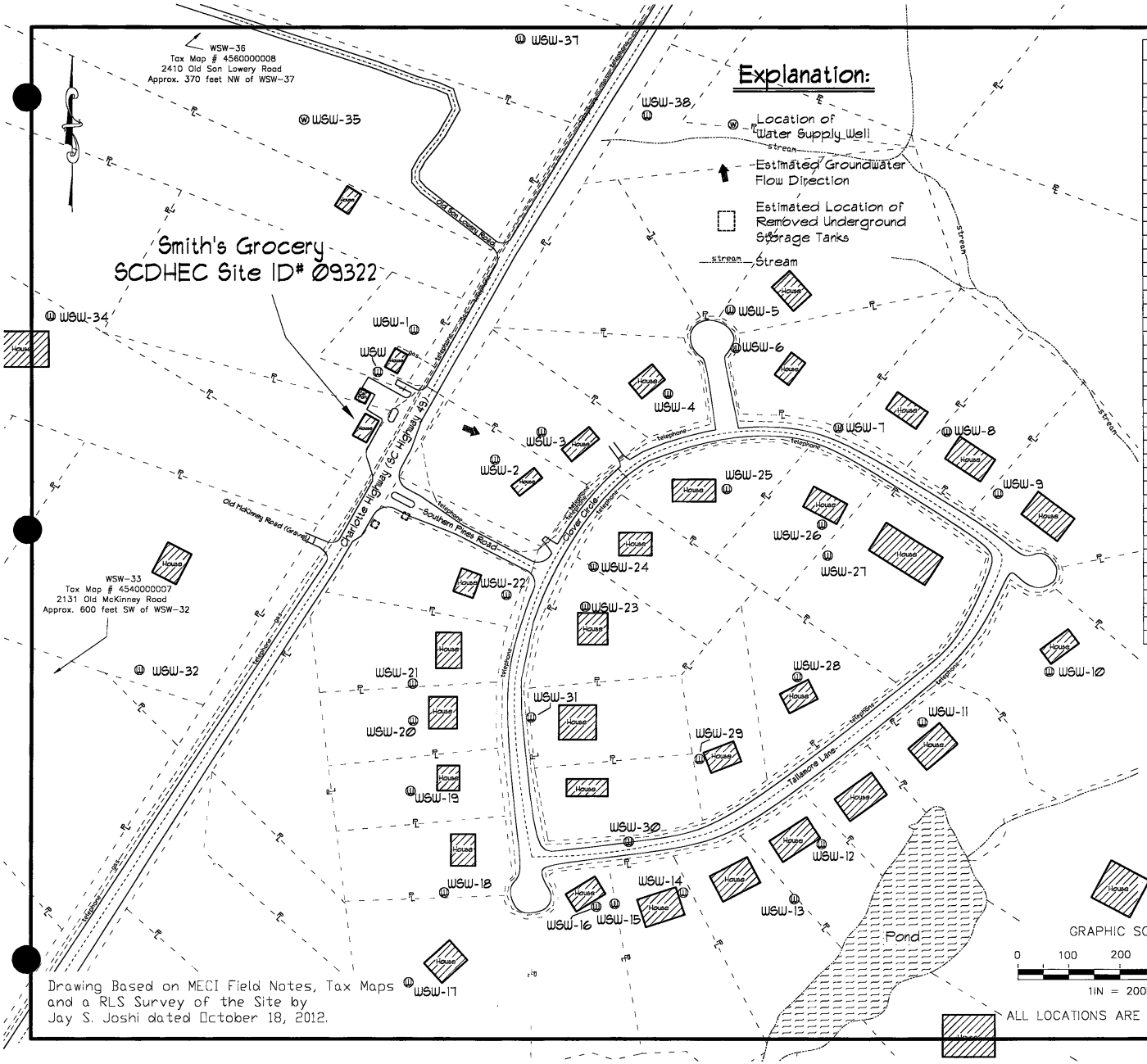
Notes: Groundwater samples collected on September 25, 26 & 27, 2012.
BDL = Below Detection Limits
"J" Values included in Total BTEX Calculations

WSW CoC Concentration Map

Smith's Grocery
3716 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 4H



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated October 18, 2012.

COC Concentration Data - Oxygenates

Sample *	DIPE (ug/l)	Ethanol (ug/l)	3,3-Dimethyl-1-butanol (ug/l)	ETBE (ug/l)	TAA (ug/l)	TAME (ug/l)	TBA (ug/l)	TBF (ug/l)
WSW-1	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-2 Pre	49	<1,000	<100	<100	990	<10	48J	<100
WSW-2 Post	0.71J	<1,000	<100	<100	480	<10	34J	<100
WSW-3 Pre	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-3 Post	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-4	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-5	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-6	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-7	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-8	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-9	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-10	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-11	<10	<1,000	<100	<100	<100	<10	<100S	<100S
WSW-12	<10	<1,000L	<100	<100	19J	<10	<100	<100
WSW-13	<10	<1,000L	<100	<100	<100	<10	<100	<100S
WSW-14	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-15	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-16	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-17	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-18	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-19	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-20	<10	<1,000LS	<100S	<100	<100	<10	<100	<100S
WSW-21	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-22	<10	<1,000S	<100S	<100	<100S	<10	<100S	<100S
WSW-23	<10	<1,000S	<100S	<100	<100S	<10	<100S	<100S
WSW-24 Pre	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-24 Post	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-25	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-26	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-27	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-28	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-29	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-30	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-31	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-32	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-33	<10	<1,000	<100	<100	<100	<10	<100	<100
WSW-34	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-35	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-36	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-37	<10	<1,000L	<100	<100	<100	<10	<100	<100
WSW-38	<10	<1,000L	<100	<100	<100	<10	<100	<100

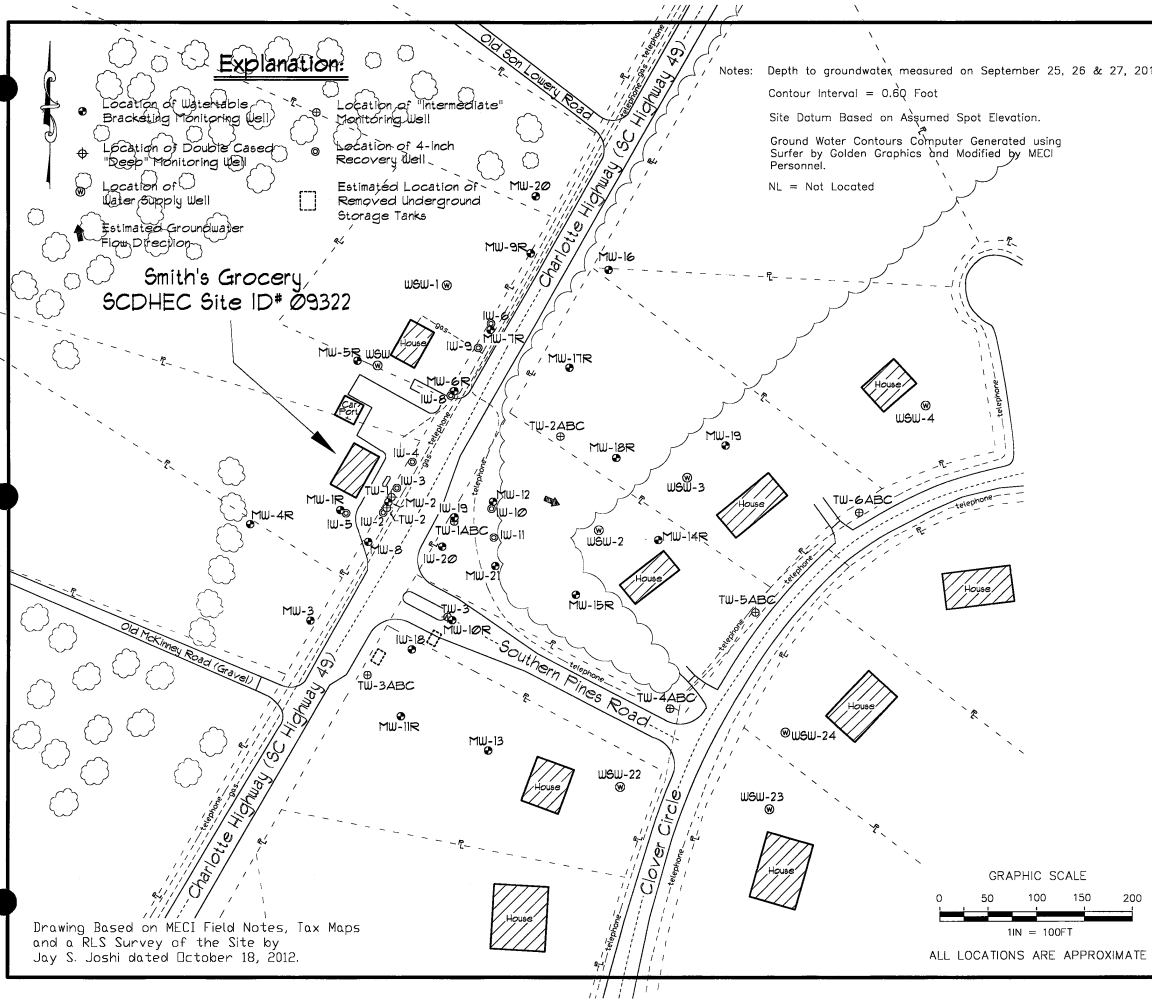
Notes: Groundwater samples collected on September 25, 26 & 27, 2012.
BDL = Below Detection Limits
"J" Values included in Total BTEX Calculations

WSW Oxygenates Concentration Map

Smith's Grocery
3176 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 41



Notes: Depth to groundwater measured on September 25, 26 & 27, 2012.

Contour Interval = 0.60 Foot

Site Datum Based on Assumed Spot Elevation.

Ground Water Contours Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

NL = Not Located

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated October 18, 2012.

Groundwater Elevation Data

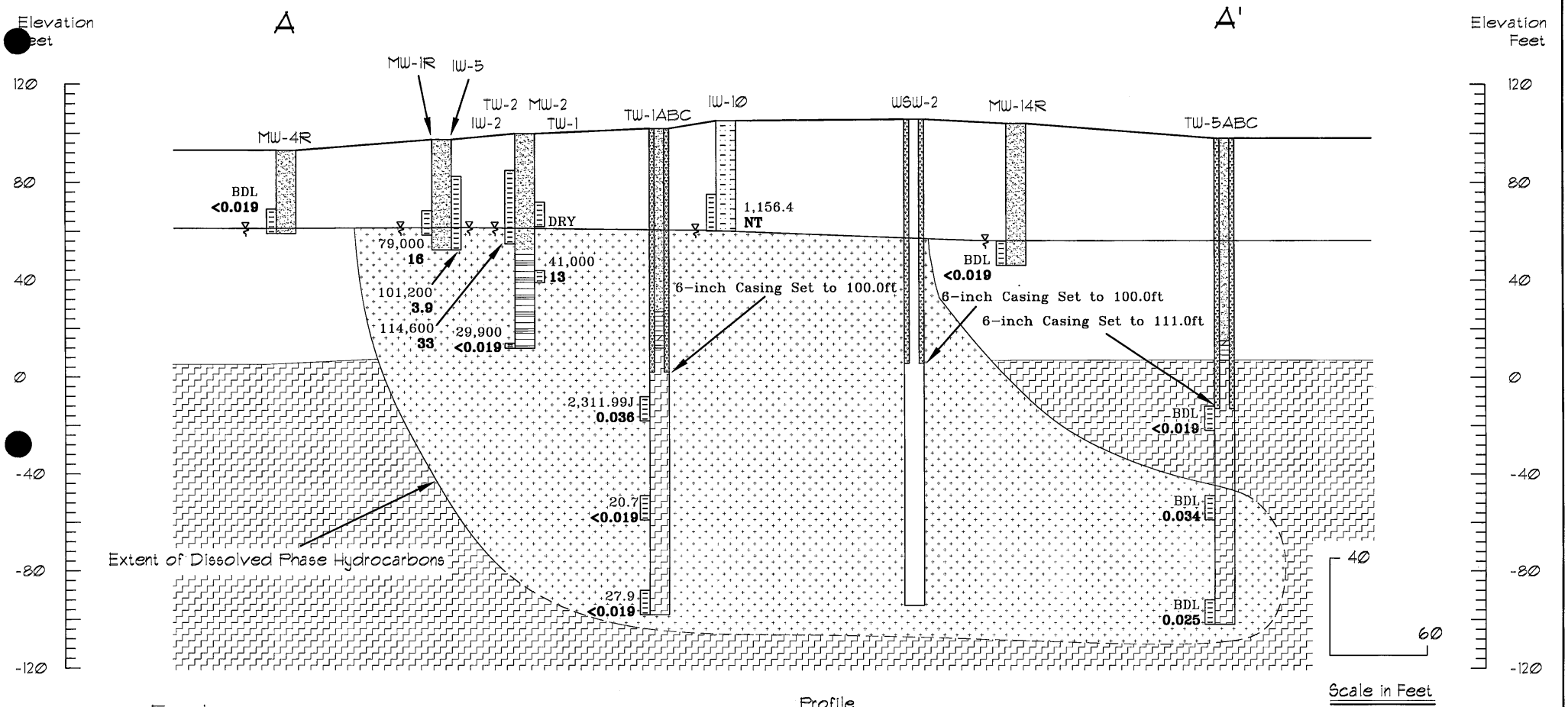
Well #	Screened Interval (ft)	Depth to Water (ft)	Well Head Elevation	Groundwater Elevation
MW-1R	29-39	35.04	96.56	61.52
MW-2	23-38	DRY	99.67	DRY
MW-3	25-35	DRY	97.10	DRY
MW-4R	24-34	31.40	92.55	61.15
MW-5R	305-405	32.84	93.85	61.01
MW-6R	34-44	38.13	98.90	60.76
MW-7R	34-44	37.32	97.42	60.10
MW-8	23-38	38.66	100.14	61.48
MW-9R	28-38	35.00	94.95	59.95
MW-10R	425-505	43.26	103.38	60.12
MW-11R	44-54	45.05	105.46	60.41
MW-12	29-44	DRY	104.56	DRY
MW-13	32-41	DRY	105.35	DRY
MW-14R	48-58	47.60	103.91	56.31
MW-15R	48-58	49.13	106.23	57.10
MW-16	22-37	36.25	95.06	58.81
MW-17R	38-48	42.24	99.69	57.45
MW-18R	45-55	46.15	103.03	56.88
MW-19	35-50	DRY	103.32	DRY
MW-20	20-35	33.21	93.33	60.12
MW-21	44-54	41.63	101.18	59.55
TW-1	56-61	37.58	99.79	62.21
TW-2	86-88	38.50	99.79	61.29
TW-3	66-71	42.90	104.11	61.21
TW-1A	110-120	41.29	101.85	60.56
TW-1B	151-161	41.60	101.83	60.23
TW-1C	190-200	42.06	101.84	59.78
TW-2A	127-137	42.15	102.33	59.58
TW-2B	150-160	42.14	102.40	59.66
TW-2C	193-203	41.88	102.39	60.51
TW-3A	125-135	40.63	102.02	61.39
TW-3B	157-167	40.83	101.98	61.15
TW-3C	188-198	40.60	101.91	61.31
TW-4A	131-141	41.86	97.04	55.18
TW-4B	160-170	42.94	97.26	54.32
TW-4C	190-200	42.54	97.26	54.72
TW-5A	110-120	45.66	97.80	52.14
TW-5B	147-157	45.68	97.86	52.18
TW-5C	187-197	45.38	97.85	51.87
TW-6A	108-118	44.60	96.83	52.23
TW-6B	143-153	44.62	96.85	52.23
TW-6C	190-200	45.00	96.86	51.86
IW-2	15-45	38.25	99.69	61.44
IW-3	15-45	38.13	99.60	61.47
IW-4	15-45	38.41	99.22	60.81
IW-5	15-45	39.69	97.26	61.57
IW-6	15-45	36.83	96.89	60.06
IW-8	15-45	38.30	99.10	60.80
IW-9	15-45	37.15	98.87	61.72
IW-10	15-45	44.12	104.10	60.58
IW-11	15-45	DRY	106.04	DRY
IW-18	15-45	43.10	103.81	60.71
IW-19	15-45	NL	101.64	NL
IW-20	15-45	41.15	102.19	61.04

Potentiometric Data Site Map
(Groundwater Contour)

Smith's Grocery
3716 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

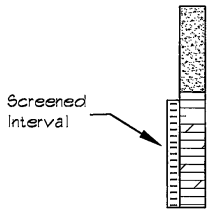
JOB NO. 12-3850
DATE October 23, 2012
FIGURE 5



Explanation:

- Clayey SILT
- Sandy SILT
- Sandy CLAY
- Partially Wethered Rock: Micaceous SILT
- Rock: Mica Gneiss with Fine to Medium Layered Biotite Gneiss, Biotite Schist, and Hornblende Gneiss

Profile



40,000 ← Total BTEX Concentration (ug/L)

40,000 ← EDB Concentration (ug/L)

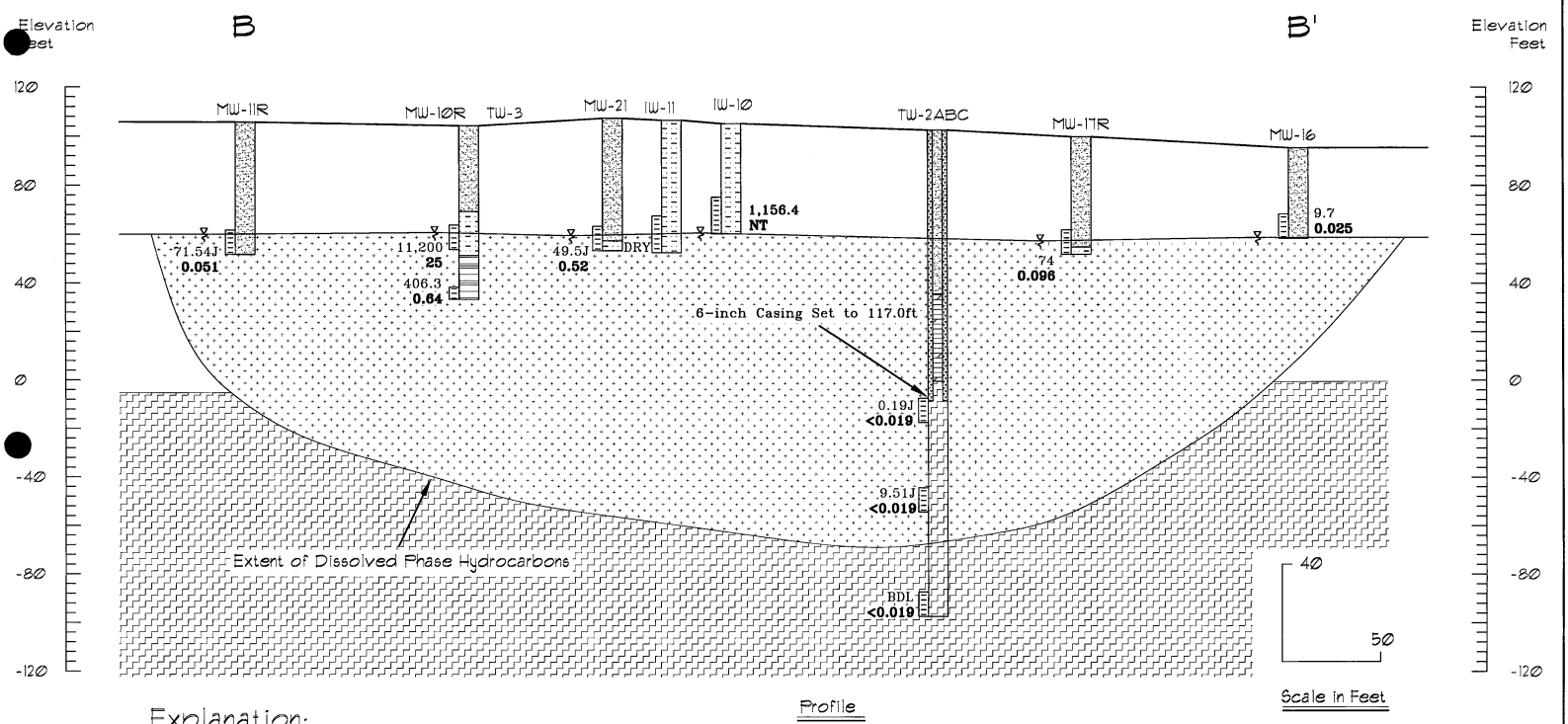
BDL = Below Detection Limits

Geologic Cross Section A - A'

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

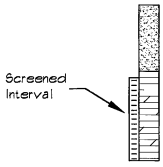
JOB NO. 12-3850
DATE October 24, 2012
Figure 6



Explanation:

- Clayey SILT
- Sandy SILT
- Sandy CLAY
- Partially Wethered Rock: Micaceous SILT
- Rock: Mica Gneiss with Fine to Medium Layered Biotite Gneiss, Biotite Schist, and Hornblende Gneiss

Profile



BDL = Below Detection Limits

Geologic Cross Section B - B'

Smith's Grocery
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3650
DATE October 24, 2012
Figure 6A

APPENDIX A:

SITE SURVEY

APPENDIX B:

SAMPLING LOGS, LABORATORY DATA SHEETS, & CHAIN-OF-CUSTODY FORMS

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012

Field Personnel: B. Owen, D. Odom

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** MW-1R

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	35.04			feet
Total Well Depth (TWD)	39			feet
Length of the water column (LWC=TWD-DGW)			3.96	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	0.65	gallons
3 casing volume (3 X CV)=		3	1.94	gallons

Total Volume of Water Purged Before Sampling 0.5 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:30	11:32						
pH (s.u.)	5.04	5.22						
Specific Conductivity (µmhos/cm)	66.7	68.9						
Water Temperature (°C)	19.7	19.1						
Dissolved Oxygen	1.68	1.75						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 11:32 Dry @ 0.5 gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-2
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:		feet
Depth to Free Product (DFP)		feet
Depth to Ground Water (DGW)	Dry at 38	feet
Total Well Depth (TWD)	38	feet
Length of the water column (LWC=TWD-DGW)		feet
1 casing volume (CV=LWC X C)= _____ X	0.163	gallons
3 casing volume (3 X CV)=	3	gallons

Total Volume of Water Purged Before Sampling 0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)								
Specific Conductivity (µmhos/cm)								
Water Temperature (°C)								
Dissolved Oxygen								
Turbidity (NTU)								
PID readings, if required								

Remarks: Sample Time: Well Gauged Dry
No Sample Collected

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-3
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:		feet
Depth to Free Product (DFP)		feet
Depth to Ground Water (DGW)	Dry at 35	feet
Total Well Depth (TWD)	35	feet
Length of the water column (LWC=TWD-DGW)		feet
1 casing volume (CV=LWC X C)= _____ X	0.163	gallons
3 casing volume (3 X CV)=	3	gallons

Total Volume of Water Purged Before Sampling 0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)								
Specific Conductivity (µmhos/cm)								
Water Temperature (°C)								
Dissolved Oxygen								
Turbidity (NTU)								
PID readings, if required								

Remarks: Sample Time: Well Gauged Dry
No Sample Collected

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-4R
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	31.40			feet
Total Well Depth (TWD)	34			feet
Length of the water column (LWC=TWD-DGW)			2.6	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	0.42	gallons
3 casing volume (3 X CV)=		3	1.27	gallons

Total Volume of Water Purged Before Sampling 0.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	12:00							
pH (s.u.)	5.63							
Specific Conductivity (µmhos/cm)	176.0							
Water Temperature (°C)	22.4							
Dissolved Oxygen	1.16							
Turbidity (NTU)	240+							
PID readings, if required								

Remarks: Sample Time: 12:00 Insufficient water for 1st volume readings; Dry @ 0.5 gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012

Field Personnel: B. Owen, D. Odom

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** MW-5R

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	32.84			feet
Total Well Depth (TWD)	40.5			feet
Length of the water column (LWC=TWD-DGW)			7.66	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	1.25	gallons
3 casing volume (3 X CV)=		3	3.75	gallons

Total Volume of Water Purged Before Sampling 0.5 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	9:52	9:54						
pH (s.u.)	6.29	5.22						
Specific Conductivity (µmhos/cm)	47.5	46.4						
Water Temperature (°C)	17.7	17.4						
Dissolved Oxygen	4.07	5.23						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 9:54 Dry @ 0.5 gallons
Total Depth at 40.45 feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-6R
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	38.15			feet
Total Well Depth (TWD)	44			feet
Length of the water column (LWC=TWD-DGW)			5.85	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	0.95	gallons
3 casing volume (3 X CV)=		3	2.86	gallons

Total Volume of Water Purged Before Sampling 1.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	14:19	14:21						
pH (s.u.)	5.71	5.63						
Specific Conductivity (µmhos/cm)	37.1	55.3						
Water Temperature (°C)	19.0	18.8						
Dissolved Oxygen	4.52	4.54						
Turbidity (NTU)	<5	240+						
PID readings, if required								

Remarks: Sample Time: 14:21 Dry @ 1.0 gallons
Total Depth at 44.15 feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-7R
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	37.32			feet
Total Well Depth (TWD)	44			feet
Length of the water column (LWC=TWD-DGW)			6.68	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	1.09	gallons
3 casing volume (3 X CV)=		3	3.27	gallons

Total Volume of Water Purged Before Sampling 0.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:50	13:52						
pH (s.u.)	5.47	5.49						
Specific Conductivity (µmhos/cm)	89.9	98.7						
Water Temperature (°C)	18.7	18.5						
Dissolved Oxygen	1.56	3.16						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 13:52 Dry @ 0.5 gallons
Total Depth at 43.05 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-8
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	38.66			feet
Total Well Depth (TWD)	41.4			feet
Length of the water column (LWC=TWD-DGW)			2.74	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	0.45	gallons
3 casing volume (3 X CV)=		3	1.34	gallons

Total Volume of Water Purged Before Sampling 0.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:06	11:08						
pH (s.u.)	5.67	5.71						
Specific Conductivity (µmhos/cm)	141.8	150.1						
Water Temperature (°C)	19.9	19.9						
Dissolved Oxygen	1.98	2.06						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 11:08 Dry @ 0.5 gallons
Total Depth at 41.40 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-9R
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	35.00			feet
Total Well Depth (TWD)	38			feet
Length of the water column (LWC=TWD-DGW)			3	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	0.49	gallons
3 casing volume (3 X CV)=		3	1.47	gallons

Total Volume of Water Purged Before Sampling 0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:34							
pH (s.u.)	5.38							
Specific Conductivity (µmhos/cm)	85.3							
Water Temperature (°C)	18.8							
Dissolved Oxygen	2.72							
Turbidity (NTU)	240+							
PID readings, if required								

Remarks: Sample Time: 13:34 Insuffcient water for 1st volume readings.

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-10R
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	43.26			feet
Total Well Depth (TWD)	50.5			feet
Length of the water column (LWC=TWD-DGW)			7.24	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	1.18	gallons
3 casing volume (3 X CV)=		3	3.54	gallons

Total Volume of Water Purged Before Sampling 0.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:16							
pH (s.u.)	5.43							
Specific Conductivity (µmhos/cm)	79.6							
Water Temperature (°C)	19.9							
Dissolved Oxygen	1.80							
Turbidity (NTU)	<5							
PID readings, if required								

Remarks: Sample Time: 11:16 Insufficient water for 1st volume readings; Dry @ 0.5 gallons
Total Depth at 50.4 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-11R
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	45.05			feet
Total Well Depth (TWD)	54			feet
Length of the water column (LWC=TWD-DGW)			8.95	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	1.46	gallons
3 casing volume (3 X CV)=		3	4.38	gallons

Total Volume of Water Purged Before Sampling 1.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	12:25	12:27						
pH (s.u.)	5.94	5.75						
Specific Conductivity (µmhos/cm)	69.0	63.6						
Water Temperature (°C)	18.5	17.8						
Dissolved Oxygen	2.76	2.76						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 12:27 Dry @ 1.0 gallons
Total Depth at 53.80 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012

Field Personnel: B. Owen, D. Odom

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** MW-12

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Free Product (DFP)			feet
Depth to Ground Water (DGW)	Dry at 44		feet
Total Well Depth (TWD)	54		feet
Length of the water column (LWC=TWD-DGW)			feet
1 casing volume (CV=LWC X C)= _____ X	0.163		gallons
3 casing volume (3 X CV)=	3		gallons

Total Volume of Water Purged Before Sampling 0.0 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)								
Specific Conductivity (µmhos/cm)								
Water Temperature (°C)								
Dissolved Oxygen								
Turbidity (NTU)								
PID readings, if required								

Remarks: Sample Time: Well Gauged Dry
No Sample Collected

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-13
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:		feet
Depth to Free Product (DFP)		feet
Depth to Ground Water (DGW)	Dry at 47	feet
Total Well Depth (TWD)	47	feet
Length of the water column (LWC=TWD-DGW)		feet
1 casing volume (CV=LWC X C)= _____ X	0.163	gallons
3 casing volume (3 X CV)=	3	gallons

Total Volume of Water Purged Before Sampling 0.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)								
Specific Conductivity (µmhos/cm)								
Water Temperature (°C)								
Dissolved Oxygen								
Turbidity (NTU)								
PID readings, if required								

Remarks: Sample Time: Well Gauged Dry; Total Depth at 46.90 Feet
No Sample Collected

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-14R
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	47.60			feet
Total Well Depth (TWD)	58			feet
Length of the water column (LWC=TWD-DGW)			10.4	feet
1 casing volume (CV=LWC X C)=	____ X	0.163	1.70	gallons
3 casing volume (3 X CV)=		3	5.09	gallons

Total Volume of Water Purged Before Sampling 1.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	12:32	12:35						
pH (s.u.)	5.28	5.25						
Specific Conductivity (µmhos/cm)	70.6	68.6						
Water Temperature (°C)	17.6	17.4						
Dissolved Oxygen	2.36	2.26						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 12:35 Dry @ 1.0 gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-15R
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	49.13			feet
Total Well Depth (TWD)	58			feet
Length of the water column (LWC=TWD-DGW)			8.87	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	1.45	gallons
3 casing volume (3 X CV)=		3	4.34	gallons

Total Volume of Water Purged Before Sampling 1.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	12:23	12:26						
pH (s.u.)	5.57	5.55						
Specific Conductivity (µmhos/cm)	54.3	57.4						
Water Temperature (°C)	18.6	18.3						
Dissolved Oxygen	4.21	4.32						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 12:26 Dry @ 1.0 gallons
Total Depth at 58.40 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-16
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	36.25			feet
Total Well Depth (TWD)	37			feet
Length of the water column (LWC=TWD-DGW)			0.75	feet
1 casing volume (CV=LWC X C)=	____ X	0.163	0.12	gallons
3 casing volume (3 X CV)=		3	0.37	gallons

Total Volume of Water Purged Before Sampling 0.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:18							
pH (s.u.)	INS							
Specific Conductivity (µmhos/cm)	INS							
Water Temperature (°C)	INS							
Dissolved Oxygen	INS							
Turbidity (NTU)	INS							
PID readings, if required								

Remarks: Sample Time: 13:18 **Insufficient water for purging**

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-17R
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	42.24			feet
Total Well Depth (TWD)	48			feet
Length of the water column (LWC=TWD-DGW)			5.76	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	0.94	gallons
3 casing volume (3 X CV)=		3	2.82	gallons

Total Volume of Water Purged Before Sampling 1.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:09	13:11						
pH (s.u.)	5.56	5.46						
Specific Conductivity (µmhos/cm)	38.2	39.7						
Water Temperature (°C)	17.7	17.6						
Dissolved Oxygen	1.92	2.47						
Turbidity (NTU)	150	240+						
PID readings, if required								

Remarks: Sample Time: 13:11 Dry @ 1.0 gallons
Total Depth at 48.10 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-18R
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	46.15			feet
Total Well Depth (TWD)	55			feet
Length of the water column (LWC=TWD-DGW)			8.85	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	1.44	gallons
3 casing volume (3 X CV)=		3	4.33	gallons

Total Volume of Water Purged Before Sampling 1.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	12:58	13:01						
pH (s.u.)	5.82	5.72						
Specific Conductivity (µmhos/cm)	41.2	39.7						
Water Temperature (°C)	18.3	18.0						
Dissolved Oxygen	2.25	3.22						
Turbidity (NTU)	150	240+						
PID readings, if required								

Remarks: Sample Time: 13:01 Dry @ 1.0 gallons
Total Depth at 54.90 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-19
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:		feet
Depth to Free Product (DFP)		feet
Depth to Ground Water (DGW)	Dry at 50	feet
Total Well Depth (TWD)	50	feet
Length of the water column (LWC=TWD-DGW)		feet
1 casing volume (CV=LWC X C)= _____ X	0.163	gallons
3 casing volume (3 X CV)=	3	gallons

Total Volume of Water Purged Before Sampling 0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)								
Specific Conductivity (µmhos/cm)								
Water Temperature (°C)								
Dissolved Oxygen								
Turbidity (NTU)								
PID readings, if required								

Remarks: Sample Time: Well Gauged Dry; Total Depth 49.20 Feet
No Sample Collected

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-20
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	33.27			feet
Total Well Depth (TWD)	35			feet
Length of the water column (LWC=TWD-DGW)			1.73	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	0.28	gallons
3 casing volume (3 X CV)=		3	0.85	gallons

Total Volume of Water Purged Before Sampling 0.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:38							
pH (s.u.)	INS							
Specific Conductivity (µmhos/cm)	INS							
Water Temperature (°C)	INS							
Dissolved Oxygen	INS							
Turbidity (NTU)	INS							
PID readings, if required								

Remarks: Sample Time: 13:38 **Insufficient water for purging**

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-1
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	37.58			feet
Total Well Depth (TWD)	61			feet
Length of the water column (LWC=TWD-DGW)			23.42	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	3.82	gallons
3 casing volume (3 X CV)=		3	11.45	gallons

Total Volume of Water Purged Before Sampling 5.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	10:25	10:31						
pH (s.u.)	5.77	5.90						
Specific Conductivity (µmhos/cm)	91.0	153.3						
Water Temperature (°C)	20.0	19.7						
Dissolved Oxygen	4.13	3.15						
Turbidity (NTU)	<5	240+						
PID readings, if required								

Remarks: Sample Time: 10:31 Dry @ 5.0 gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-2
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	38.50			feet
Total Well Depth (TWD)	88			feet
Length of the water column (LWC=TWD-DGW)			49.5	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	8.07	gallons
3 casing volume (3 X CV)=		3	24.21	gallons

Total Volume of Water Purged Before Sampling 24.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	10:42	10:48	10:56	11:07				
pH (s.u.)	10.21	10.82	9.66	9.05				
Specific Conductivity (µmhos/cm)	216.5	190.7	198.2	201.4				
Water Temperature (°C)	20.9	19.9	19.4	19.0				
Dissolved Oxygen	2.02	4.69	2.15	1.18				
Turbidity (NTU)	240+	240+	240+	240+				
PID readings, if required								

Remarks: Sample Time: 11:07

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-3
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	42.90			feet
Total Well Depth (TWD)	71			feet
Length of the water column (LWC=TWD-DGW)			28.1	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	4.58	gallons
3 casing volume (3 X CV)=		3	13.74	gallons

Total Volume of Water Purged Before Sampling 7.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:04	11:11						
pH (s.u.)	6.03	5.53						
Specific Conductivity (µmhos/cm)	77.1	79.0						
Water Temperature (°C)	20.2	19.3						
Dissolved Oxygen	2.08	1.91						
Turbidity (NTU)	<5	<5						
PID readings, if required								

Remarks: Sample Time: 11:11 Dry @ 7.0 gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** IW-2
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	38.25			feet
Total Well Depth (TWD)	45			feet
Length of the water column (LWC=TWD-DGW)			6.75	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	1.10	gallons
3 casing volume (3 X CV)=		3	3.30	gallons

Total Volume of Water Purged Before Sampling 0.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:10	11:12						
pH (s.u.)	6.77	6.12						
Specific Conductivity (µmhos/cm)	112.6	136.1						
Water Temperature (°C)	20.2	19.9						
Dissolved Oxygen	1.41	1.52						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 11:12 Dry @ 0.5 gallons
Total Depth at 41.70 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** IW-3
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	38.13			feet
Total Well Depth (TWD)	45			feet
Length of the water column (LWC=TWD-DGW)			6.87	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	1.12	gallons
3 casing volume (3 X CV)=		3	3.36	gallons

Total Volume of Water Purged Before Sampling 0.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	10:18	10:20						
pH (s.u.)	5.50	5.42						
Specific Conductivity (µmhos/cm)	148.6	146.7						
Water Temperature (°C)	20.2	20.0						
Dissolved Oxygen	1.64	1.87						
Turbidity (NTU)	<5	240+						
PID readings, if required								

Remarks: Sample Time: 10:20 Dry @ 0.5 gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** IW-4
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	38.41			feet
Total Well Depth (TWD)	45			feet
Length of the water column (LWC=TWD-DGW)			6.59	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	1.07	gallons
3 casing volume (3 X CV)=		3	3.22	gallons

Total Volume of Water Purged Before Sampling 0.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	10:08	10:10						
pH (s.u.)	5.28	5.55						
Specific Conductivity (µmhos/cm)	135.3	152.4						
Water Temperature (°C)	19.9	20.0						
Dissolved Oxygen	2.80	1.72						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 10:10 Dry @ 0.5 gallons
Total Depth 41.95 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** IW-5
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	35.69			feet
Total Well Depth (TWD)	45			feet
Length of the water column (LWC=TWD-DGW)			9.31	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	1.52	gallons
3 casing volume (3 X CV)=		3	4.55	gallons

Total Volume of Water Purged Before Sampling 1.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:41	11:44						
pH (s.u.)	5.09	5.38						
Specific Conductivity (µmhos/cm)	148.8	149.3						
Water Temperature (°C)	19.1	19.1						
Dissolved Oxygen	3.93	1.80						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 11:44 Dry @ 1.0 gallons
Total Depth 41.20 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** IW-6
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	36.83			feet
Total Well Depth (TWD)	45			feet
Length of the water column (LWC=TWD-DGW)			8.17	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	1.33	gallons
3 casing volume (3 X CV)=		3	4.00	gallons

Total Volume of Water Purged Before Sampling 0.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:58	13:59						
pH (s.u.)	5.64	5.63						
Specific Conductivity (µmhos/cm)	113.1	113.8						
Water Temperature (°C)	18.1	17.9						
Dissolved Oxygen	1.42	2.02						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 13:59 Dry @ 0.5 gallons
Total Depth 42.18 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** IW-8
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	38.30			feet
Total Well Depth (TWD)	45			feet
Length of the water column (LWC=TWD-DGW)			6.7	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	1.09	gallons
3 casing volume (3 X CV)=		3	3.28	gallons

Total Volume of Water Purged Before Sampling 0.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	14:25	14:28						
pH (s.u.)	5.50	5.38						
Specific Conductivity (µmhos/cm)	58.3	135.6						
Water Temperature (°C)	19.1	19.0						
Dissolved Oxygen	4.30	2.34						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 14:28 Dry @ 0.5 gallons
Total Depth at 43.50 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** IW-9
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	37.15			feet
Total Well Depth (TWD)	45			feet
Length of the water column (LWC=TWD-DGW)			7.85	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	1.28	gallons
3 casing volume (3 X CV)=		3	3.84	gallons

Total Volume of Water Purged Before Sampling 1.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	14:07	14:09						
pH (s.u.)	5.50	5.41						
Specific Conductivity (µmhos/cm)	93.0	99.2						
Water Temperature (°C)	18.1	18.2						
Dissolved Oxygen	1.19	2.31						
Turbidity (NTU)	100	240+						
PID readings, if required								

Remarks: Sample Time: 14:09 Dry @ 1.0 gallons
Total Depth 42.90 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** IW-10
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	44.12			feet
Total Well Depth (TWD)	45			feet
Length of the water column (LWC=TWD-DGW)			0.88	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	0.14	gallons
3 casing volume (3 X CV)=		3	0.43	gallons

Total Volume of Water Purged Before Sampling 0.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	12:10							
pH (s.u.)	INS							
Specific Conductivity (µmhos/cm)	INS							
Water Temperature (°C)	INS							
Dissolved Oxygen	INS							
Turbidity (NTU)	INS							
PID readings, if required								

Remarks: Sample Time: 12:10 **Insufficient water for purging**
Total Depth 45.03 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012

Field Personnel: B. Owen, D. Odom

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** IW-11

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:		feet
Depth to Free Product (DFP)		feet
Depth to Ground Water (DGW)	Dry at 45	feet
Total Well Depth (TWD)	45	feet
Length of the water column (LWC=TWD-DGW)		feet
1 casing volume (CV=LWC X C)= _____ X	0.163	gallons
3 casing volume (3 X CV)=	3	gallons

Total Volume of Water Purged Before Sampling 0.0 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:57	11:59						
pH (s.u.)	5.97	5.83						
Specific Conductivity (µmhos/cm)	80.3	97.4						
Water Temperature (°C)	19.2	19.2						
Dissolved Oxygen	1.87	2.92						
Turbidity (NTU)	150	240+						
PID readings, if required								

Remarks: Sample Time: Well Gauged Dry; Total Depth at 45.10 Feet
No Sample Collected

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** MW-21
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	47.63			feet
Total Well Depth (TWD)	54			feet
Length of the water column (LWC=TWD-DGW)			6.37	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	1.04	gallons
3 casing volume (3 X CV)=		3	3.11	gallons

Total Volume of Water Purged Before Sampling 0.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:57	11:59						
pH (s.u.)	5.97	5.83						
Specific Conductivity (µmhos/cm)	80.3	97.4						
Water Temperature (°C)	19.2	19.2						
Dissolved Oxygen	1.87	2.92						
Turbidity (NTU)	150	240+						
PID readings, if required								

Remarks: Sample Time: 11:59 **Insufficient water for purging**
Total Depth at 54.10 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** IW-18
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	43.10			feet
Total Well Depth (TWD)	44.11			feet
Length of the water column (LWC=TWD-DGW)			1.01	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	0.16	gallons
3 casing volume (3 X CV)=		3	0.49	gallons

Total Volume of Water Purged Before Sampling 0.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:41							
pH (s.u.)	INS							
Specific Conductivity (µmhos/cm)	INS							
Water Temperature (°C)	INS							
Dissolved Oxygen	INS							
Turbidity (NTU)	INS							
PID readings, if required								

Remarks: Sample Time: 11:41 **Insufficient water for purging**

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** IW-19
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:		feet
Depth to Free Product (DFP)		feet
Depth to Ground Water (DGW)		feet
Total Well Depth (TWD)	43.05	feet
Length of the water column (LWC=TWD-DGW)		feet
1 casing volume (CV=LWC X C)= _____ X	0.163	gallons
3 casing volume (3 X CV)=	3	gallons

Total Volume of Water Purged Before Sampling 0.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:48							
pH (s.u.)	INS							
Specific Conductivity (µmhos/cm)	INS							
Water Temperature (°C)	INS							
Dissolved Oxygen	INS							
Turbidity (NTU)	INS							
PID readings, if required								

Remarks: Sample Time: **Not Located**

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: B. Owen, D. Odom
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** IW-20
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	41.15			feet
Total Well Depth (TWD)	45			feet
Length of the water column (LWC=TWD-DGW)			3.85	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	0.63	gallons
3 casing volume (3 X CV)=		3	1.88	gallons

Total Volume of Water Purged Before Sampling 0.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:48							
pH (s.u.)	INS							
Specific Conductivity (µmhos/cm)	INS							
Water Temperature (°C)	INS							
Dissolved Oxygen	INS							
Turbidity (NTU)	INS							
PID readings, if required								

Remarks: Sample Time: 11:48 **Insufficient water for purging**
Total Depth at 42.30 Feet

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-1A
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 1 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	41.29			feet
Total Well Depth (TWD)	120			feet
Length of the water column (LWC=TWD-DGW)			78.71	feet
1 casing volume (CV=LWC X C)= _____ X		0.047	3.70	gallons
3 casing volume (3 X CV)=		3	11.10	gallons

Total Volume of Water Purged Before Sampling 4.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:30	14:00						
pH (s.u.)	6.46	6.38						
Specific Conductivity (µmhos/cm)	217.1	126.0						
Water Temperature (°C)	23.6	22.1						
Dissolved Oxygen	2.42	1.59						
Turbidity (NTU)	<5	240+						
PID readings, if required								

Remarks: Sample Time: 14:00 Purged one well volume

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/27/2012

Field Personnel: R. Ariail, G. Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-1B

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	41.00			feet
Total Well Depth (TWD)	161			feet
Length of the water column (LWC=TWD-DGW)			120	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	19.56	gallons
3 casing volume (3 X CV)=		3	58.68	gallons

Total Volume of Water Purged Before Sampling 61.0 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:15	13:30	13:45	14:01				
pH (s.u.)	7.04	6.78	7.13	7.26				
Specific Conductivity (µmhos/cm)	171.1	152.0	149.6	148.0				
Water Temperature (°C)	21.5	20.5	22.6	20.8				
Dissolved Oxygen	0.61	3.20	3.75	3.63				
Turbidity (NTU)	<5	<5	<5	<5				
PID readings, if required								

Remarks: Sample Time: 14:01

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/27/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-1C
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	42.06			feet
Total Well Depth (TWD)	200			feet
Length of the water column (LWC=TWD-DGW)			157.94	feet
1 casing volume (CV=LWC X C)=		X 0.163	25.74	gallons
3 casing volume (3 X CV)=		3	77.23	gallons

Total Volume of Water Purged Before Sampling 27.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	12:10	12:41						
pH (s.u.)	6.88	7.17						
Specific Conductivity (µmhos/cm)	238.3	250.4						
Water Temperature (°C)	19.3	20.7						
Dissolved Oxygen	0.65	1.13						
Turbidity (NTU)	<5	240+						
PID readings, if required								

Remarks: Sample Time: 12:41 Dry @ 27.0 gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-2A
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 1 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	42.75			feet
Total Well Depth (TWD)	137			feet
Length of the water column (LWC=TWD-DGW)			94.25	feet
1 casing volume (CV=LWC X C)= _____ X		0.047	4.43	gallons
3 casing volume (3 X CV)=		3	13.29	gallons

Total Volume of Water Purged Before Sampling 4.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	14:10	14:45						
pH (s.u.)	6.43	6.73						
Specific Conductivity (µmhos/cm)	162.3	175.2						
Water Temperature (°C)	23.4	21.0						
Dissolved Oxygen	1.91	1.70						
Turbidity (NTU)	<5	240+						
PID readings, if required								

Remarks: Sample Time: 14:45 Purged one well volume

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/27/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-2B
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	42.74			feet
Total Well Depth (TWD)	160			feet
Length of the water column (LWC=TWD-DGW)			117.26	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	19.11	gallons
3 casing volume (3 X CV)=		3	57.34	gallons

Total Volume of Water Purged Before Sampling 60.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:00	11:16	11:31	11:47				
pH (s.u.)	7.10	6.86	7.02	7.09				
Specific Conductivity (µmhos/cm)	128.6	207.5	259.3	257.7				
Water Temperature (°C)	18.1	19.1	19.7	20.0				
Dissolved Oxygen	5.32	0.52	0.45	0.41				
Turbidity (NTU)	<5	240+	200	200				
PID readings, if required								

Remarks: Sample Time: 11:47

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/27/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-2C
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	41.88			feet
Total Well Depth (TWD)	203			feet
Length of the water column (LWC=TWD-DGW)			161.12	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	26.26	gallons
3 casing volume (3 X CV)=		3	78.79	gallons

Total Volume of Water Purged Before Sampling 82.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	9:44	10:05	10:27	10:47				
pH (s.u.)	7.57	7.25	7.21	7.24				
Specific Conductivity (µmhos/cm)	150.0	131.6	113.2	128.6				
Water Temperature (°C)	18.0	19.1	19.7	19.1				
Dissolved Oxygen	3.23	4.19	4.52	4.54				
Turbidity (NTU)	<5	<5	<5	<5				
PID readings, if required								

Remarks: Sample Time: 10:47

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012

Field Personnel: R. Ariail, G. Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-3A

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 1 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	40.63			feet
Total Well Depth (TWD)	135			feet
Length of the water column (LWC=TWD-DGW)			94.37	feet
1 casing volume (CV=LWC X C)= _____ X		0.047	4.44	gallons
3 casing volume (3 X CV)=		3	13.31	gallons

Total Volume of Water Purged Before Sampling 4.5 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	12:35	13:15						
pH (s.u.)	6.42	7.07						
Specific Conductivity (µmhos/cm)	265.7	407.7						
Water Temperature (°C)	23.0	21.7						
Dissolved Oxygen	1.78	1.45						
Turbidity (NTU)	45.00	240+						
PID readings, if required								

Remarks: Sample Time: 13:15 Purged one well volume

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-3B
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	40.83			feet
Total Well Depth (TWD)	167			feet
Length of the water column (LWC=TWD-DGW)			126.17	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	20.57	gallons
3 casing volume (3 X CV)=		3	61.70	gallons

Total Volume of Water Purged Before Sampling 64.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	15:55	16:12	16:27	16:43				
pH (s.u.)	6.74	6.76	7.08	7.36				
Specific Conductivity (µmhos/cm)	171.6	171.3	495.0	258.8				
Water Temperature (°C)	20.0	20.9	20.3	20.1				
Dissolved Oxygen	2.94	1.12	4.35	4.43				
Turbidity (NTU)	<5	145.00	240+	240+				
PID readings, if required								

Remarks: Sample Time: 16:43

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-3C
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	40.60			feet
Total Well Depth (TWD)	198			feet
Length of the water column (LWC=TWD-DGW)			157.4	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	25.66	gallons
3 casing volume (3 X CV)=		3	76.97	gallons

Total Volume of Water Purged Before Sampling 27.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	15:10	15:40						
pH (s.u.)	6.15	6.57						
Specific Conductivity (µmhos/cm)	77.6	193.5						
Water Temperature (°C)	23.4	21.6						
Dissolved Oxygen	3.76	1.56						
Turbidity (NTU)	<5	<5						
PID readings, if required								

Remarks: Sample Time: 15:40 Dry @ 27.0 gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-4A
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 1 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	41.86			feet
Total Well Depth (TWD)	141			feet
Length of the water column (LWC=TWD-DGW)			99.14	feet
1 casing volume (CV=LWC X C)= _____ X		0.047	4.66	gallons
3 casing volume (3 X CV)=		3	13.98	gallons

Total Volume of Water Purged Before Sampling 4.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	9:15	10:00						
pH (s.u.)	7.35	6.50						
Specific Conductivity (µmhos/cm)	86.8	79.9						
Water Temperature (°C)	19.3	19.5						
Dissolved Oxygen	3.79	3.87						
Turbidity (NTU)	<5	<5						
PID readings, if required								

Remarks: Sample Time: 10:00 Purged one well volume

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-4B
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	42.94			feet
Total Well Depth (TWD)	170			feet
Length of the water column (LWC=TWD-DGW)			127.06	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	20.71	gallons
3 casing volume (3 X CV)=		3	62.13	gallons

Total Volume of Water Purged Before Sampling 65.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:55	14:10	14:25	14:40				
pH (s.u.)	6.62	6.38	6.39	6.59				
Specific Conductivity (µmhos/cm)	137.7	65.1	64.4	67.1				
Water Temperature (°C)	24.4	20.0	19.9	20.3				
Dissolved Oxygen	4.31	4.57	4.72	4.88				
Turbidity (NTU)	<5	<5	<5	<5				
PID readings, if required								

Remarks: Sample Time: 14:40

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012

Field Personnel: R. Ariail, G. Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-4C

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	42.54			feet
Total Well Depth (TWD)	200			feet
Length of the water column (LWC=TWD-DGW)			157.46	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	25.67	gallons
3 casing volume (3 X CV)=		3	77.00	gallons

Total Volume of Water Purged Before Sampling 80.0 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	12:09	12:32	13:01	13:33				
pH (s.u.)	6.33	6.68	6.74	6.73				
Specific Conductivity (µmhos/cm)	101.3	94.7	150.5	132.9				
Water Temperature (°C)	24.7	20.9	21.8	21.8				
Dissolved Oxygen	3.72	3.90	3.71	3.81				
Turbidity (NTU)	<5	<5	<5	15				
PID readings, if required								

Remarks: Sample Time: 13:33

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-5A
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 1 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	45.66			feet
Total Well Depth (TWD)	120			feet
Length of the water column (LWC=TWD-DGW)			74.34	feet
1 casing volume (CV=LWC X C)= ____ X		0.047	3.49	gallons
3 casing volume (3 X CV)=		3	10.48	gallons

Total Volume of Water Purged Before Sampling 3.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	17:00	17:25						
pH (s.u.)	7.38	6.45						
Specific Conductivity (µmhos/cm)	96.5	87.7						
Water Temperature (°C)	19.0	18.6						
Dissolved Oxygen	3.51	3.02						
Turbidity (NTU)	<5	75.00						
PID readings, if required								

Remarks: Sample Time: 17:25 Purged one well volume

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012

Field Personnel: R. Ariail, G. Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-5B

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	45.68			feet
Total Well Depth (TWD)	157			feet
Length of the water column (LWC=TWD-DGW)			111.32	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	18.15	gallons
3 casing volume (3 X CV)=		3	54.44	gallons

Total Volume of Water Purged Before Sampling 25.0 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	17:40	18:05						
pH (s.u.)	6.54	6.73						
Specific Conductivity (µmhos/cm)	138.8	143.8						
Water Temperature (°C)	17.6	17.4						
Dissolved Oxygen	0.90	1.01						
Turbidity (NTU)	<5	100						
PID readings, if required								

Remarks: Sample Time: 18:35 Dry @ 25.0 gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/26/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-5C
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	45.98			feet
Total Well Depth (TWD)	197			feet
Length of the water column (LWC=TWD-DGW)			151.02	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	24.62	gallons
3 casing volume (3 X CV)=		3	73.85	gallons

Total Volume of Water Purged Before Sampling 29.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	9:50	10:53						
pH (s.u.)	6.54	7.02						
Specific Conductivity (µmhos/cm)	145.8	143.7						
Water Temperature (°C)	21.7	18.1						
Dissolved Oxygen	1.27	1.24						
Turbidity (NTU)	<5	<5						
PID readings, if required								

Remarks: Sample Time: 11:04 Dry @ 29.0 gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-6A
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 1 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	44.60			feet
Total Well Depth (TWD)	118			feet
Length of the water column (LWC=TWD-DGW)			73.4	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	11.96	gallons
3 casing volume (3 X CV)=		3	35.89	gallons

Total Volume of Water Purged Before Sampling 3.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	12:05	12:30						
pH (s.u.)	6.79	7.36						
Specific Conductivity (µmhos/cm)	108.9	116.4						
Water Temperature (°C)	21.9	20.8						
Dissolved Oxygen	4.37	4.02						
Turbidity (NTU)	240+	240+						
PID readings, if required								

Remarks: Sample Time: 12:30 Purged one well volume

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012
Field Personnel: R. Ariail, G. Globensky
General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith's Grocery
Site ID#: 09322 **Monitoring Well #** TW-6B
Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	44.62			feet
Total Well Depth (TWD)	153			feet
Length of the water column (LWC=TWD-DGW)			108.38	feet
1 casing volume (CV=LWC X C)= _____ X		0.163	17.67	gallons
3 casing volume (3 X CV)=		3	53.00	gallons

Total Volume of Water Purged Before Sampling 55.0 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	11:50	12:15	12:45	13:05				
pH (s.u.)	6.81	7.60	8.51	7.20				
Specific Conductivity (µmhos/cm)	316.9	661.0	574.0	197.1				
Water Temperature (°C)	21.1	23.1	24.7	20.6				
Dissolved Oxygen	1.44	1.13	1.24	2.88				
Turbidity (NTU)	<5	240+	240+	240+				
PID readings, if required								

Remarks: Sample Time: 13:05

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy): 9/25/2012

Field Personnel: R. Ariail, G. Globensky

General Weather Conditions: Sunny

Ambient Air Temperature: 28.0 °C

Quality Assurance

pH Meter	YSI Model 550A	Conductivity Meter	
serial no.	02A0831	serial no.	02A0831
pH=4.0		standard	X
pH=7.0	X	standard	
pH=10.0		standard	

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith's Grocery

Site ID#: 09322 **Monitoring Well #** TW-6C

Water Supply Well **Public** _____ **Private** _____

Monitoring Well Diameter (D): 2 inches

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:				feet
Depth to Free Product (DFP)				feet
Depth to Ground Water (DGW)	45.00			feet
Total Well Depth (TWD)	200			feet
Length of the water column (LWC=TWD-DGW)			155	feet
1 casing volume (CV=LWC X C)= ____ X		0.163	25.27	gallons
3 casing volume (3 X CV)=		3	75.80	gallons

Total Volume of Water Purged Before Sampling 50.0 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)	13:17	14:00	14:40					
pH (s.u.)	7.51	7.84	7.83					
Specific Conductivity (µmhos/cm)	210.0	219.1	178.2					
Water Temperature (°C)	20.6	22.2	18.4					
Dissolved Oxygen	5.01	1.45	2.78					
Turbidity (NTU)	240+	<5	<5					
PID readings, if required								

Remarks: Sample Time: 14:40 Dry @ 50.0 gallons

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Midlands Environmental Consultants, Inc.
235 Dooley Rd
Lexington, SC 29073
Attention: Bryan Shane

Project Name: **Smith's Grocery**

Project Number: **12-3850**

Lot Number: **ND17012**

Date Completed: **04/18/2012**

Kelly M. Maberry
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
Midlands Environmental Consultants, Inc.
Lot Number: ND17012

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

GC/MS Volatiles
The LCS/LCSD associated with batch 82659 had ethanol recovered above the acceptance limits. This demonstrates a high bias on analytical results. There were no detections for this compound in the samples associated with this batch; therefore, data quality is not impacted.

Sample Summary

Midlands Environmental Consultants, Inc.

Lot Number: ND17012

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	GPW-Hillwsw Pre	Aqueous	04/16/2012 1330	04/17/2012
002	GPW-Hillwsw Post 1	Aqueous	04/16/2012 1430	04/17/2012
003	GPW-Hillwsw Post 2	Aqueous	04/16/2012 1445	04/17/2012
004	GPW-Swiftwsw Pre	Aqueous	04/16/2012 1515	04/17/2012
005	GPW-Swiftwsw Post 1	Aqueous	04/16/2012 1530	04/17/2012
006	GPW-Swiftwsw Post 2	Aqueous	04/16/2012 1545	04/17/2012

(6 samples)

Executive Summary

Midlands Environmental Consultants, Inc.

Lot Number: ND17012

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	GPW-Hillwsw Pre	Aqueous	Benzene	8260B	54		ug/L	5
001	GPW-Hillwsw Pre	Aqueous	1,2-Dichloroethane	8260B	7.9		ug/L	5
001	GPW-Hillwsw Pre	Aqueous	Xylenes (total)	8260B	8.4		ug/L	5
001	GPW-Hillwsw Pre	Aqueous	Diisopropyl ether (IPE)	8260B	11		ug/L	5
001	GPW-Hillwsw Pre	Aqueous	1,2-Dibromoethane (EDB)	8011	0.42		ug/L	6
004	GPW-Swiftwsw Pre	Aqueous	Benzene	8260B	22		ug/L	11
004	GPW-Swiftwsw Pre	Aqueous	1,2-Dichloroethane	8260B	15		ug/L	11
004	GPW-Swiftwsw Pre	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.46	J	ug/L	11
004	GPW-Swiftwsw Pre	Aqueous	Naphthalene	8260B	4.5		ug/L	11
004	GPW-Swiftwsw Pre	Aqueous	Xylenes (total)	8260B	25		ug/L	11
004	GPW-Swiftwsw Pre	Aqueous	Diisopropyl ether (IPE)	8260B	27		ug/L	11
004	GPW-Swiftwsw Pre	Aqueous	tert-Amyl alcohol (TAA)	8260B	370		ug/L	11
004	GPW-Swiftwsw Pre	Aqueous	tert-butyl alcohol (TBA)	8260B	26	J	ug/L	11
004	GPW-Swiftwsw Pre	Aqueous	1,2-Dibromoethane (EDB)	8011	0.43		ug/L	12
005	GPW-Swiftwsw Post 1	Aqueous	tert-butyl alcohol (TBA)	8260B	22	J	ug/L	13

(15 detections)

Client: Midlands Environmental Consultants, Inc.
Description: GPW-Hillwsw Pre
Date Sampled: 04/16/2012 1330
Date Received: 04/17/2012

Laboratory ID: ND17012-001
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/17/2012 1319	AAC		82659

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**54**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**7.9**		**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**8.4**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		119	70-130
Bromofluorobenzene		106	70-130
Toluene-d8		108	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/17/2012 1319	AAC		82659

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**11**		**10**	**0.40**	**ug/L**	**1**
[redacted]nol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		106	70-130
1,2-Dichloroethane-d4		119	70-130
Toluene-d8		108	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 1843	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
[redacted]re applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: Midlands Environmental Consultants, Inc.
Description: GPW-Hillwsw Pre
Date Sampled: 04/16/2012 1330
Date Received: 04/17/2012

Laboratory ID: ND17012-001
Matrix: Aqueous

EDB & DBCP by Microextraction

	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 1843	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.42		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		118	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
re applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)

H = Out of holding time
N = Recovery is out of criteria

Client: Midlands Environmental Consultants, Inc.
Description: GPW-Hillwsw Post 1
Date Sampled: 04/16/2012 1430
Date Received: 04/17/2012

Laboratory ID: ND17012-002
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/17/2012 1341	AAC		82659

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		119	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		107	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/17/2012 1341	AAC		82659

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]nol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		119	70-130
Toluene-d8		107	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 1947	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
[redacted]re applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: Midlands Environmental Consultants, Inc.
Description: **GPW-Hillwsw Post 1**
Date Sampled: **04/16/2012 1430**
Date Received: **04/17/2012**

Laboratory ID: **ND17012-002**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 1947	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		112	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
* = Reportable result (only when report all runs)

re applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: Midlands Environmental Consultants, Inc.
Description: GPW-Hillwsw Post 2
Date Sampled: 04/16/2012 1445
Date Received: 04/17/2012

Laboratory ID: ND17012-003
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/17/2012 1402	AAC		82659

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		119	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		107	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/17/2012 1402	AAC		82659

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]nol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		119	70-130
Toluene-d8		107	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 2008	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
[redacted]re applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **GPW-Hillwsw Post 2**
Date Sampled: **04/16/2012 1445**
Date Received: **04/17/2012**

Laboratory ID: **ND17012-003**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 2008	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		111	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
[redacted]re applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: Midlands Environmental Consultants, Inc.
Description: GPW-Swiftwsw Pre
Date Sampled: 04/16/2012 1515
Date Received: 04/17/2012

Laboratory ID: ND17012-004
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/17/2012 1427	AAC		82659

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**22**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**15**		**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.46**	**J**	**1.0**	**0.40**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**4.5**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**25**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		119	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		108	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/17/2012 1427	AAC		82659

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**27**		**10**	**0.40**	**ug/L**	**1**
[redacted]nol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**370**		**100**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**26**	**J**	**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		119	70-130
Toluene-d8		108	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 2030	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
[redacted]ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: Midlands Environmental Consultants, Inc.
Description: GPW-Swiftwsw Pre
Date Sampled: 04/16/2012 1515
Date Received: 04/17/2012

Laboratory ID: ND17012-004
Matrix: Aqueous

EDB & DBCP by Microextraction

	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 2030	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.43		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		117	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
* = Reportable result (only when report all runs)
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: Midlands Environmental Consultants, Inc.
Description: GPW-Swiftwsw Post 1
Date Sampled: 04/16/2012 1530
Date Received: 04/17/2012

Laboratory ID: ND17012-005
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/17/2012 1448	AAC		82659

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		107	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/17/2012 1448	AAC		82659

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]nol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**22**	**J**	**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4		118	70-130
Toluene-d8		107	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 2051	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
[redacted]re applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **GPW-Swiftwsw Post 1**
Date Sampled: **04/16/2012 1530**
Date Received: **04/17/2012**

Laboratory ID: **ND17012-005**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 2051	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		118	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
* = Reportable result (only when report all runs)

re applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: Midlands Environmental Consultants, Inc.
Description: GPW-Swiftwsw Post 2
Date Sampled: 04/16/2012 1545
Date Received: 04/17/2012

Laboratory ID: ND17012-006
Matrix: Aqueous

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/17/2012 1510	AAC		82659

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		119	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		106	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/17/2012 1510	AAC		82659

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]nol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		119	70-130
Toluene-d8		106	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 2113	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
[redacted]ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **ND17012-006**
Description: **GPW-Swiftwsw Post 2**
Matrix: **Aqueous**
Date Sampled: **04/16/2012 1545**
Date Received: **04/17/2012**

EDB & DBCP by Microextraction

	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 2113	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		112	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ82659-001
Batch: 82659
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	04/17/2012 0843
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	04/17/2012 0843
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	04/17/2012 0843
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	04/17/2012 0843
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	04/17/2012 0843
Ethanol	ND		1	1000	33	ug/L	04/17/2012 0843
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	04/17/2012 0843
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	04/17/2012 0843

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4		115	70-130
Toluene-d8		108	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ82659-002
Batch: 82659
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1000		1	103	70-130	04/17/2012 0718
tert-Amyl methyl ether (TAME)	50	42		1	84	70-130	04/17/2012 0718
tert-Butyl formate (TBF)	250	190		1	75	70-130	04/17/2012 0718
Diisopropyl ether (IPE)	50	50		1	100	70-130	04/17/2012 0718
3,3-Dimethyl-1-butanol	1000	1100		1	110	70-130	04/17/2012 0718
Ethanol	5000	7700	N	1	153	70-130	04/17/2012 0718
Ethyl-tert-butyl ether (ETBE)	50	43		1	87	70-130	04/17/2012 0718
tert-butyl alcohol (TBA)	1000	990		1	99	70-130	04/17/2012 0718

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		107	70-130
1,2-Dichloroethane-d4		120	70-130
Toluene-d8		111	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ82659-003
Batch: 82659
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	980		1	98	4.9	70-130	20	04/17/2012 0739
tert-Amyl methyl ether (TAME)	50	43		1	86	2.9	70-130	20	04/17/2012 0739
tert-Butyl formate (TBF)	250	190		1	77	1.9	70-130	20	04/17/2012 0739
Diisopropyl ether (IPE)	50	50		1	101	0.75	70-130	20	04/17/2012 0739
3,3-Dimethyl-1-butanol	1000	1100		1	108	2.1	70-130	20	04/17/2012 0739
Ethanol	5000	6600	N	1	132	15	70-130	20	04/17/2012 0739
Ethyl-tert-butyl ether (ETBE)	50	44		1	88	1.6	70-130	20	04/17/2012 0739
tert-butyl alcohol (TBA)	1000	980		1	98	0.37	70-130	20	04/17/2012 0739

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		109	70-130
1,2-Dichloroethane-d4		119	70-130
Toluene-d8		111	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ82659-001
Batch: 82659
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	04/17/2012 0843
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	04/17/2012 0843
Ethylbenzene	ND		1	1.0	0.33	ug/L	04/17/2012 0843
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	04/17/2012 0843
Naphthalene	ND		1	1.0	0.40	ug/L	04/17/2012 0843
Toluene	ND		1	1.0	0.33	ug/L	04/17/2012 0843
Xylenes (total)	ND		1	1.0	0.33	ug/L	04/17/2012 0843

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4		115	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ82659-002
Batch: 82659
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	48		1	96	70-130	04/17/2012 0718
1,2-Dichloroethane	50	51		1	103	70-130	04/17/2012 0718
Ethylbenzene	50	49		1	97	70-130	04/17/2012 0718
Methyl tertiary butyl ether (MTBE)	50	54		1	107	70-130	04/17/2012 0718
Naphthalene	50	50		1	99	70-130	04/17/2012 0718
Toluene	50	48		1	97	70-130	04/17/2012 0718
Xylenes (total)	100	100		1	100	70-130	04/17/2012 0718

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		107	70-130
1,2-Dichloroethane-d4		120	70-130
Toluene-d8		111	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ82659-003
Batch: 82659
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
[redacted]zene	50	48		1	96	0.046	70-130	20	04/17/2012 0739
[redacted]-Dichloroethane	50	50		1	101	2.2	70-130	20	04/17/2012 0739
Ethylbenzene	50	49		1	97	0.31	70-130	20	04/17/2012 0739
Methyl tertiary butyl ether (MTBE)	50	54		1	108	0.70	70-130	20	04/17/2012 0739
Naphthalene	50	48		1	96	3.5	70-130	20	04/17/2012 0739
Toluene	50	49		1	97	0.27	70-130	20	04/17/2012 0739
Xylenes (total)	100	100		1	100	0.41	70-130	20	04/17/2012 0739

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		109	70-130
1,2-Dichloroethane-d4		119	70-130
Toluene-d8		111	70-130

PQL = Practical quantitation limit
[redacted]ot detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MB

Sample ID: NQ82703-001
Batch: 82703
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 04/17/2012 1335

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	04/17/2012 1801

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		107	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: NQ82703-002
Batch: 82703
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 04/17/2012 1335

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.27		1	110	60-140	04/17/2012 1822

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		114	57-137

EDB & DBCP by Microextraction - MS

Sample ID: ND17012-001MS
Batch: 82703
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 04/17/2012 1335

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.42	0.24	0.68		1	107	60-140	04/17/2012 1904

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		113	57-137

PQL = Practical quantitation limit
[redacted]ot detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MSD

Sample ID: ND17012-001MD
Batch: 82703
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 04/17/2012 1335

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.42	0.24	0.66		1	100	2.8	60-140	20	04/17/2012 1926

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		111	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 10618

Client: MECI
Address: 235B Dooly Rd
City: Lexington State: SC Zip Code: 29073
Project Name: Smiths Grocery
Project Number:
Report to Contact: B. Shane
Telephone No. / Fax No. / Email:
Sampler (Printed Name): John C. Bryant
Waybill No:
Quote No:
Page 1 of 1

Preservative: 1. Unpres 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH

Lot No: ND17012

Sample ID / Description	Date	Time	G=Grab C=Composite	Matrix	8260B, BTEX, NAPTH, MTBE	1,2 DCA 8-Oxy	8011 EDB
GPW-HillwSW Pre	4/16	13:30	G	X	X	X	X
GPW-HillwSW Post1	↓	14:30	↓	X	X	X	X
GPW-HillwSW Post2	↓	14:45	↓	X	X	X	X
GPW-SwiftwSW Pre	↓	15:15	↓	X	X	X	X
GPW-SwiftwSW Post1	↓	15:30	↓	X	X	X	X
GPW-SwiftwSW Post2	4/16	15:45	G	X	X	X	X

Remarks / Cooler ID: Low Detection for Drinking Well requested (MSW) (Quick Turn)

Turnaround Time Required (Prior lab approval required for expedited TAT): Standard / Rush (Please Specify)
Sample Disposal: Return to Client / Disposal by Lab
QC Requirements (Specify):
Possible Hazard Identification: Non-Hazard / Flammable / Skin Irritant / Poison / Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler: [signature]	4/16	6:30	1. Received by: [signature]	4.16.12	1830
2. Relinquished by: [signature]	4.17.12	1050	2. Received by: [signature]	4.17.12	1050
3. Relinquished by: [signature] MSMI 4/17/12	4/17/12		3. Received by:		
4. Relinquished by: [signature]	4/17/12	1150	4. Laboratory Received by: [signature]	4/17/12	1150

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY: Received on Ice (Check) Yes / No / Ice Pack Receipt Temp: 1.0 °C Temp. Blank Y / N

Shealy Environmental Services, Inc.
Document Number: FOAD-016
Revision Number: 9

Page 1 of 1
Replaces Date: 05/06/11
Effective Date: 10/11/11

Sample Receipt Checklist (SRC)

Client: Pace Cooler Inspected by/date: EZ 4/17/12 Lot #: ND1730 12

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐		2. If custody seals were present, were they intact and unbroken?

Cooler ID/temperature upon receipt: 1 / 0.1 °C / °C / °C / °C
Method: ☐ Temperature Blank ☑ Against Bottles
Method of coolant: ☐ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____ (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☑	No ☐		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/TPH/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH) with the SR # (number) _____

Sample(s) _____ were received with bubbles >6 mm in diameter.

Sample(s) _____ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BN/pest/PCB/herb.

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: _____ Date of response: _____

Comments: _____

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Midlands Environmental Consultants, Inc.
235 Dooley Rd
Lexington, SC 29073
Attention: Bryan Shane

Project Name: **Smith's Grocery**

Project Number: **12-3850**

Lot Number: **ND17013**

Date Completed: **04/19/2012**

Kelly M. Maberry
Project Manager

ACCREDITED IN ACCORDANCE WITH nelac

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative

Midlands Environmental Consultants, Inc.

Lot Number: ND17013

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

The data is screening only. Laboratory QC may not pass and samples may be analyzed outside of tune time.

Sample Summary

Midlands Environmental Consultants, Inc.

Lot Number: ND17013

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	GPW-1	Aqueous	04/16/2012 1000	04/17/2012
002	GPW-2	Aqueous	04/16/2012 1100	04/17/2012
003	GPW-3	Aqueous	04/16/2012 1200	04/17/2012
004	GPW-4	Aqueous	04/16/2012 1300	04/17/2012
005	GPW-5	Aqueous	04/16/2012 1400	04/17/2012

(5 samples)

Executive Summary

Midlands Environmental Consultants, Inc.

Lot Number: ND17013

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	GPW-1	Aqueous	Benzene	8260B	1100	E	ug/L	5
001	GPW-1	Aqueous	Ethylbenzene	8260B	130		ug/L	5
001	GPW-1	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	27		ug/L	5
001	GPW-1	Aqueous	Naphthalene	8260B	130		ug/L	5
001	GPW-1	Aqueous	Toluene	8260B	1100	E	ug/L	5
001	GPW-1	Aqueous	Xylenes (total)	8260B	1600	E	ug/L	5
002	GPW-2	Aqueous	Benzene	8260B	37		ug/L	6
002	GPW-2	Aqueous	Naphthalene	8260B	3.8	J	ug/L	6
002	GPW-2	Aqueous	Toluene	8260B	6.1		ug/L	6
002	GPW-2	Aqueous	Xylenes (total)	8260B	29		ug/L	6
003	GPW-3	Aqueous	Benzene	8260B	0.91	J	ug/L	7
004	GPW-4	Aqueous	Benzene	8260B	590	E	ug/L	8
004	GPW-4	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	3.3	J	ug/L	8
004	GPW-4	Aqueous	Naphthalene	8260B	6.6		ug/L	8
004	GPW-4	Aqueous	Xylenes (total)	8260B	1.8	J	ug/L	8
005	GPW-5	Aqueous	Benzene	8260B	10		ug/L	9
005	GPW-5	Aqueous	Ethylbenzene	8260B	29		ug/L	9
005	GPW-5	Aqueous	Naphthalene	8260B	2.1	J	ug/L	9
005	GPW-5	Aqueous	Xylenes (total)	8260B	120		ug/L	9
005	GPW-5	Aqueous	1,2-Dibromoethane (EDB)	8011	0.31		ug/L	10

(20 detections)

Volatile Organic Compounds by GC/MS

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **ND17013-001**

Description: **GPW-1** Matrix: **Aqueous**

Date Sampled: **04/16/2012 1000**

Date Received: **04/17/2012**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/19/2012 0643	JJG		82843

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	1100	E	5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	130		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	27		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	130		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	1100	E	5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	1600	E	5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **ND17013-002**

Description: **GPW-2** Matrix: **Aqueous**

Date Sampled: **04/16/2012 1100**

Date Received: **04/17/2012**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/19/2012 0705	JJG		82843

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**37**		**5.0**	**0.20**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**3.8**	**J**	**5.0**	**1.7**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**6.1**		**5.0**	**1.7**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**29**		**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		94	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **ND17013-003**

Description: **GPW-3** Matrix: **Aqueous**

Date Sampled: **04/16/2012 1200**

Date Received: **04/17/2012**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/19/2012 0727	JJG		82843

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**0.91**	**J**	**5.0**	**0.20**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		95	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **ND17013-004**
Description: **GPW-4**
Matrix: **Aqueous**
Date Sampled: **04/16/2012 1300**
Date Received: **04/17/2012**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/19/2012 0749	JJG		82843

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**590**	**E**	**5.0**	**0.20**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**3.3**	**J**	**5.0**	**0.40**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**6.6**		**5.0**	**1.7**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**1.8**	**J**	**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		95	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Volatile Organic Compounds by GC/MS

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **ND17013-005**
Description: **GPW-5**
Matrix: **Aqueous**
Date Sampled: **04/16/2012 1400**
Date Received: **04/17/2012**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/19/2012 0811	JJG		82843

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**10**		**5.0**	**0.20**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**29**		**5.0**	**1.7**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**2.1**	**J**	**5.0**	**1.7**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**120**		**5.0**	**1.7**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

EDB & DBCP by Microextraction

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **ND17013-005**

Description: **GPW-5** Matrix: **Aqueous**

Date Sampled: **04/16/2012 1400**

Date Received: **04/17/2012**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/17/2012 2134	MSM	04/17/2012 1335	82703

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.31**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		119	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 10617

Company: MEC1
Address: 2358 Dooley Rd
City: Lexington | State: SC | Zip Code: 29073
Project Name: Smiths Grocery
Project Number:
P.O. Number:
Requested/Contact: B. Shane
Telephone No. / Fax No. / Email:
Sampler (Print and Name): John C. Bryant
Waybill No.
Page: 1 of 1
Number of Containers:
Bottle Specifications on back:
Preservative:
Lot No: LD 170 13
Remarks / Cooler ID:

Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCl 6. Na2S2O3

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	Grab	Composite	Matrix: GW	DW	WW	S	Other	Analysis: 8260B MTBE, NAPH, BTEX
GPW-1	7/16	10:00	6	X						X
GPW-2	↓	11:00	↓	↓						X
GPW-3		12:00								X
GPW-4	↓	13:00	↓	↓						X
GPW-5	7/16	14:00	6	Y						X

Field Screening (Quick Turn)

Turn Around Time Required (Prior approval required for expedited TAT): Standard / Rush (Please Specify)

Sample Disposal: Return to Client / Disposal by Lab

QC Requirements (Specify):

Possible Hazard Identification: Non-Hazard / Flammable / Skin Irritant / Poison / Unknown

	Date	Time
1. Relinquished by: Sampler	7/16	16:30
2. Relinquished by:	7-17-12	1050
3. Relinquished by:	Date	Time
4. Relinquished by:	7/17/12	1149

	Date	Time
1. Received by:	7-16-12	1630
2. Received by:	7-17-12	1050
3. Received by:	Date	Time
4. Laboratory Received by:	Date 7-17-12	Time 1149

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle): Yes / No / Ice Pack
Receipt Temp. 1.0 °C
Temp Blank: Y / N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Receipt Checklist (SRC)

Client: MEC Cooler Inspected by/date: CC 4/3/12 Lot #: KDN13

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other

Yes ☐	No ☑	1. Were custody seals present on the cooler?
Yes ☐	No ☐	2. If custody seals were present, were they intact and unbroken?

Cooler ID/temperature upon receipt 1 - 0 / ____ °C ____ / ____ °C ____ / ____ °C ____ / ____ °C
Method: ☐ Temperature Blank ☑ Against Bottles
Method of coolant: ☐ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____. (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☐	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☑	No ☐		13. Were all samples received within ½ the holding time or ≤48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH); with the SR # (number)

Sample(s) _____ were received with bubbles >6 mm in diameter.

Sample(s) _____ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: Date of response: _____

Comments:

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Midlands Environmental Consultants, Inc.
235 Dooley Rd
Lexington, SC 29073
Attention: Bryan Shane

Project Name: **Smith's Grocery**

Project Number: **12-3850**

Lot Number: **ND18031**

Date Completed: **04/23/2012**

Kelly M. Maberry
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative

Midlands Environmental Consultants, Inc.

Lot Number: ND18031

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

The data in this report is screening only. Laboratory QC may not pass and samples may be analyzed outside of tune time.

Sample Summary

Midlands Environmental Consultants, Inc.

Lot Number: ND18031

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	GPW-6	Aqueous	04/17/2012 0945	04/18/2012
002	GPW-7	Aqueous	04/17/2012 1045	04/18/2012
003	GPW-8	Aqueous	04/17/2012 1145	04/18/2012
004	GPW-9	Aqueous	04/17/2012 1240	04/18/2012
005	GPW-10	Aqueous	04/17/2012 1259	04/18/2012
006	GPW-11	Aqueous	04/17/2012 1430	04/18/2012

(6 samples)

Executive Summary

Midlands Environmental Consultants, Inc.

Lot Number: ND18031

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	GPW-6	Aqueous	Benzene	8260B	0.68	J	ug/L	5

(1 detection)

Client: **Midlands Environmental Consultants, Inc.**
Description: **GPW-6**
Date Sampled: **04/17/2012 0945**
Date Received: **04/18/2012**

Laboratory ID: **ND18031-001**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/19/2012 2148	DD		82932

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**0.68**	**J**	**5.0**	**0.20**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		117	70-130
Bromofluorobenzene		110	70-130
Toluene-d8		108	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/21/2012 1425	NCM	04/18/2012 1800	82823

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		106	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **ND18031-002**

Description: **GPW-7** Matrix: **Aqueous**

Date Sampled: **04/17/2012 1045**

Date Received: **04/18/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/19/2012 2210	DD		82932

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		109	70-130
Toluene-d8		110	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/21/2012 1446	NCM	04/18/2012 1800	82823

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		106	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **GPW-8**
Date Sampled: **04/17/2012 1145**
Date Received: **04/18/2012**

Laboratory ID: **ND18031-003**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/19/2012 2231	DD		82932

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		108	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/21/2012 1508	NCM	04/18/2012 1800	82823

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		116	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
* = Reportable result (only when report all runs)
H = Out of holding time
N = Recovery is out of criteria

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **ND18031-004**

Description: **GPW-9** Matrix: **Aqueous**

Date Sampled: **04/17/2012 1240**

Date Received: **04/18/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/19/2012 2252	DD		82932

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		109	70-130
Toluene-d8		109	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/21/2012 1529	NCM	04/18/2012 1800	82823

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		109	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **GPW-10**
Date Sampled: **04/17/2012 1259**
Date Received: **04/18/2012**

Laboratory ID: **ND18031-005**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/19/2012 2314	DD		82932

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		110	70-130
Toluene-d8		109	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/21/2012 1550	NCM	04/18/2012 1800	82823

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		119	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **GPW-11**
Date Sampled: **04/17/2012 1430**
Date Received: **04/18/2012**

Laboratory ID: **ND18031-006**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/19/2012 2335	DD		82932

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.0	0.20	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	1.7	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		5.0	1.7	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	1.7	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		5.0	1.7	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		109	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/21/2012 1612	NCM	04/18/2012 1800	82823

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		104	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria

Shealy Environmental Services, Inc
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 10619

Client	MCCI
Address	235B Dooley Rd
City / State / Zip Code	Lexington / SC / 29073
Project Name	Smiths Grocery
Project Number	
Report to Contact	B Shane
Telephone No. / Fax No. / Email	
Sampler (Printed Name)	John C. Bryant
Waybill No.	
Quote No.	
Page	1 of 1
Lot No.	ND18031

Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCl 6. Na Thio. 7. NaOH

Sample ID / Description	Date	Time	G=Grab C=Composite	Matrix GW	8260B, BTEX NAPTH, MTBE	8011 EDB	Remarks / Cooler ID
GPW-6	4/17	9:45	G	X	X	X	Field Screening
GPW-7	↓	10:45	↓	↓	X	X	
GPW-8	↓	11:45	↓	↓	X	X	
GPW-9	↓	12:40	↓	↓	X	X	
GPW-10	↓	12:59	↓	↓	X	X	
GPW-11	4/17	14:30	G	X	X	X	

Turn Around Time Required: ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐ Non Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

Relinquished by	Date	Time	Received by	Date	Time
1. Relinquished by / Sampler: [signature]	4/17	15:00	1. Received by: [signature]	4/17/	15:00
2. Relinquished by: [signature]	4/18	12:12	2. Received by: [signature]	4/18/12	12:12
3. Relinquished by:			3. Received by:		
4. Relinquished by: [signature]	4/18/12	1315	4. Laboratory Received by: [signature]	4/18/12	1315

LAB USE ONLY: Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack — Receipt Temp 1.8 °C — Temp Blank Y / N

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Receipt Checklist (SRC)

Client: MEC Cooler Inspected by/date: [illegible] 4/18/12 Lot #: ND18031

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐		2. If custody seals were present, were they intact and unbroken?
Cooler ID/temperature upon receipt: 1.8 °C ___/___ °C ___/___ °C ___/___ °C Method: ☑ Temperature Blank ☑ Against Bottles Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____. (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☑	No ☐		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☐	No ☐	NA ☐	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH) with the SR # (number)

Sample(s) _____ were received with bubbles >6 mm in diameter.

Sample(s) _____ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb.

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: _____ Date of response: _____

Comments: _____

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Midlands Environmental Consultants, Inc.
235 Dooley Rd
Lexington, SC 29073
Attention: Bryan Shane

Project Name: **Smith's Grocery**

Project Number: **12-3946**

Lot Number: **NH30049**

Date Completed: **09/11/2012**

Kelly M. Maberry
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative

Midlands Environmental Consultants, Inc.

Lot Number: NH30049

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Receiving

3 Field Blanks and a Trip Blank were received but not listed on the chain of custody.

Samples -004, -013, -015, -016 and -024 for volatiles analysis contained vials with air bubbles greater than ¼" or 6mm in diameter. The laboratory uses these vials for screening and the vials without bubbles for analysis whenever possible. Condition of samples is documented on the Sample Receipt Checklist (SRC).

GC/MS Volatiles

The LCS/LCSD associated with batches 92933 and 92935 had ethanol recovered above the acceptance limits. This demonstrates a high bias on analytical results. There were no detections for this compound in the samples associated with these batches; therefore, data quality is not impacted.

The LCS/LCSD associated with batch 92980 had ethanol and tert-butyl alcohol recovered above the acceptance limits. This demonstrates a high bias on analytical results. There were no detections for these compounds in the samples associated with this batch; therefore, data quality is not impacted.

The MS associated with sample -020 had several compounds and the surrogate 1,2-dichloroethane-d4 recovered outside of the acceptance limits. This demonstrates a matrix effect and data quality is not impacted.

The surrogate 1,2-dichloroethane-d4 in the duplicate associated with sample -020 was recovered outside of the acceptance limits. The sample had all surrogates recovered within the required acceptance limits. Insufficient sample volume remained for re-analysis.

Samples -010, -011 and -012 had the surrogate 1,2-dichloroethane-d4 recovered above the acceptance limits. This reflects a high bias for compounds associated with this surrogate. There were no detections for this compound in the samples; therefore, there is no impact on data quality and no corrective action is required.

EDB/DBCP

The sample result for -001 has a P qualifier because the relative percent difference (RPD) between the two dissimilar phase GC columns exceeds 40%. Section 7.10.4 of SW-846 method 8000B states the higher of the two results is reported; however the lower result is reported for this sample. The higher result for sample -001 was 0.068 ug/L.

Samples -005, -007, -017 and -024 had a layer of sediment in the sample vial that altered the final volume.

Sample Summary
Midlands Environmental Consultants, Inc.
Lot Number: NH30049

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	FR-1 120	Aqueous	08/28/2012	08/30/2012
002	FR-1 161	Aqueous	08/28/2012	08/30/2012
003	FR-1 200	Aqueous	08/28/2012	08/30/2012
004	FR-2 137	Aqueous	08/28/2012	08/30/2012
005	FR-2 160	Aqueous	08/28/2012	08/30/2012
006	FR-2 203	Aqueous	08/28/2012	08/30/2012
007	FR-3 135	Aqueous	08/28/2012	08/30/2012
008	FR-3 167	Aqueous	08/28/2012	08/30/2012
009	FR-3 198	Aqueous	08/28/2012	08/30/2012
010	FR-4 140	Aqueous	08/30/2012	08/31/2012
011	FR-4 170	Aqueous	08/30/2012	08/31/2012
012	FR-4 200	Aqueous	08/29/2012	08/31/2012
013	FR-5 120	Aqueous	08/28/2012	08/30/2012
014	FR-5 157	Aqueous	08/28/2012	08/30/2012
015	FR-5 197	Aqueous	08/28/2012	08/30/2012
016	FR-6 118	Aqueous	08/28/2012	08/30/2012
017	FR-6 153	Aqueous	08/28/2012	08/30/2012
018	FR-6 200	Aqueous	08/28/2012	08/30/2012
019	FR-2 137 Dup.	Aqueous	08/28/2012	08/30/2012
020	FR-2 160 Dup.	Aqueous	08/28/2012	08/30/2012
021	FR-2 203 Dup.	Aqueous	08/28/2012	08/30/2012
022	Field Blank	Aqueous	08/28/2012	08/30/2012
023	Field Blank	Aqueous	08/29/2012	08/30/2012
024	Trip Blank	Aqueous	08/28/2012	08/30/2012
025	Field Blank	Aqueous	08/30/2012	08/31/2012

(25 samples)

Executive Summary

Midlands Environmental Consultants, Inc.

Lot Number: NH30049

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	FR-1 120	Aqueous	Benzene	8260B	2400		ug/L	5
001	FR-1 120	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	15	J	ug/L	5
001	FR-1 120	Aqueous	Naphthalene	8260B	31		ug/L	5
001	FR-1 120	Aqueous	Xylenes (total)	8260B	450		ug/L	5
001	FR-1 120	Aqueous	Diisopropyl ether (IPE)	8260B	34	J	ug/L	5
001	FR-1 120	Aqueous	tert-Amyl alcohol (TAA)	8260B	2200		ug/L	5
001	FR-1 120	Aqueous	1,2-Dibromoethane (EDB)	8011	0.041	P	ug/L	6
002	FR-1 161	Aqueous	Benzene	8260B	17		ug/L	7
002	FR-1 161	Aqueous	Xylenes (total)	8260B	5.0		ug/L	7
002	FR-1 161	Aqueous	Diisopropyl ether (IPE)	8260B	1.0	J	ug/L	7
002	FR-1 161	Aqueous	tert-Amyl alcohol (TAA)	8260B	63	J	ug/L	7
003	FR-1 200	Aqueous	Benzene	8260B	1900		ug/L	9
003	FR-1 200	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	14		ug/L	9
003	FR-1 200	Aqueous	Naphthalene	8260B	7.1	J	ug/L	9
003	FR-1 200	Aqueous	Xylenes (total)	8260B	160		ug/L	9
003	FR-1 200	Aqueous	Diisopropyl ether (IPE)	8260B	32	J	ug/L	9
003	FR-1 200	Aqueous	tert-Amyl alcohol (TAA)	8260B	1500		ug/L	9
003	FR-1 200	Aqueous	1,2-Dibromoethane (EDB)	8011	0.051		ug/L	10
004	FR-2 137	Aqueous	Diisopropyl ether (IPE)	8260B	0.65	J	ug/L	11
004	FR-2 137	Aqueous	tert-Amyl alcohol (TAA)	8260B	60	J	ug/L	11
005	FR-2 160	Aqueous	Benzene	8260B	2.7		ug/L	13
005	FR-2 160	Aqueous	Xylenes (total)	8260B	1.2		ug/L	13
006	FR-2 203	Aqueous	Benzene	8260B	2.1		ug/L	15
006	FR-2 203	Aqueous	Xylenes (total)	8260B	2.0		ug/L	15
008	FR-3 167	Aqueous	Benzene	8260B	7.7		ug/L	19
008	FR-3 167	Aqueous	Xylenes (total)	8260B	5.3		ug/L	19
009	FR-3 198	Aqueous	Benzene	8260B	30		ug/L	21
009	FR-3 198	Aqueous	Xylenes (total)	8260B	9.0		ug/L	21
010	FR-4 140	Aqueous	1,2-Dibromoethane (EDB)	8011	0.022		ug/L	24
011	FR-4 170	Aqueous	1,2-Dibromoethane (EDB)	8011	0.023		ug/L	26
013	FR-5 120	Aqueous	1,2-Dibromoethane (EDB)	8011	0.065		ug/L	30
014	FR-5 157	Aqueous	1,2-Dichloroethane	8260B	0.85	J	ug/L	31
014	FR-5 157	Aqueous	1,2-Dibromoethane (EDB)	8011	0.065		ug/L	32
015	FR-5 197	Aqueous	1,2-Dichloroethane	8260B	0.87	J	ug/L	33
015	FR-5 197	Aqueous	1,2-Dibromoethane (EDB)	8011	0.077		ug/L	34
019	FR-2 137 Dup.	Aqueous	Diisopropyl ether (IPE)	8260B	0.62	J	ug/L	41
020	FR-2 160 Dup.	Aqueous	Benzene	8260B	1.7		ug/L	43
020	FR-2 160 Dup.	Aqueous	Xylenes (total)	8260B	0.52	J	ug/L	43
020	FR-2 160 Dup.	Aqueous	tert-Amyl alcohol (TAA)	8260B	57	JS	ug/L	43
021	FR-2 203 Dup.	Aqueous	Benzene	8260B	2.2		ug/L	45
021	FR-2 203 Dup.	Aqueous	Xylenes (total)	8260B	1.9		ug/L	45

(41 detections)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-1 120**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-001**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	09/08/2012 0506	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**2400**		**20**	**2.6**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		20	2.9	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		20	6.6	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**15**	**J**	**20**	**8.0**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**31**		**20**	**8.0**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		20	6.6	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**450**		**20**	**6.6**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	09/08/2012 0506	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**34**	**J**	**200**	**8.0**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	20000	660	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		2000	20	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		2000	4.0	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**2200**		**2000**	**130**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		200	4.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		2000	130	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2000	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		101	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1038	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-1 120**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-001**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1038	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.041**	**P**	**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		86	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NH30049-002**
Description: **FR-1 161** Matrix: **Aqueous**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0528	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**17**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**5.0**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0528	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**1.0**	**J**	**10**	**0.40**	**ug/L**	**1**
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**63**	**J**	**100**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		101	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1141	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-1 161**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-002**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1141	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		85	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-1 200**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-003**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	09/08/2012 0550	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**1900**		**10**	**1.3**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		10	1.5	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		10	3.3	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**14**		**10**	**4.0**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**7.1**	**J**	**10**	**4.0**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		10	3.3	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**160**		**10**	**3.3**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	09/08/2012 0550	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**32**	**J**	**100**	**4.0**	**ug/L**	**1**
[redacted]thanol	64-17-5	8260B	ND	L	10000	330	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND		1000	10	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1000	2.0	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**1500**		**1000**	**67**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		100	2.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		1000	67	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		1000	10	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		102	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1202	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-1 200**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-003**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1202	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.051**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		87	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-2 137**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-004**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0612	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0612	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**0.65**	**J**	**10**	**0.40**	**ug/L**	**1**
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**60**	**J**	**100**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1224	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-2 137**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-004**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1224	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		87	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-2 160**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-005**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0634	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**2.7**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**1.2**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0634	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		102	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1245	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-2 160**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-005**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1245	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		81	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-2 203**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-006**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0656	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**2.1**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**2.0**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		104	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0656	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		104	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1306	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-2 203**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-006**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1306	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		81	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-3 135**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-007**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0718	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0718	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		101	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1327	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-3 135**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-007**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1327	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.022	0.022	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		70	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-3 167**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-008**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0740	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**7.7**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**5.3**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		105	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0740	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]hanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		112	70-130
Toluene-d8		105	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1348	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-3 167**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-008**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1348	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		71	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-3 198**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-009**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0803	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**30**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**9.0**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		103	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0803	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		111	70-130
Toluene-d8		103	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1409	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-3 198**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-009**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1409	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		83	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-4 140**
Date Sampled: **08/30/2012**
Date Received: **08/31/2012**

Laboratory ID: **NH30049-010**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 2150	DD		92935

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND	Q	1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND	Q	1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND	Q	1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND	Q	1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND	Q	1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND	Q	1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND	Q	1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4	N	147	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		107	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 2150	DD		92935

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND	Q	10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND	Q	1000	33	ug/L	1
[illegible]3,3-Dimethyl-1-butanol	624-95-3	8260B	ND	Q	100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND	Q	100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND	Q	100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND	Q	10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND	Q	100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND	Q	100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4	N	147	70-130
Toluene-d8		107	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1927	MPM	08/31/2012 1540	92585

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-4 140**
Date Sampled: **08/30/2012**
Date Received: **08/31/2012**

Laboratory ID: **NH30049-010**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1927	MPM	08/31/2012 1540	92585

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.022**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		66	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-4 170**
Date Sampled: **08/30/2012**
Date Received: **08/31/2012**

Laboratory ID: **NH30049-011**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 2213	DD		92935

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND	Q	1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND	Q	1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND	Q	1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND	Q	1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND	Q	1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND	Q	1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND	Q	1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4	N	148	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		108	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 2213	DD		92935

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND	Q	10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	Q	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND	Q	100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND	Q	100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND	Q	100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND	Q	10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND	Q	100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND	Q	100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4	N	148	70-130
Toluene-d8		108	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 2030	MPM	08/31/2012 1540	92585

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-4 170**
Date Sampled: **08/30/2012**
Date Received: **08/31/2012**

Laboratory ID: **NH30049-011**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 2030	MPM	08/31/2012 1540	92585

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.023**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		77	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-4 200**
Date Sampled: **08/29/2012**
Date Received: **08/31/2012**

Laboratory ID: **NH30049-012**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 2237	DD		92935

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND	Q	1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND	Q	1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND	Q	1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND	Q	1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND	Q	1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND	Q	1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND	Q	1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4	N	150	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		108	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 2237	DD		92935

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND	Q	10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	Q	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND	Q	100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND	Q	100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND	Q	100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND	Q	10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND	Q	100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND	Q	100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4	N	150	70-130
Toluene-d8		108	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	09/07/2012 1214	MPM	09/07/2012 1025	92882

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-4 200**
Date Sampled: **08/29/2012**
Date Received: **08/31/2012**

Laboratory ID: **NH30049-012**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	09/07/2012 1214	MPM	09/07/2012 1025	92882

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		78	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-5 120**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-013**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0825	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0825	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		111	70-130
Toluene-d8		101	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1431	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-5 120**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-013**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1431	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.065**		**0.019**	**0.019**	**ug/L**	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		82	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-5 157**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-014**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0847	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	**107-06-2**	**8260B**	**0.85**	**J**	**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		114	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0847	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		114	70-130
Toluene-d8		101	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1452	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-5 157**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-014**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1452	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.065**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		84	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NH30049-015**

Description: **FR-5 197** Matrix: **Aqueous**

Date Sampled: **08/28/2012**

Date Received: **08/30/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0909	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	**107-06-2**	**8260B**	**0.87**	**J**	**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0909	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]hanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		113	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1513	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-5 197**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-015**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1513	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.077**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		88	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-6 118**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-016**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0931	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		116	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0931	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		116	70-130
Toluene-d8		102	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1534	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-6 118**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-016**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1534	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		88	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-6 153**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-017**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0953	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		106	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 0953	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		118	70-130
Toluene-d8		106	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1555	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-6 153**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-017**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1555	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.021	0.021	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		85	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-6 200**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-018**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1015	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		120	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		104	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1015	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		120	70-130
Toluene-d8		104	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1616	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-6 200**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-018**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1616	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		90	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-2 137 Dup.**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-019**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1037	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		104	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1037	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**0.62**	**J**	**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		118	70-130
Toluene-d8		104	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1637	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-2 137 Dup.**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-019**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1637	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		90	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-2 160 Dup.**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-020**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	09/10/2012 1317	AAC		92980

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**1.7**		**1.0**	**0.13**	**ug/L**	**2**
1,2-Dichloroethane	107-06-2	8260B	ND	S	1.0	0.15	ug/L	2
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	2
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	2
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	2
Xylenes (total)	**1330-20-7**	**8260B**	**0.52**	**J**	**1.0**	**0.33**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	09/10/2012 1317	AAC		92980

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	2
Ethanol	64-17-5	8260B	ND	LS	1000	33	ug/L	2
[illegible]-Dimethyl-1-butanol	624-95-3	8260B	ND	S	100	1.0	ug/L	2
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND	S	100	0.20	ug/L	2
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**57**	**JS**	**100**	**6.7**	**ug/L**	**2**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND	S	10	0.20	ug/L	2
tert-butyl alcohol (TBA)	75-65-0	8260B	ND	LS	100	6.7	ug/L	2
tert-Butyl formate (TBF)	762-75-4	8260B	ND	S	100	1.0	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1659	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-2 160 Dup.**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-020**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1659	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		86	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-2 203 Dup.**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-021**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1207	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**2.2**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**1.9**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		122	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		104	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1207	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		122	70-130
Toluene-d8		104	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1720	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **FR-2 203 Dup.**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-021**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1720	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		85	57-137

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **Field Blank**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-022**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1144	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		123	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		106	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1144	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		123	70-130
Toluene-d8		106	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1741	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **Field Blank**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-022**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1741	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		90	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **Field Blank**
Date Sampled: **08/29/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-023**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1122	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		122	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		107	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1122	JJG		92933

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		122	70-130
Toluene-d8		107	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1802	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **Field Blank**
Date Sampled: **08/29/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-023**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 1802	MPM	08/31/2012 0851	92552

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		90	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **Trip Blank**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-024**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1510	DD		92935

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		123	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		105	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1510	DD		92935

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		123	70-130
Toluene-d8		105	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 2238	MPM	08/31/2012 1153	92563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **Trip Blank**
Date Sampled: **08/28/2012**
Date Received: **08/30/2012**

Laboratory ID: **NH30049-024**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 2238	MPM	08/31/2012 1153	92563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		88	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **Field Blank**
Date Sampled: **08/30/2012**
Date Received: **08/31/2012**

Laboratory ID: **NH30049-025**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1533	DD		92935

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		127	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		106	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/08/2012 1533	DD		92935

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		127	70-130
Toluene-d8		106	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 2113	MPM	08/31/2012 1540	92585

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **Field Blank**
Date Sampled: **08/30/2012**
Date Received: **08/31/2012**

Laboratory ID: **NH30049-025**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/05/2012 2113	MPM	08/31/2012 1540	92585

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		82	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ92933-001
Batch: 92933
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	09/08/2012 0437
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	09/08/2012 0437
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	09/08/2012 0437
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	09/08/2012 0437
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	09/08/2012 0437
Ethanol	ND		1	1000	33	ug/L	09/08/2012 0437
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	09/08/2012 0437
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	09/08/2012 0437

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ92933-002
Batch: 92933
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1100		1	105	70-130	09/08/2012 0237
tert-Amyl methyl ether (TAME)	50	51		1	102	70-130	09/08/2012 0237
tert-Butyl formate (TBF)	250	280		1	113	70-130	09/08/2012 0237
Diisopropyl ether (IPE)	50	54		1	109	70-130	09/08/2012 0237
3,3-Dimethyl-1-butanol	1000	1000		1	103	70-130	09/08/2012 0237
Ethanol	5000	9300	N	1	187	70-130	09/08/2012 0237
Ethyl-tert-butyl ether (ETBE)	50	53		1	107	70-130	09/08/2012 0237
tert-butyl alcohol (TBA)	1000	1200		1	121	70-130	09/08/2012 0237

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ92933-003 **Matrix:** Aqueous
Batch: 92933 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1000		1	102	3.3	70-130	20	09/08/2012 0259
tert-Amyl methyl ether (TAME)	50	51		1	101	1.0	70-130	20	09/08/2012 0259
tert-Butyl formate (TBF)	250	280		1	113	0.062	70-130	20	09/08/2012 0259
Diisopropyl ether (IPE)	50	58		1	115	5.5	70-130	20	09/08/2012 0259
3,3-Dimethyl-1-butanol	1000	1000		1	100	2.6	70-130	20	09/08/2012 0259
Ethanol	5000	9200	N	1	185	1.3	70-130	20	09/08/2012 0259
Ethyl-tert-butyl ether (ETBE)	50	54		1	107	0.51	70-130	20	09/08/2012 0259
tert-butyl alcohol (TBA)	1000	1200		1	117	3.7	70-130	20	09/08/2012 0259

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ92933-001 **Matrix:** Aqueous
Batch: 92933 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	09/08/2012 0437
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	09/08/2012 0437
Ethylbenzene	ND		1	1.0	0.33	ug/L	09/08/2012 0437
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	09/08/2012 0437
Naphthalene	ND		1	1.0	0.40	ug/L	09/08/2012 0437
Toluene	ND		1	1.0	0.33	ug/L	09/08/2012 0437
Xylenes (total)	ND		1	1.0	0.33	ug/L	09/08/2012 0437

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ92933-002 **Matrix:** Aqueous
Batch: 92933 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	50		1	100	70-130	09/08/2012 0237
1,2-Dichloroethane	50	47		1	94	70-130	09/08/2012 0237
Ethylbenzene	50	49		1	99	70-130	09/08/2012 0237
Methyl tertiary butyl ether (MTBE)	50	53		1	107	70-130	09/08/2012 0237
Naphthalene	50	57		1	113	70-130	09/08/2012 0237
Toluene	50	48		1	97	70-130	09/08/2012 0237
Xylenes (total)	100	97		1	97	70-130	09/08/2012 0237

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ92933-003 **Matrix:** Aqueous
Batch: 92933 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	51		1	102	1.3	70-130	20	09/08/2012 0259
1,2-Dichloroethane	50	46		1	92	2.1	70-130	20	09/08/2012 0259
Ethylbenzene	50	51		1	101	2.5	70-130	20	09/08/2012 0259
Methyl tertiary butyl ether (MTBE)	50	53		1	106	0.71	70-130	20	09/08/2012 0259
Naphthalene	50	56		1	112	0.60	70-130	20	09/08/2012 0259
Toluene	50	48		1	97	0.28	70-130	20	09/08/2012 0259
Xylenes (total)	100	99		1	99	2.8	70-130	20	09/08/2012 0259

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N - Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ92935-001
Batch: 92935
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	09/08/2012 1443
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	09/08/2012 1443
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	09/08/2012 1443
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	09/08/2012 1443
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	09/08/2012 1443
Ethanol	ND		1	1000	33	ug/L	09/08/2012 1443
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	09/08/2012 1443
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	09/08/2012 1443

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		116	70-130
Toluene-d8		103	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ92935-002
Batch: 92935
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1200		1	115	70-130	09/08/2012 1246
tert-Amyl methyl ether (TAME)	50	63		1	126	70-130	09/08/2012 1246
tert-Butyl formate (TBF)	250	330	N	1	131	70-130	09/08/2012 1246
Diisopropyl ether (IPE)	50	59		1	117	70-130	09/08/2012 1246
3,3-Dimethyl-1-butanol	1000	1200		1	116	70-130	09/08/2012 1246
Ethanol	5000	5100		1	101	70-130	09/08/2012 1246
Ethyl-tert-butyl ether (ETBE)	50	60		1	120	70-130	09/08/2012 1246
tert-butyl alcohol (TBA)	1000	1100		1	107	70-130	09/08/2012 1246

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		115	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NH30049-020DU
Batch: 92935
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Diisopropyl ether (IPE)	ND	ND	Q	1	0.00	20	09/08/2012 2300
Ethanol	ND	ND	Q	1	0.00	20	09/08/2012 2300
3,3-Dimethyl-1-butanol	ND	ND	Q	1	0.00	20	09/08/2012 2300
Ethyl-tert-butyl ether (ETBE)	ND	ND	Q	1	0.00	20	09/08/2012 2300
tert-Amyl alcohol (TAA)	57	ND	Q	1	0.00	20	09/08/2012 2300
tert-Amyl methyl ether (TAME)	ND	ND	Q	1	0.00	20	09/08/2012 2300
tert-butyl alcohol (TBA)	ND	ND	Q	1	0.00	20	09/08/2012 2300
tert-Butyl formate (TBF)	ND	ND	Q	1	0.00	20	09/08/2012 2300

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4	N	146	70-130
Toluene-d8		106	70-130

Volatile Organic Compounds by GC/MS - MS

Sample ID: NH30049-020MS
Batch: 92935
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Diisopropyl ether (IPE)	ND	50	60	Q	1	121	70-130	09/08/2012 2323
Ethanol	ND	5000	980	N	1	20	70-130	09/08/2012 2323
3,3-Dimethyl-1-butanol	ND	1000	620	N	1	62	70-130	09/08/2012 2323
Ethyl-tert-butyl ether (ETBE)	ND	50	68	N	1	136	70-130	09/08/2012 2323
tert-Amyl alcohol (TAA)	57	1000	530	N	1	53	70-130	09/08/2012 2323
tert-Amyl methyl ether (TAME)	ND	50	68	N	1	135	70-130	09/08/2012 2323
tert-butyl alcohol (TBA)	ND	1000	480	N	1	48	70-130	09/08/2012 2323
tert-Butyl formate (TBF)	ND	250	2.3	N	1	0.91	70-130	09/08/2012 2323

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		109	70-130
1,2-Dichloroethane-d4	N	139	70-130
Toluene-d8		110	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ92935-001
Batch: 92935
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	09/08/2012 1443
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	09/08/2012 1443
Ethylbenzene	ND		1	1.0	0.33	ug/L	09/08/2012 1443
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	09/08/2012 1443
Naphthalene	ND		1	1.0	0.40	ug/L	09/08/2012 1443
Toluene	ND		1	1.0	0.33	ug/L	09/08/2012 1443
Xylenes (total)	ND		1	1.0	0.33	ug/L	09/08/2012 1443

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		116	70-130
Toluene-d8		103	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ92935-002
Batch: 92935
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	52		1	105	70-130	09/08/2012 1246
1,2-Dichloroethane	50	63		1	126	70-130	09/08/2012 1246
Ethylbenzene	50	52		1	103	70-130	09/08/2012 1246
Methyl tertiary butyl ether (MTBE)	50	59		1	118	70-130	09/08/2012 1246
Naphthalene	50	46		1	91	70-130	09/08/2012 1246
Toluene	50	53		1	105	70-130	09/08/2012 1246
Xylenes (total)	100	100		1	102	70-130	09/08/2012 1246

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		115	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NH30049-020DU
Batch: 92935
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Benzene	1.7	2.7	Q	1	3.7	20	09/08/2012 2300
1,2-Dichloroethane	ND	ND	Q	1	0.00	20	09/08/2012 2300
Ethylbenzene	ND	ND	Q	1	0.00	20	09/08/2012 2300
Methyl tertiary butyl ether (MTBE)	ND	ND	Q	1	0.00	20	09/08/2012 2300
Naphthalene	ND	ND	Q	1	0.00	20	09/08/2012 2300
Toluene	ND	ND	Q	1	0.00	20	09/08/2012 2300
Xylenes (total)	0.52	1.2	Q	1	2.5	20	09/08/2012 2300

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4	N	146	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		106	70-130

Volatile Organic Compounds by GC/MS - MS

Sample ID: NH30049-020MS
Batch: 92935
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	1.7	50	59	Q	1	113	72-127	09/08/2012 2323
1,2-Dichloroethane	ND	50	79	N	1	157	59-143	09/08/2012 2323
Ethylbenzene	ND	50	54	Q	1	108	79-132	09/08/2012 2323
Methyl tertiary butyl ether (MTBE)	ND	50	65	Q	1	130	60-140	09/08/2012 2323
Naphthalene	ND	50	41	Q	1	82	62-136	09/08/2012 2323
Toluene	ND	50	57	Q	1	115	75-125	09/08/2012 2323
Xylenes (total)	0.52	100	110	Q	1	110	70-130	09/08/2012 2323

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4	N	139	70-130
Bromofluorobenzene		109	70-130
Toluene-d8		110	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ92980-001 **Matrix:** Aqueous
Batch: 92980 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	09/10/2012 1006
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	09/10/2012 1006
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	09/10/2012 1006
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	09/10/2012 1006
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	09/10/2012 1006
Ethanol	ND		1	1000	33	ug/L	09/10/2012 1006
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	09/10/2012 1006
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	09/10/2012 1006

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		110	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ92980-002 **Matrix:** Aqueous
Batch: 92980 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1100		1	110	70-130	09/10/2012 0839
tert-Amyl methyl ether (TAME)	50	54		1	108	70-130	09/10/2012 0839
tert-Butyl formate (TBF)	250	320		1	128	70-130	09/10/2012 0839
Diisopropyl ether (IPE)	50	62		1	125	70-130	09/10/2012 0839
3,3-Dimethyl-1-butanol	1000	990		1	99	70-130	09/10/2012 0839
Ethanol	5000	12000	N	1	235	70-130	09/10/2012 0839
Ethyl-tert-butyl ether (ETBE)	50	61		1	122	70-130	09/10/2012 0839
tert-butyl alcohol (TBA)	1000	1400	N	1	138	70-130	09/10/2012 0839

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N - Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ92980-003 **Matrix:** Aqueous
Batch: 92980 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1100		1	108	1.8	70-130	20	09/10/2012 0900
tert-Amyl methyl ether (TAME)	50	54		1	108	0.12	70-130	20	09/10/2012 0900
tert-Butyl formate (TBF)	250	320		1	128	0.16	70-130	20	09/10/2012 0900
Diisopropyl ether (IPE)	50	65		1	130	4.1	70-130	20	09/10/2012 0900
3,3-Dimethyl-1-butanol	1000	970		1	97	2.1	70-130	20	09/10/2012 0900
Ethanol	5000	12000	N	1	241	2.2	70-130	20	09/10/2012 0900
Ethyl-tert-butyl ether (ETBE)	50	61		1	121	0.50	70-130	20	09/10/2012 0900
tert-butyl alcohol (TBA)	1000	1300	N	1	134	2.9	70-130	20	09/10/2012 0900

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		109	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ92980-001 **Matrix:** Aqueous
Batch: 92980 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	09/10/2012 1006
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	09/10/2012 1006
Ethylbenzene	ND		1	1.0	0.33	ug/L	09/10/2012 1006
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	09/10/2012 1006
Naphthalene	ND		1	1.0	0.40	ug/L	09/10/2012 1006
Toluene	ND		1	1.0	0.33	ug/L	09/10/2012 1006
Xylenes (total)	ND		1	1.0	0.33	ug/L	09/10/2012 1006

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		110	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ92980-002
Batch: 92980
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	53		1	106	70-130	09/10/2012 0839
1,2-Dichloroethane	50	50		1	99	70-130	09/10/2012 0839
Ethylbenzene	50	48		1	96	70-130	09/10/2012 0839
Methyl tertiary butyl ether (MTBE)	50	60		1	120	70-130	09/10/2012 0839
Naphthalene	50	52		1	103	70-130	09/10/2012 0839
Toluene	50	50		1	101	70-130	09/10/2012 0839
Xylenes (total)	100	94		1	94	70-130	09/10/2012 0839

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		107	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ92980-003
Batch: 92980
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	54		1	107	1.1	70-130	20	09/10/2012 0900
1,2-Dichloroethane	50	49		1	98	1.1	70-130	20	09/10/2012 0900
Ethylbenzene	50	47		1	94	1.8	70-130	20	09/10/2012 0900
Methyl tertiary butyl ether (MTBE)	50	59		1	118	1.5	70-130	20	09/10/2012 0900
Naphthalene	50	52		1	104	1.3	70-130	20	09/10/2012 0900
Toluene	50	51		1	102	1.8	70-130	20	09/10/2012 0900
Xylenes (total)	100	94		1	94	0.58	70-130	20	09/10/2012 0900

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		109	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MB

Sample ID: NQ92552-001 **Matrix:** Aqueous
Batch: 92552 **Prep Method:** 8011
Analytical Method: 8011 **Prep Date:** 08/31/2012 851

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	09/05/2012 0955

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		89	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: NQ92552-002 **Matrix:** Aqueous
Batch: 92552 **Prep Method:** 8011
Analytical Method: 8011 **Prep Date:** 08/31/2012 851

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.25		1	98	60-140	09/05/2012 1016

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		88	57-137

EDB & DBCP by Microextraction - MS

Sample ID: NH30049-001MS **Matrix:** Aqueous
Batch: 92552 **Prep Method:** 8011
Analytical Method: 8011 **Prep Date:** 08/31/2012 851

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.041	0.24	0.21		1	72	60-140	09/05/2012 1059

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		78	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MSD

Sample ID: NH30049-001MD
Batch: 92552
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 08/31/2012 851

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.041	0.25	0.22		1	73	3.3	60-140	20	09/05/2012 1120

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		80	57-137

EDB & DBCP by Microextraction - MB

Sample ID: NQ92563-001
Batch: 92563
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 08/31/2012 1153

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	09/05/2012 2155

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		90	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: NQ92563-002
Batch: 92563
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 08/31/2012 1153

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.24		1	97	60-140	09/05/2012 2216

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		90	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MB

Sample ID: NQ92585-001 **Matrix:** Aqueous
Batch: 92585 **Prep Method:** 8011
Analytical Method: 8011 **Prep Date:** 08/31/2012 1540

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	09/05/2012 1844

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		87	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: NQ92585-002 **Matrix:** Aqueous
Batch: 92585 **Prep Method:** 8011
Analytical Method: 8011 **Prep Date:** 08/31/2012 1540

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.24		1	95	60-140	09/05/2012 1906

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		88	57-137

EDB & DBCP by Microextraction - MS

Sample ID: NH30049-010MS **Matrix:** Aqueous
Batch: 92585 **Prep Method:** 8011
Analytical Method: 8011 **Prep Date:** 08/31/2012 1540

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.022	0.24	0.22		1	80	60-140	09/05/2012 1948

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		71	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MSD

Sample ID: NH30049-010MD
Batch: 92585
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 08/31/2012 1540

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.022	0.24	0.20		1	74	8.8	60-140	20	09/05/2012 2009

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		68	57-137

EDB & DBCP by Microextraction - MB

Sample ID: NQ92882-001
Batch: 92882
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 09/07/2012 1025

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	09/07/2012 1131

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		80	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: NQ92882-002
Batch: 92882
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 09/07/2012 1025

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.20		1	82	60-140	09/07/2012 1153

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		82	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MS

Sample ID: NH30049-012MS
Batch: 92882
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 09/07/2012 1025

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	ND	0.25	0.22		1	90	60-140	09/07/2012 1235

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		81	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc
Document Number: SESI-018
Revision Number: 9

Page 1 of 1
Replaces Date: 05/06/11
Effective Date: 10/11/11

Sample Receipt Checklist (SRC)

Client: ARCE Cooler Inspected by/date: [illegible] 8/30/12 Lot #: NH30049

Means of receipt: ☐ SESI ☒ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other

Yes ☐	No ☒	1. Were custody seals present on the cooler?
Yes ☐	No ☒	2. If custody seals were present, were they intact and unbroken?

Cooler ID/temperature upon receipt 1 2.0 °C / °C / °C / °C

Method: ☐ Temperature Blank ☒ Against Bottles TRIP BLANK

Method of coolant: ☒ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.

Yes ☐	No ☐	NA ☒	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____ (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☐	No ☐	NA ☒	4. Is the commercial courier's packing slip attached to this form?
Yes ☐	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☒	5a Were samples relinquished by client to commercial courier?
Yes ☐	No ☐		6. Were sample IDs listed?
Yes ☐	No ☐	[illegible]	7. Was collection date & time listed? Not Listed on COC or Labels
Yes ☐	No ☐		8. Were tests to be performed listed on the COC?
Yes ☐	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☐	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☐	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☐	No ☐		12. Was adequate sample volume available?
Yes ☐	No ☒		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☐		14. Were any samples containers missing? -10 -011 -012
Yes ☐	No ☒	[illegible]	15. Were there any excess samples not listed on COC?
Yes ☒	No ☐	NA ☐	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☒	17. Were all metals/O&G/TPH/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☒	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☒	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☐	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☒	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH) with the SR # (number)

Sample(s): -001 -010 -010(3) -012 (2) were received with bubbles >6 mm in diameter.

Sample(s): _____ were received with TRC >0.2 mg/L for NH3/ TKN/cyanide/BNA/pest/PCB/herb

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: _____ Date of response: _____

Comments: Samples FB-4 140(-010) FB-4 170(-011) FB-4 200(-012) were not received in coolers.

-002 FIELD Blank 8/28/12

-003 FIELD Blank 8/29/12

-004 Trip Blank

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY Chain of Custody Record

Number 09339

Client: INTEL
Address: 2358 Dooley Rd
City: Lexington State: SC Zip Code: 29073
Project Name: Smiths Grocery
Report to Contact: B. Shene
Sampler (Printed Name): John C. Bryant
Cooler ID: 1 of 2
Quote No.: N1130049
N1130049 (struck through)

Sample ID / Description	Date	Time	Grab/Composite	Matrix: Water	Analysis: BTEX, Naphthalene, MTBE	8-Oxy, 12 DCA	EDB 8011
FR-1 120	8/28		G	X	X	X	X
FR-1 161	↓		↓	↓	↓	↓	↓
FR-1 200	↓		↓	↓	↓	↓	↓
FR-2 137	↓		↓	↓	↓	↓	↓
FR-2 160	↓		↓	↓	↓	↓	↓
FR-2 203	↓		↓	↓	↓	↓	↓
FR-3 135	↓		↓	↓	↓	↓	↓
FR-3 167	↓		↓	↓	↓	↓	↓
FR-3 198	↓		↓	↓	↓	↓	↓
FR-4 140	8/28		G	X	X	X	X

Remarks: PLEASE RUN ALL SAMPLES FOR LOW DETECTION LIMITS FOR DRINKING WATER

Sample Disposal | QC Requirements (Specify) | Possible Hazard Identification

Relinquished by	Date	Time	Received by	Date	Time
1. [signature]	8/30	1550	1. [signature]	8/30	1550
2. [signature]	8/30/12	1634	2.		
3.			3.		
4.			4. Laboratory Received by [signature]	8/30/12	1634

LAB USE ONLY: Receipt Temp. 1.2

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

Chain of Custody Record

Shealy Environmental Services, Inc
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 09340

Client: MCI
Address: 239B Dooley Rd
City: Lexington State: SC Zip Code: 29073
Project Name: Smiths Grocery
Report to Contact: B. Shane
Sampler (Printed Name): John C. Bryant
Page 2 of 3
Quote No.: NH30049 (corrected from NH30019, initialed 8/30/12)

Sample ID / Description	Date	Time	No. of Containers	Matrix	8260B, 8011 X, MTBE, NAPH, & oxy, 1 2DCA	LDB 8011
FR-4 170	8/28		6	X	X	X
FR-4 200	↓		↓	↓	↓	↓
FR-5 120	↓		↓	↓	↓	↓
FR-5 157	↓		↓	↓	↓	↓
FR-5 197	↓		↓	↓	↓	↓
FR-6 118	↓		↓	↓	↓	↓
FR-6 153	↓		↓	↓	↓	↓
FR-6 200	↓		↓	↓	↓	↓
FR-2 137 Dup	↓		↓	↓	↓	↓
FR-2 160 Dup	8/28		6	X	X	X

Remarks: PLEASE RUN ALL SAMPLES FOR LOW DETECTION LIMITS FOR DRINKING WATER.

Sample Disposal / QC Requirements / Possible Hazard Identification: Non-Hazard, Flammable, Skin Irritant, Poison, Unknown

Relinquished by	Date	Time	Received by	Date	Time
1. [signature]	8/30	1550	1. [signature]	8/30/12	1550
2. [signature]	8/30/12	1634	2.		
3.			3.		
4.			4. Laboratory Received by [signature]	8/30/12	1634

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check) ✓ Yes / No / Ice Pack — Receipt Temp. 1.0 °C

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 09341

Field	Entry
Client	MFCI
Address	235B Dooley Rd
City / State / Zip	Lexington / SC / 29073
Project Name	Smiths Gravity
Report to Contact	B. Shealc
Sampler (Printed Name)	John C. Bryant
Page	3 of 3
Quote No.	NA30049 (struck) NA30049
Initials/Date	GO 8/3/12

Sample ID / Description	Date	Time	Grab/Composite	Matrix	Analysis
FB-Z-203 Dup	8/28		G	X	

PLEASE RUN ALL SAMPLES FOR LOW DETECTION LIMITS FOR DRINKING WATER

Relinquished by	Date	Time	Received by	Date	Time
1. [signature]	8/30	1550	1. [signature]	8/30/12	1550
2. [signature]	8/30/12	1634	2.		
3.			3.		
4.			4. Laboratory Received by [signature]	8/30/12	1634

Sample Disposal / QC Requirements (Specify) / Possible Hazard Identification: Non-Hazard

LAB USE ONLY — Received on Ice (Check): Yes — Receipt Temp.: 1.0

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Receipt Checklist (SRC)

Client: MECC Cooler Inspected by/date: [illegible] 8/31/12 Lot #: NH30049

Means of receipt: [ ] SESI [X] Client [ ] UPS [ ] FedEx [ ] Airborne Exp [ ] Other

Yes	No	NA	Question
[ ]	[X]		1. Were custody seals present on the cooler?
[ ]	[X]		2. If custody seals were present, were they intact and unbroken?

Cooler ID/temperature upon receipt 2.1 °C ___/___ °C ___/___ °C ___/___ °C

Method: [ ] Temperature Blank [X] Against Bottles

Method of coolant: [X] Wet Ice [ ] Blue Ice [ ] Dry Ice [ ] None

If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.

Yes	No	NA	Question
[ ]	[ ]	[X]	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: ________. (For coolers received via commercial courier, PMs are to be notified immediately.)
[ ]	[ ]	[X]	4. Is the commercial courier's packing slip attached to this form?
[X]	[ ]		5. Were proper custody procedures (relinquished/received) followed?
[ ]	[ ]	[X]	5a Were samples relinquished by client to commercial courier?
[X]	[ ]		6. Were sample IDs listed?
[X]	[ ]		7. Was collection date & time listed?
[X]	[ ]		8. Were tests to be performed listed on the COC?
[X]	[ ]		9. Did all samples arrive in the proper containers for each test?
[X]	[X]	8/31/12	10. Did all container label information (ID, date, time) agree with COC?
[X]	[ ]		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
[X]	[ ]		12. Was adequate sample volume available?
[ ]	[X]		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
[ ]	[X]		14. Were any samples containers missing?
[X]	[ ]		15. Were there any excess samples not listed on COC? FIELD BLANK 8/31/12
[ ]	[X]	[ ]	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
[ ]	[ ]	[X]	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
[ ]	[ ]	[X]	18. Were all cyanide and/or sulfide samples received at a pH >12?
[ ]	[ ]	[X]	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
[ ]	[ ]	[X]	20. Were collection temperatures documented on the COC for NC samples?
[ ]	[ ]	[ ]	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) ________ were received incorrectly preserved and were adjusted accordingly in sample receiving with ________ (H_2SO_4, HNO_3, HCl, NaOH) with the SR # (number)

Sample(s) ________ were received with bubbles >6 mm in diameter.

Sample(s) ________ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb.

Corrective Action taken, if necessary:

Was client notified: Yes [ ] No [ ] Did client respond: Yes [ ] No [ ]

SESI employee: ________ Date of response: ________

Comments: Received missing samples FR-4 140 were labeled FR-4 141 on containers, [illegible] samples were dated 8-30-12 with no time. FR-4 141, FR-4 170 and Field Blank (which was extra, FR-4 200 (8/31/12)) [illegible] received

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Midlands Environmental Consultants, Inc.
235 Dooley Rd
Lexington, SC 29073
Attention: Bryan Shane

Project Name: **Smith's Grocery**

Project Number: **12-3946**

Lot Number: **NI28064**

Date Completed: **10/12/2012**

Kelly M. Maberry
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
Midlands Environmental Consultants, Inc.
Lot Number: NI28064

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Receiving
Samples -001 and -004 for volatiles analysis contained vials with air bubbles greater than ¼" or 6mm in diameter. The laboratory uses these vials for screening and the vials without bubbles for analysis whenever possible. Condition of samples is documented on the Sample Receipt Checklist (SRC).

GC/MS Volatiles
The RPD for ethanol exceeded method control limits in batch 94612; however, all other QA/QC criteria for this compound in the LCS/LCSD were within acceptance criteria and method control limits. The associated sample results were reported and no corrective action was required.

The MS associated with sample -012 had compounds recovered outside of the acceptance limits. This demonstrates a matrix effect and data quality is not impacted.

EDB/DBCP
Sample -007 had a layer of sediment in the sample vial that altered the final volume.

Sample Summary

Midlands Environmental Consultants, Inc.

Lot Number: NI28064

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	TW-1A	Aqueous	09/26/2012 1400	09/28/2012
002	TW-1B	Aqueous	09/27/2012 1401	09/28/2012
003	TW-1C	Aqueous	09/27/2012 1241	09/28/2012
004	TW-2A	Aqueous	09/26/2012 1445	09/28/2012
005	TW-2B	Aqueous	09/27/2012 1147	09/28/2012
006	TW-2C	Aqueous	09/27/2012 1047	09/28/2012
007	TW-3A	Aqueous	09/26/2012 1315	09/28/2012
008	TW-3B	Aqueous	09/26/2012 1643	09/28/2012
009	TW-3C	Aqueous	09/26/2012 1540	09/28/2012
010	TW-4A	Aqueous	09/26/2012 1000	09/28/2012
011	TW-4B	Aqueous	09/26/2012 1440	09/28/2012
012	TW-4C	Aqueous	09/26/2012 1333	09/28/2012
013	TW-5A	Aqueous	09/25/2012 1725	09/28/2012
014	TW-5B	Aqueous	09/25/2012 1835	09/28/2012
015	TW-5C	Aqueous	09/26/2012 1104	09/28/2012
016	TW-6A	Aqueous	09/25/2012 1230	09/28/2012
017	TW-6B	Aqueous	09/25/2012 1305	09/28/2012
018	TW-6C	Aqueous	09/25/2012 1440	09/28/2012

(18 samples)

Executive Summary

Midlands Environmental Consultants, Inc.

Lot Number: NI28064

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	TW-1A	Aqueous	Benzene	8260B	1700		ug/L	5
001	TW-1A	Aqueous	Ethylbenzene	8260B	0.69	J	ug/L	5
001	TW-1A	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	8.8		ug/L	5
001	TW-1A	Aqueous	Naphthalene	8260B	84		ug/L	5
001	TW-1A	Aqueous	Toluene	8260B	1.3		ug/L	5
001	TW-1A	Aqueous	Xylenes (total)	8260B	610		ug/L	5
001	TW-1A	Aqueous	Diisopropyl ether (IPE)	8260B	20		ug/L	5
001	TW-1A	Aqueous	tert-Amyl alcohol (TAA)	8260B	940		ug/L	5
001	TW-1A	Aqueous	1,2-Dibromoethane (EDB)	8011	0.036		ug/L	6
002	TW-1B	Aqueous	Benzene	8260B	17		ug/L	7
002	TW-1B	Aqueous	Naphthalene	8260B	0.71	J	ug/L	7
002	TW-1B	Aqueous	Xylenes (total)	8260B	3.7		ug/L	7
003	TW-1C	Aqueous	Benzene	8260B	25		ug/L	9
003	TW-1C	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	1.6		ug/L	9
003	TW-1C	Aqueous	Naphthalene	8260B	0.52	J	ug/L	9
003	TW-1C	Aqueous	Xylenes (total)	8260B	2.9		ug/L	9
003	TW-1C	Aqueous	Diisopropyl ether (IPE)	8260B	4.1	J	ug/L	9
004	TW-2A	Aqueous	Benzene	8260B	0.19	J	ug/L	11
005	TW-2B	Aqueous	Benzene	8260B	8.7		ug/L	13
005	TW-2B	Aqueous	Naphthalene	8260B	0.42	J	ug/L	13
005	TW-2B	Aqueous	Xylenes (total)	8260B	0.81	J	ug/L	13
010	TW-4A	Aqueous	1,2-Dichloroethane	8260B	0.70	J	ug/L	23
010	TW-4A	Aqueous	1,2-Dibromoethane (EDB)	8011	0.034		ug/L	24
011	TW-4B	Aqueous	1,2-Dibromoethane (EDB)	8011	0.032		ug/L	26
014	TW-5B	Aqueous	1,2-Dibromoethane (EDB)	8011	0.034		ug/L	32
015	TW-5C	Aqueous	1,2-Dibromoethane (EDB)	8011	0.025		ug/L	34
017	TW-6B	Aqueous	1,2-Dichloroethane	8260B	0.60	J	ug/L	37
017	TW-6B	Aqueous	1,2-Dibromoethane (EDB)	8011	0.038		ug/L	38

(28 detections)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-1A**
Date Sampled: **09/26/2012 1400**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-001**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0330	DD		94602
2	5030B	8260B	5	10/05/2012 1442	BDC		94767

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**1700**		**5.0**	**0.66**	**ug/L**	**2**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**0.69**	**J**	**1.0**	**0.33**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**8.8**		**1.0**	**0.40**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**84**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**1.3**		**1.0**	**0.33**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**610**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130		90	70-130
Bromofluorobenzene		91	70-130		93	70-130
Toluene-d8		97	70-130		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0330	DD		94602

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**20**		**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**940**		**100**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-1A**
Date Sampled: **09/26/2012 1400**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-001**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1838	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.036**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		91	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-1B**
Date Sampled: **09/27/2012 1401**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-002**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0354	DD		94602
2	5030B	8260B	1	10/08/2012 1723	BDC		94884

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**17**		**1.0**	**0.13**	**ug/L**	**2**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**0.71**	**J**	**1.0**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**3.7**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130		130	70-130
Bromofluorobenzene		98	70-130		93	70-130
Toluene-d8		93	70-130		122	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0354	DD		94602

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		93	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-1B**
Date Sampled: **09/27/2012 1401**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-002**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1941	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		90	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-1C**
Date Sampled: **09/27/2012 1241**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-003**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0419	DD		94602

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**25**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**1.6**		**1.0**	**0.40**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**0.52**	**J**	**1.0**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**2.9**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		92	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0419	DD		94602

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**4.1**	**J**	**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		92	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2003	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-1C**
Date Sampled: **09/27/2012 1241**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-003**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2003	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		88	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI28064-004**
Description: **TW-2A** Matrix: **Aqueous**
Date Sampled: **09/26/2012 1445**
Date Received: **09/28/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0443	DD		94602

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**0.19**	**J**	**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		93	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0443	DD		94602

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		93	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2024	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-2A**
Date Sampled: **09/26/2012 1445**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-004**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2024	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		83	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
° = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-2B**
Date Sampled: **09/27/2012 1147**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-005**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0507	DD		94602

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**8.7**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**0.42**	**J**	**1.0**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**0.81**	**J**	**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		92	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0507	DD		94602

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		92	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2045	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-2B**
Date Sampled: **09/27/2012 1147**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-005**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2045	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		87	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI28064-006**
Description: **TW-2C** Matrix: **Aqueous**
Date Sampled: **09/27/2012 1047**
Date Received: **09/28/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0546	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		94	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0546	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		94	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2106	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-2C**
Date Sampled: **09/27/2012 1047**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-006**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2106	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		95	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-3A**
Date Sampled: **09/26/2012 1315**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-007**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0608	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		93	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0608	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		93	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2128	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-3A**
Date Sampled: **09/26/2012 1315**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-007**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2128	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.023	0.023	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		73	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-3B**
Date Sampled: **09/26/2012 1643**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-008**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0630	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0630	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2149	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI28064-008**

Description: **TW-3B** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1643**

Date Received: **09/28/2012**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2149	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		67	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI28064-009**
Description: **TW-3C** Matrix: **Aqueous**
Date Sampled: **09/26/2012 1540**
Date Received: **09/28/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0652	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0652	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		111	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2210	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-3C**
Date Sampled: **09/26/2012 1540**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-009**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2210	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		76	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-4A**
Date Sampled: **09/26/2012 1000**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-010**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0715	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	**107-06-2**	**8260B**	**0.70**	**J**	**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		114	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		93	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0715	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		114	70-130
Toluene-d8		93	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2231	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-4A**
Date Sampled: **09/26/2012 1000**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-010**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2231	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.034		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		83	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI28064-011**
Description: **TW-4B** Matrix: **Aqueous**
Date Sampled: **09/26/2012 1440**
Date Received: **09/28/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0737	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		117	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		94	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0737	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		117	70-130
Toluene-d8		94	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2252	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-4B**
Date Sampled: **09/26/2012 1440**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-011**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2252	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.032**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		106	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI28064-012**
Description: **TW-4C** Matrix: **Aqueous**
Date Sampled: **09/26/2012 1333**
Date Received: **09/28/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0759	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		96	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0759	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	S	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND	S	100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		118	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2313	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-4C**
Date Sampled: **09/26/2012 1333**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-012**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2313	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		79	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI28064-013**
Description: **TW-5A** Matrix: **Aqueous**
Date Sampled: **09/25/2012 1725**
Date Received: **09/28/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0821	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		120	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0821	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		120	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2334	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI28064-013**

Description: **TW-5A** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1725**

Date Received: **09/28/2012**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2334	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		91	57-137

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-5B**
Date Sampled: **09/25/2012 1835**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-014**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0843	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		122	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0843	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		122	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2356	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-5B**
Date Sampled: **09/25/2012 1835**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-014**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 2356	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.034**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		86	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-5C**
Date Sampled: **09/26/2012 1104**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-015**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0905	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		125	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0905	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		125	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/05/2012 0017	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-5C**
Date Sampled: **09/26/2012 1104**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-015**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/05/2012 0017	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.025**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		85	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI28064-016**

Description: **TW-6A** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1230**

Date Received: **09/28/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0928	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		124	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		93	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0928	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		124	70-130
Toluene-d8		93	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/05/2012 0038	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-6A**
Date Sampled: **09/25/2012 1230**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-016**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/05/2012 0038	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		87	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-6B**
Date Sampled: **09/25/2012 1305**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-017**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0950	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	**107-06-2**	**8260B**	**0.60**	**J**	**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		124	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/04/2012 0950	DD		94612

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		124	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/05/2012 0059	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-6B**
Date Sampled: **09/25/2012 1305**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-017**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/05/2012 0059	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.038**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		87	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-6C**
Date Sampled: **09/25/2012 1440**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-018**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/09/2012 0116	JJG		94918

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		93	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/09/2012 0116	JJG		94918

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		93	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/05/2012 0120	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-6C**
Date Sampled: **09/25/2012 1440**
Date Received: **09/28/2012**

Laboratory ID: **NI28064-018**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/05/2012 0120	MPM	10/02/2012 1130	94472

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		94	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94602-001
Batch: 94602
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	10/03/2012 2230
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/03/2012 2230
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	10/03/2012 2230
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	10/03/2012 2230
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	10/03/2012 2230
Ethanol	ND		1	1000	33	ug/L	10/03/2012 2230
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	10/03/2012 2230
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	10/03/2012 2230

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		92	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94602-002
Batch: 94602
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	960		1	96	70-130	10/03/2012 2053
tert-Amyl methyl ether (TAME)	50	47		1	94	70-130	10/03/2012 2053
tert-Butyl formate (TBF)	250	240		1	97	70-130	10/03/2012 2053
Diisopropyl ether (IPE)	50	48		1	96	70-130	10/03/2012 2053
3,3-Dimethyl-1-butanol	1000	970		1	97	70-130	10/03/2012 2053
Ethanol	5000	5500		1	110	70-130	10/03/2012 2053
Ethyl-tert-butyl ether (ETBE)	50	48		1	95	70-130	10/03/2012 2053
tert-butyl alcohol (TBA)	1000	940		1	94	70-130	10/03/2012 2053

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		92	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94602-003 **Matrix:** Aqueous
Batch: 94602 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	930		1	93	3.2	70-130	20	10/03/2012 2117
tert-Amyl methyl ether (TAME)	50	47		1	93	1.5	70-130	20	10/03/2012 2117
tert-Butyl formate (TBF)	250	230		1	91	6.5	70-130	20	10/03/2012 2117
Diisopropyl ether (IPE)	50	47		1	93	3.0	70-130	20	10/03/2012 2117
3,3-Dimethyl-1-butanol	1000	930		1	93	3.8	70-130	20	10/03/2012 2117
Ethanol	5000	5100		1	102	6.9	70-130	20	10/03/2012 2117
Ethyl-tert-butyl ether (ETBE)	50	46		1	92	3.2	70-130	20	10/03/2012 2117
tert-butyl alcohol (TBA)	1000	890		1	89	5.3	70-130	20	10/03/2012 2117

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94602-001
Batch: 94602
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/03/2012 2230
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	10/03/2012 2230
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/03/2012 2230
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	10/03/2012 2230
Naphthalene	ND		1	1.0	0.40	ug/L	10/03/2012 2230
Toluene	ND		1	1.0	0.33	ug/L	10/03/2012 2230
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/03/2012 2230

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		92	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94602-002
Batch: 94602
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	47		1	93	70-130	10/03/2012 2053
1,2-Dichloroethane	50	45		1	90	70-130	10/03/2012 2053
Ethylbenzene	50	46		1	92	70-130	10/03/2012 2053
Methyl tertiary butyl ether (MTBE)	50	45		1	89	70-130	10/03/2012 2053
Naphthalene	50	51		1	102	70-130	10/03/2012 2053
Toluene	50	45		1	89	70-130	10/03/2012 2053
Xylenes (total)	100	95		1	95	70-130	10/03/2012 2053

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		92	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94602-003
Batch: 94602
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	46		1	91	2.2	70-130	20	10/03/2012 2117
1,2-Dichloroethane	50	44		1	88	2.3	70-130	20	10/03/2012 2117
Ethylbenzene	50	45		1	90	1.6	70-130	20	10/03/2012 2117
Methyl tertiary butyl ether (MTBE)	50	43		1	86	4.1	70-130	20	10/03/2012 2117
Naphthalene	50	48		1	96	6.4	70-130	20	10/03/2012 2117
Toluene	50	45		1	89	0.047	70-130	20	10/03/2012 2117
Xylenes (total)	100	92		1	92	3.3	70-130	20	10/03/2012 2117

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94612-001
Batch: 94612
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	10/04/2012 0524
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/04/2012 0524
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	10/04/2012 0524
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	10/04/2012 0524
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	10/04/2012 0524
Ethanol	ND		1	1000	33	ug/L	10/04/2012 0524
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	10/04/2012 0524
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	10/04/2012 0524

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		95	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94612-002 **Matrix:** Aqueous
Batch: 94612 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1000		1	105	70-130	10/04/2012 0355
tert-Amyl methyl ether (TAME)	50	54		1	107	70-130	10/04/2012 0355
tert-Butyl formate (TBF)	250	280		1	112	70-130	10/04/2012 0355
Diisopropyl ether (IPE)	50	45		1	89	70-130	10/04/2012 0355
3,3-Dimethyl-1-butanol	1000	1000		1	100	70-130	10/04/2012 0355
Ethanol	5000	3900		1	77	70-130	10/04/2012 0355
Ethyl-tert-butyl ether (ETBE)	50	49		1	99	70-130	10/04/2012 0355
tert-butyl alcohol (TBA)	1000	1000		1	100	70-130	10/04/2012 0355

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N - Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94612-003 **Matrix:** Aqueous
Batch: 94612 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	980		1	98	6.5	70-130	20	10/04/2012 0417
tert-Amyl methyl ether (TAME)	50	52		1	105	2.3	70-130	20	10/04/2012 0417
tert-Butyl formate (TBF)	250	280		1	111	0.84	70-130	20	10/04/2012 0417
Diisopropyl ether (IPE)	50	47		1	93	4.5	70-130	20	10/04/2012 0417
3,3-Dimethyl-1-butanol	1000	920		1	92	8.7	70-130	20	10/04/2012 0417
Ethanol	5000	5100	+	1	102	28	70-130	20	10/04/2012 0417
Ethyl-tert-butyl ether (ETBE)	50	50		1	101	1.8	70-130	20	10/04/2012 0417
tert-butyl alcohol (TBA)	1000	930		1	93	6.8	70-130	20	10/04/2012 0417

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI28064-011DU
Batch: 94612
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Diisopropyl ether (IPE)	ND	ND		1	0.00	20	10/04/2012 1203
Ethanol	ND	ND		1	0.00	20	10/04/2012 1203
3,3-Dimethyl-1-butanol	ND	ND		1	0.00	20	10/04/2012 1203
Ethyl-tert-butyl ether (ETBE)	ND	ND		1	0.00	20	10/04/2012 1203
tert-Amyl alcohol (TAA)	ND	ND		1	0.00	20	10/04/2012 1203
tert-Amyl methyl ether (TAME)	ND	ND		1	0.00	20	10/04/2012 1203
tert-butyl alcohol (TBA)	ND	ND		1	0.00	20	10/04/2012 1203
tert-Butyl formate (TBF)	ND	ND		1	0.00	20	10/04/2012 1203

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		92	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: NI28064-012MS
Batch: 94612
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Diisopropyl ether (IPE)	ND	50	47		1	93	70-130	10/04/2012 1225
Ethanol	ND	5000	3000	N	1	60	70-130	10/04/2012 1225
3,3-Dimethyl-1-butanol	ND	1000	820		1	82	70-130	10/04/2012 1225
Ethyl-tert-butyl ether (ETBE)	ND	50	50		1	100	70-130	10/04/2012 1225
tert-Amyl alcohol (TAA)	ND	1000	840		1	84	70-130	10/04/2012 1225
tert-Amyl methyl ether (TAME)	ND	50	50		1	101	70-130	10/04/2012 1225
tert-butyl alcohol (TBA)	ND	1000	940		1	94	70-130	10/04/2012 1225
tert-Butyl formate (TBF)	ND	250	ND	N	1	0.00	70-130	10/04/2012 1225

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		95	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94612-001
Batch: 94612
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/04/2012 0524
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	10/04/2012 0524
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/04/2012 0524
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	10/04/2012 0524
Naphthalene	ND		1	1.0	0.40	ug/L	10/04/2012 0524
Toluene	ND		1	1.0	0.33	ug/L	10/04/2012 0524
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/04/2012 0524

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		95	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94612-002
Batch: 94612
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	47		1	94	70-130	10/04/2012 0355
1,2-Dichloroethane	50	49		1	97	70-130	10/04/2012 0355
Ethylbenzene	50	49		1	99	70-130	10/04/2012 0355
Methyl tertiary butyl ether (MTBE)	50	47		1	94	70-130	10/04/2012 0355
Naphthalene	50	56		1	112	70-130	10/04/2012 0355
Toluene	50	47		1	93	70-130	10/04/2012 0355
Xylenes (total)	100	96		1	96	70-130	10/04/2012 0355

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94612-003 **Matrix:** Aqueous
Batch: 94612 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	47		1	94	0.24	70-130	20	10/04/2012 0417
1,2-Dichloroethane	50	47		1	94	3.0	70-130	20	10/04/2012 0417
Ethylbenzene	50	49		1	97	1.5	70-130	20	10/04/2012 0417
Methyl tertiary butyl ether (MTBE)	50	47		1	94	0.26	70-130	20	10/04/2012 0417
Naphthalene	50	55		1	110	2.4	70-130	20	10/04/2012 0417
Toluene	50	47		1	95	1.4	70-130	20	10/04/2012 0417
Xylenes (total)	100	95		1	95	1.0	70-130	20	10/04/2012 0417

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI28064-011DU
Batch: 94612
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Benzene	ND	ND		1	0.00	20	10/04/2012 1203
1,2-Dichloroethane	ND	0.43	J	1	0.00	20	10/04/2012 1203
Ethylbenzene	ND	ND		1	0.00	20	10/04/2012 1203
Methyl tertiary butyl ether (MTBE)	ND	ND		1	0.00	20	10/04/2012 1203
Naphthalene	ND	ND		1	0.00	20	10/04/2012 1203
Toluene	ND	ND		1	0.00	20	10/04/2012 1203
Xylenes (total)	ND	ND		1	0.00	20	10/04/2012 1203

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		92	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: NI28064-012MS
Batch: 94612
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	50	49		1	97	72-127	10/04/2012 1225
1,2-Dichloroethane	ND	50	47		1	94	59-143	10/04/2012 1225
Ethylbenzene	ND	50	49		1	98	79-132	10/04/2012 1225
Methyl tertiary butyl ether (MTBE)	ND	50	45		1	91	60-140	10/04/2012 1225
Naphthalene	ND	50	53		1	105	62-136	10/04/2012 1225
Toluene	ND	50	48		1	96	75-125	10/04/2012 1225
Xylenes (total)	ND	100	94		1	94	70-130	10/04/2012 1225

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		95	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94767-001
Batch: 94767
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/05/2012 1125

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94767-002
Batch: 94767
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	50		1	100	70-130	10/05/2012 0948

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94767-003
Batch: 94767
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	50		1	100	0.43	70-130	20	10/05/2012 1012

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94884-001 **Matrix:** Aqueous
Batch: 94884 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/12/2012 0000

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene	N	0.00	70-130
1,2-Dichloroethane-d4	N	0.00	70-130
Toluene-d8	N	0.00	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94884-002
Batch: 94884
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50		N	1	0.00	70-130	10/12/2012 0000

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene	N	0.00	70-130
1,2-Dichloroethane-d4	N	0.00	70-130
Toluene-d8	N	0.00	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94884-003
Batch: 94884
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	57	+	1	114	200	70-130	20	10/08/2012 1006

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		121	70-130
Toluene-d8		116	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94918-001
Batch: 94918
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	10/08/2012 1659
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/08/2012 1659
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	10/08/2012 1659
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	10/08/2012 1659
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	10/08/2012 1659
Ethanol	ND		1	1000	33	ug/L	10/08/2012 1659
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	10/08/2012 1659
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	10/08/2012 1659

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		95	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94918-002
Batch: 94918
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1100		1	112	70-130	10/08/2012 1525
tert-Amyl methyl ether (TAME)	50	48		1	95	70-130	10/08/2012 1525
tert-Butyl formate (TBF)	250	230		1	90	70-130	10/08/2012 1525
Diisopropyl ether (IPE)	50	47		1	94	70-130	10/08/2012 1525
3,3-Dimethyl-1-butanol	1000	1200		1	117	70-130	10/08/2012 1525
Ethanol	5000	5600		1	112	70-130	10/08/2012 1525
Ethyl-tert-butyl ether (ETBE)	50	43		1	85	70-130	10/08/2012 1525
tert-butyl alcohol (TBA)	1000	1100		1	113	70-130	10/08/2012 1525

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94918-003
Batch: 94918
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1100		1	110	2.0	70-130	20	10/08/2012 1548
tert-Amyl methyl ether (TAME)	50	48		1	97	1.9	70-130	20	10/08/2012 1548
tert-Butyl formate (TBF)	250	230		1	92	1.4	70-130	20	10/08/2012 1548
Diisopropyl ether (IPE)	50	48		1	97	2.6	70-130	20	10/08/2012 1548
3,3-Dimethyl-1-butanol	1000	1100		1	113	3.7	70-130	20	10/08/2012 1548
Ethanol	5000	5500		1	109	2.1	70-130	20	10/08/2012 1548
Ethyl-tert-butyl ether (ETBE)	50	44		1	87	2.5	70-130	20	10/08/2012 1548
tert-butyl alcohol (TBA)	1000	1100		1	110	2.6	70-130	20	10/08/2012 1548

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94918-001
Batch: 94918
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/08/2012 1659
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	10/08/2012 1659
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/08/2012 1659
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	10/08/2012 1659
Naphthalene	ND		1	1.0	0.40	ug/L	10/08/2012 1659
Toluene	ND		1	1.0	0.33	ug/L	10/08/2012 1659
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/08/2012 1659

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		95	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94918-002
Batch: 94918
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	43		1	86	70-130	10/08/2012 1525
1,2-Dichloroethane	50	46		1	92	70-130	10/08/2012 1525
Ethylbenzene	50	48		1	96	70-130	10/08/2012 1525
Methyl tertiary butyl ether (MTBE)	50	46		1	92	70-130	10/08/2012 1525
Naphthalene	50	58		1	115	70-130	10/08/2012 1525
Toluene	50	46		1	92	70-130	10/08/2012 1525
Xylenes (total)	100	98		1	98	70-130	10/08/2012 1525

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94918-003 **Matrix:** Aqueous
Batch: 94918 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	43		1	86	0.42	70-130	20	10/08/2012 1548
1,2-Dichloroethane	50	46		1	91	1.5	70-130	20	10/08/2012 1548
Ethylbenzene	50	48		1	96	0.50	70-130	20	10/08/2012 1548
Methyl tertiary butyl ether (MTBE)	50	47		1	94	2.3	70-130	20	10/08/2012 1548
Naphthalene	50	58		1	117	1.0	70-130	20	10/08/2012 1548
Toluene	50	46		1	91	0.32	70-130	20	10/08/2012 1548
Xylenes (total)	100	98		1	98	0.0061	70-130	20	10/08/2012 1548

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N - Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MB

Sample ID: NQ94472-001
Batch: 94472
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/02/2012 1130

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	10/04/2012 1755

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		99	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - LCS

Sample ID: NQ94472-002 **Matrix:** Aqueous
Batch: 94472 **Prep Method:** 8011
Analytical Method: 8011 **Prep Date:** 10/02/2012 1130

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.25		1	102	60-140	10/04/2012 1816

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		100	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MS

Sample ID: NI28064-001MS
Batch: 94472
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/02/2012 1130

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.036	0.24	0.27		1	99	60-140	10/04/2012 1859

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		103	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MSD

Sample ID: NI28064-001MD
Batch: 94472
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/02/2012 1130

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.036	0.24	0.26		1	94	6.1	60-140	20	10/04/2012 1920

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		98	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 20569

Client: MCL	Report to Contact: B. Brewer	Sampler(s) Printed Name: RYAN ARIAIC
Address: 235-B Dooley Rd	Telephone No. / Fax No. / Email: 803-808-2013 / jlc@mci.net	Work Order No.
City: Lexington	State: SC	Zip Code: 29073
Project Name: Smiths Grocery	Project Number	P.O. Number

Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCl 6. Na Thio 7. NaOH

Page 1 of 2

Number of Containers: 3 3 3 3

Bottle (See Instructions on back): A A A A

Preservative: 5 5 5 5

Lot No: NTDRCY

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: BTEX, Naphthalene (8260B)	1,2-DCA	8-oxy	EDB	Remarks / Cooler ID
TW-1A	9/26	1400	G	X					X	X	X	X	
TW-1B	9/27	1401											
TW-1C	9/27	1241											
TW-2A	9/26	1445											
TW-2B	9/27	1147											
TW-2C	9/27	1047											
TW-3A	9/26	1315											
TW-3B	9/26	1643											
TW-3C	9/26	1540											
TW-4A	9/26	1000	G	X					X	X	X	X	

Low Detection Limits All MCLs

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time
1. Relinquished by / Sampler: Ryan Ariaic	9/27/12	1700
1. Received by:	9/28/12	1700
2. Relinquished by:	9-28-12	1155
2. Received by:	9/28/12	1155
3. Relinquished by:		
3. Received by:		
4. Relinquished by:	9/28/12	1400
4. Laboratory Received by:	9/28/12	1400

LAB USE ONLY: Received on Ice (Circle): (Yes) No | Ice Pack | Receipt Temp: 1.0 °C | Temp. Blank: (Yes) No

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY

Chain of Custody Record

Number 20570

Client: Merit	Report to Contact: B. Shaw	Sampler (Printed Name): Ryan Allair	Quote No:
Address: 235-B Dooley Rd	Telephone No. / Fax No. / Email: 803-808-2043 / jlc@merit.net	Waybill No:	Page: 2 of 2
City: Lexington State: SC Zip Code: 29073	Preservative: 1. Unpres. 4. H2SO4 7. NaOH 2. NaOH/ZnA 5. HCl 3. HNO3 6. Na Thio.		Number of Containers
Project Name: Smiths Grocery			Bottle (See instructions on back)
Project Number:	P.O. Number:		Preservative
			Lot No: Murphy

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	Grab/Composite	Matrix: GW	DW	WW	S	Other	Analysis: BTEX, Naphthalene (8260B)	1,2-DCA	6-day	EDB	Remarks / Cooler ID
TW-4B	9/26	1440	G	X					X	X	X	X	Low Detection Limits on all wells
TW-4C	9/26	1333											
TW-5A	9/25	1725											
TW-5B	9/25	1885											
TW-5C	9/26	1104											
TW-6A	9/25	1230											
TW-6B	9/25	1305											
TW-6C	9/25	1440	G	X					X	X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposed by Lab

QC Requirements (Specify):

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Relinquished by / Sampler	Date	Time	Received by	Date	Time
1.	Ryan Allair	9/27/12	1700		9/27/12	1700
2.		9/28/12	1155		9/28/12	1155
3.		Date	Time		Date	Time
4.		9-28-12	1400	Laboratory Received by	9/28/12	1400

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check): ☐ Yes ☐ No ☐ Ice Pack — Record Temp: 1.0 °C — Temp. Blank: ☐ Y ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Receipt Checklist (SRC)

Client: [illegible] Cooler Inspected by/date: [illegible] 9/28/[illegible] Lot #: [illegible] 28864

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other

Yes ☐	No ☑	1. Were custody seals present on the cooler?
Yes ☐	No ☐	2. If custody seals were present, were they intact and unbroken?

Cooler ID temperature upon receipt 1.0 °C

Method: ☑ Temperature Blank ☐ Against Bottles

Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other [illegible]. (For coolers received via commercial courier, PMs are to be notified immediately.)
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a. Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☐	No ☑		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☑	No ☐	NA ☐	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc.) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) ________ were received incorrectly preserved and were adjusted accordingly in sample receiving with ________ (H_2SO_4, HNO_3, HCl, NaOH) with the SR # number.

Sample(s) -003(2) 004(6) were received with bubbles >6 mm in diameter.

Sample(s) ________ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb.

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: ________ Date of response: ________

Comments: ________

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Midlands Environmental Consultants, Inc.
235 Dooley Rd
Lexington, SC 29073
Attention: Bryan Shane

Project Name: **Smith's Grocery**

Project Number: **12-3946**

Lot Number: **NI27063**
Date Completed: **10/16/2012**
Date Revised: **10/24/2012**

Kelly M. Maberry
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
Midlands Environmental Consultants, Inc.
Lot Number: NI27063

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Receiving
Page 8 of the chain of custody forms does not have tests listed. The tests were logged in according to the bottles received.

Several sample IDs were revised to include "R" at the client's request. Sample -027 was revised to "MW-21" at the client's request.

Several samples for volatiles analysis contained vials with air bubbles greater than ¼" or 6mm in diameter. The laboratory uses these vials for screening and the vials without bubbles for analysis whenever possible. Condition of samples is documented on the Sample Receipt Checklist (SRC).

GC/MS Volatiles
The method blank associated with samples -034, -035, -036, -039 and -040 had naphthalene detected at a concentration that was above the MDL but below ½ the PQL. All samples associated with this method blank that have detections for this compound have been flagged with a "B".

The LCS/LCSD associated with batches 94478, 94513, 94571 and 94822 had ethanol recovered above the acceptance limits. This demonstrates a high bias on analytical results. There were no detections for this compound in the samples associated with these batches; therefore, data quality is not impacted.

The MS associated with samples -008, -011, -050, -060 and -062 had compounds recovered outside of the acceptance limits. This demonstrates a matrix effect and data quality is not impacted.

The RPD for benzene, ethylbenzene and toluene in the duplicate associated with sample -009 exceeded method control limits. This is most likely a matrix effect. Insufficient sample volume remained for re-analysis.

EDB/DBCP
The sample result for -024 has a P qualifier because the relative percent difference (RPD) between the two dissimilar phase GC columns exceeds 40%. Section 7.10.4 of SW-846 method 8000B states the higher of the two results is reported; however the lower result is reported for this sample. The higher result for sample -024 was 2.1 ug/L.

The MS/MSD associated with samples -017, -022, -058 and -078 had EDB recovered outside of the acceptance limits and the RPD exceeded method control limits. This demonstrates a matrix effect and data quality is not impacted.

The MS associated with samples -058 and -078 had the surrogate recovered outside of the acceptance limits. The sample and MSD has the surrogate recovered within the acceptance limits, demonstrating this is isolated to the MS. The sample results are reported and no corrective action is required.

Due to high detections for target compounds, samples -001, -019, -020, -024 and -032 were diluted 50X, 50X, 100X, 5X and 20X, respectively. As a result, the associated surrogates were recovered outside of the acceptance limits. No corrective action was required, as dilutions of 5X and greater may impact surrogate recoveries.

Samples -007, -008 and -024 had a layer of sediment in the sample vials that altered the final volume.

Sample Summary

Midlands Environmental Consultants, Inc.

Lot Number: NI27063

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	MW-1R	Aqueous	09/26/2012 1132	09/27/2012
002	MW-4R	Aqueous	09/26/2012 1200	09/27/2012
003	MW-5R	Aqueous	09/26/2012 0954	09/27/2012
004	MW-6R	Aqueous	09/25/2012 1425	09/27/2012
005	MW-7R	Aqueous	09/25/2012 1352	09/27/2012
006	MW-8	Aqueous	09/26/2012 1108	09/27/2012
007	MW-9R	Aqueous	09/25/2012 1334	09/27/2012
008	MW-10R	Aqueous	09/25/2012 1116	09/27/2012
009	MW-11R	Aqueous	09/26/2012 1229	09/27/2012
010	MW-14R	Aqueous	09/25/2012 1235	09/27/2012
011	MW-15R	Aqueous	09/25/2012 1226	09/27/2012
012	MW-16	Aqueous	09/25/2012 1318	09/27/2012
013	MW-17R	Aqueous	09/25/2012 1311	09/27/2012
014	MW-18R	Aqueous	09/25/2012 1301	09/27/2012
015	MW-20	Aqueous	09/25/2012 1338	09/27/2012
016	TW-1	Aqueous	09/26/2012 1031	09/27/2012
017	TW-2	Aqueous	09/26/2012 1107	09/27/2012
018	TW-3	Aqueous	09/25/2012 1111	09/27/2012
019	IW-2	Aqueous	09/26/2012 1112	09/27/2012
020	IW-3	Aqueous	09/26/2012 1020	09/27/2012
021	IW-4	Aqueous	09/26/2012 1010	09/27/2012
022	IW-5	Aqueous	09/26/2012 1144	09/27/2012
023	IW-6	Aqueous	09/25/2012 1359	09/27/2012
024	IW-8	Aqueous	09/25/2012 1428	09/27/2012
025	IW-9	Aqueous	09/25/2012 1409	09/27/2012
026	IW-10	Aqueous	09/25/2012 1210	09/27/2012
027	MW-21	Aqueous	09/25/2012 1159	09/27/2012
028	IW-18	Aqueous	09/25/2012 1141	09/27/2012
029	IW-20	Aqueous	09/25/2012 1148	09/27/2012
030	MW-1R Duplicate	Aqueous	09/26/2012 1132	09/27/2012
031	MW-5 Duplicate	Aqueous	09/26/2012 0954	09/27/2012
032	MW-8 Duplicate	Aqueous	09/26/2012 1108	09/27/2012
033	MW-10 Duplicate	Aqueous	09/25/2012 1116	09/27/2012
034	Field Blank	Aqueous	09/25/2012 1030	09/27/2012
035	Field Blank	Aqueous	09/26/2012 1400	09/27/2012
036	Trip Blank	Aqueous	09/25/2012 1035	09/27/2012
037	Trip Blank	Aqueous	09/26/2012 1435	09/27/2012
038	WSW-1	Aqueous	09/25/2012 1024	09/27/2012
039	WSW-2 (PRE)	Aqueous	09/25/2012 1220	09/27/2012
040	WSW-2 (POST)	Aqueous	09/25/2012 1225	09/27/2012
041	WSW-3 (PRE)	Aqueous	09/25/2012 1251	09/27/2012
042	WSW-3 (POST)	Aqueous	09/25/2012 1257	09/27/2012
043	WSW-4	Aqueous	09/25/2012 1307	09/27/2012
044	WSW-5	Aqueous	09/25/2012 1320	09/27/2012
045	WSW-6	Aqueous	09/25/2012 1330	09/27/2012

Sample Summary (Continued)

Lot Number: NI27063

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
046	WSW-7	Aqueous	09/25/2012 1340	09/27/2012
047	WSW-8	Aqueous	09/25/2012 1350	09/27/2012
048	WSW-9	Aqueous	09/25/2012 1405	09/27/2012
049	WSW-10	Aqueous	09/25/2012 1415	09/27/2012
050	WSW-11	Aqueous	09/26/2012 1000	09/27/2012
051	WSW-12	Aqueous	09/26/2012 1010	09/27/2012
052	WSW-13	Aqueous	09/26/2012 1017	09/27/2012
053	WSW-14	Aqueous	09/26/2012 1041	09/27/2012
054	WSW-15	Aqueous	09/26/2012 1030	09/27/2012
055	WSW-16	Aqueous	09/26/2012 1105	09/27/2012
056	WSW-17	Aqueous	09/26/2012 1111	09/27/2012
057	WSW-18	Aqueous	09/26/2012 1116	09/27/2012
058	WSW-19	Aqueous	09/26/2012 1120	09/27/2012
059	WSW-20	Aqueous	09/26/2012 1135	09/27/2012
060	WSW-21	Aqueous	09/26/2012 1140	09/27/2012
061	WSW-22	Aqueous	09/26/2012 1145	09/27/2012
062	WSW-23	Aqueous	09/26/2012 1200	09/27/2012
063	WSW-24 (PRE)	Aqueous	09/25/2012 1237	09/27/2012
064	WSW-24 (POST)	Aqueous	09/25/2012 1242	09/27/2012
065	WSW-25	Aqueous	09/25/2012 1315	09/27/2012
066	WSW-26	Aqueous	09/25/2012 1345	09/27/2012
067	WSW-27	Aqueous	09/25/2012 1355	09/27/2012
068	WSW-28	Aqueous	09/25/2012 1430	09/27/2012
069	WSW-29	Aqueous	09/26/2012 0955	09/27/2012
070	WSW-30	Aqueous	09/26/2012 1052	09/27/2012
071	WSW-31	Aqueous	09/26/2012 1131	09/27/2012
072	WSW-32	Aqueous	09/25/2012 1105	09/27/2012
073	WSW-33	Aqueous	09/25/2012 1115	09/27/2012
074	WSW-34	Aqueous	09/25/2012 1039	09/27/2012
075	WSW-35	Aqueous	09/25/2012 1125	09/27/2012
076	WSW-36	Aqueous	09/25/2012 1137	09/27/2012
077	WSW-37	Aqueous	09/25/2012 1149	09/27/2012
078	WSW-38	Aqueous	09/25/2012 1156	09/27/2012

(78 samples)

Executive Summary

Midlands Environmental Consultants, Inc.

Lot Number: NI27063

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	MW-1R	Aqueous	Benzene	8260B	7200		ug/L	11
001	MW-1R	Aqueous	1,2-Dichloroethane	8260B	130		ug/L	11
001	MW-1R	Aqueous	Ethylbenzene	8260B	5800		ug/L	11
001	MW-1R	Aqueous	Naphthalene	8260B	1000		ug/L	11
001	MW-1R	Aqueous	Toluene	8260B	33000		ug/L	11
001	MW-1R	Aqueous	Xylenes (total)	8260B	33000		ug/L	11
001	MW-1R	Aqueous	Diisopropyl ether (IPE)	8260B	38	J	ug/L	11
001	MW-1R	Aqueous	1,2-Dibromoethane (EDB)	8011	16		ug/L	12
004	MW-6R	Aqueous	Benzene	8260B	2000		ug/L	17
004	MW-6R	Aqueous	1,2-Dichloroethane	8260B	40		ug/L	17
004	MW-6R	Aqueous	Ethylbenzene	8260B	1200		ug/L	17
004	MW-6R	Aqueous	Naphthalene	8260B	350		ug/L	17
004	MW-6R	Aqueous	Toluene	8260B	150		ug/L	17
004	MW-6R	Aqueous	Xylenes (total)	8260B	4200		ug/L	17
004	MW-6R	Aqueous	Diisopropyl ether (IPE)	8260B	28	J	ug/L	17
004	MW-6R	Aqueous	tert-Amyl alcohol (TAA)	8260B	1100		ug/L	17
004	MW-6R	Aqueous	tert-butyl alcohol (TBA)	8260B	86	J	ug/L	17
004	MW-6R	Aqueous	1,2-Dibromoethane (EDB)	8011	2.0		ug/L	18
005	MW-7R	Aqueous	Benzene	8260B	200		ug/L	19
005	MW-7R	Aqueous	1,2-Dichloroethane	8260B	5.8		ug/L	19
005	MW-7R	Aqueous	Ethylbenzene	8260B	15		ug/L	19
005	MW-7R	Aqueous	Naphthalene	8260B	27		ug/L	19
005	MW-7R	Aqueous	Toluene	8260B	12		ug/L	19
005	MW-7R	Aqueous	Xylenes (total)	8260B	1000		ug/L	19
005	MW-7R	Aqueous	Diisopropyl ether (IPE)	8260B	6.8	J	ug/L	19
005	MW-7R	Aqueous	tert-Amyl alcohol (TAA)	8260B	180		ug/L	19
005	MW-7R	Aqueous	tert-butyl alcohol (TBA)	8260B	150		ug/L	19
006	MW-8	Aqueous	Benzene	8260B	9300		ug/L	21
006	MW-8	Aqueous	1,2-Dichloroethane	8260B	210		ug/L	21
006	MW-8	Aqueous	Ethylbenzene	8260B	4600		ug/L	21
006	MW-8	Aqueous	Naphthalene	8260B	960		ug/L	21
006	MW-8	Aqueous	Toluene	8260B	47000		ug/L	21
006	MW-8	Aqueous	Xylenes (total)	8260B	26000		ug/L	21
006	MW-8	Aqueous	Diisopropyl ether (IPE)	8260B	180	J	ug/L	21
006	MW-8	Aqueous	1,2-Dibromoethane (EDB)	8011	14		ug/L	22
008	MW-10R	Aqueous	Benzene	8260B	3100		ug/L	25
008	MW-10R	Aqueous	1,2-Dichloroethane	8260B	260		ug/L	25
008	MW-10R	Aqueous	Ethylbenzene	8260B	2200		ug/L	25
008	MW-10R	Aqueous	Naphthalene	8260B	250		ug/L	25
008	MW-10R	Aqueous	Toluene	8260B	3500		ug/L	25
008	MW-10R	Aqueous	Xylenes (total)	8260B	2400		ug/L	25
008	MW-10R	Aqueous	Diisopropyl ether (IPE)	8260B	370		ug/L	25
008	MW-10R	Aqueous	tert-Amyl alcohol (TAA)	8260B	5400		ug/L	25
008	MW-10R	Aqueous	tert-butyl alcohol (TBA)	8260B	290		ug/L	25
008	MW-10R	Aqueous	1,2-Dibromoethane (EDB)	8011	25		ug/L	26

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
009	MW-11R	Aqueous	Benzene	8260B	2.8		ug/L	27
009	MW-11R	Aqueous	Ethylbenzene	8260B	4.4		ug/L	27
009	MW-11R	Aqueous	Naphthalene	8260B	3.3		ug/L	27
009	MW-11R	Aqueous	Toluene	8260B	0.34	J	ug/L	27
009	MW-11R	Aqueous	Xylenes (total)	8260B	64		ug/L	27
009	MW-11R	Aqueous	Diisopropyl ether (IPE)	8260B	0.59	J	ug/L	27
009	MW-11R	Aqueous	tert-butyl alcohol (TBA)	8260B	120		ug/L	27
009	MW-11R	Aqueous	1,2-Dibromoethane (EDB)	8011	0.051		ug/L	28
010	MW-14R	Aqueous	tert-butyl alcohol (TBA)	8260B	15	J	ug/L	29
011	MW-15R	Aqueous	1,2-Dichloroethane	8260B	12		ug/L	31
011	MW-15R	Aqueous	1,2-Dibromoethane (EDB)	8011	0.76		ug/L	32
012	MW-16	Aqueous	Benzene	8260B	4.9		ug/L	33
012	MW-16	Aqueous	Naphthalene	8260B	1.1		ug/L	33
012	MW-16	Aqueous	Xylenes (total)	8260B	4.8		ug/L	33
012	MW-16	Aqueous	1,2-Dibromoethane (EDB)	8011	0.025		ug/L	34
013	MW-17R	Aqueous	Benzene	8260B	45		ug/L	35
013	MW-17R	Aqueous	1,2-Dichloroethane	8260B	3.6		ug/L	35
013	MW-17R	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	2.8		ug/L	35
013	MW-17R	Aqueous	Naphthalene	8260B	4.2		ug/L	35
013	MW-17R	Aqueous	Xylenes (total)	8260B	29		ug/L	35
013	MW-17R	Aqueous	Diisopropyl ether (IPE)	8260B	14		ug/L	35
013	MW-17R	Aqueous	tert-butyl alcohol (TBA)	8260B	15	J	ug/L	35
013	MW-17R	Aqueous	1,2-Dibromoethane (EDB)	8011	0.096		ug/L	36
014	MW-18R	Aqueous	1,2-Dichloroethane	8260B	19		ug/L	37
014	MW-18R	Aqueous	Diisopropyl ether (IPE)	8260B	17		ug/L	37
014	MW-18R	Aqueous	1,2-Dibromoethane (EDB)	8011	1.8		ug/L	38
016	TW-1	Aqueous	Benzene	8260B	12000		ug/L	41
016	TW-1	Aqueous	Ethylbenzene	8260B	3000		ug/L	41
016	TW-1	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	48		ug/L	41
016	TW-1	Aqueous	Naphthalene	8260B	680		ug/L	41
016	TW-1	Aqueous	Toluene	8260B	11000		ug/L	41
016	TW-1	Aqueous	Xylenes (total)	8260B	15000		ug/L	41
016	TW-1	Aqueous	Diisopropyl ether (IPE)	8260B	180	J	ug/L	41
016	TW-1	Aqueous	1,2-Dibromoethane (EDB)	8011	13		ug/L	42
017	TW-2	Aqueous	Benzene	8260B	6200		ug/L	43
017	TW-2	Aqueous	Ethylbenzene	8260B	1300		ug/L	43
017	TW-2	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	120		ug/L	43
017	TW-2	Aqueous	Naphthalene	8260B	390		ug/L	43
017	TW-2	Aqueous	Toluene	8260B	16000		ug/L	43
017	TW-2	Aqueous	Xylenes (total)	8260B	6400		ug/L	43
017	TW-2	Aqueous	Diisopropyl ether (IPE)	8260B	290		ug/L	43
018	TW-3	Aqueous	Benzene	8260B	330		ug/L	45
018	TW-3	Aqueous	Ethylbenzene	8260B	7.3		ug/L	45
018	TW-3	Aqueous	Naphthalene	8260B	20		ug/L	45
018	TW-3	Aqueous	Toluene	8260B	17		ug/L	45
018	TW-3	Aqueous	Xylenes (total)	8260B	52		ug/L	45
018	TW-3	Aqueous	Diisopropyl ether (IPE)	8260B	23		ug/L	45
018	TW-3	Aqueous	tert-Amyl alcohol (TAA)	8260B	540		ug/L	45

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
018	TW-3	Aqueous	tert-butyl alcohol (TBA)	8260B	32	J	ug/L	45
018	TW-3	Aqueous	1,2-Dibromoethane (EDB)	8011	0.64		ug/L	46
019	IW-2	Aqueous	Benzene	8260B	25000		ug/L	47
019	IW-2	Aqueous	Ethylbenzene	8260B	3600		ug/L	47
019	IW-2	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	290		ug/L	47
019	IW-2	Aqueous	Naphthalene	8260B	870		ug/L	47
019	IW-2	Aqueous	Toluene	8260B	60000		ug/L	47
019	IW-2	Aqueous	Xylenes (total)	8260B	26000		ug/L	47
019	IW-2	Aqueous	Diisopropyl ether (IPE)	8260B	760		ug/L	47
019	IW-2	Aqueous	tert-butyl alcohol (TBA)	8260B	3000		ug/L	47
019	IW-2	Aqueous	1,2-Dibromoethane (EDB)	8011	33		ug/L	48
020	IW-3	Aqueous	Benzene	8260B	14000		ug/L	49
020	IW-3	Aqueous	Ethylbenzene	8260B	2400		ug/L	49
020	IW-3	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	410		ug/L	49
020	IW-3	Aqueous	Naphthalene	8260B	640		ug/L	49
020	IW-3	Aqueous	Toluene	8260B	27000		ug/L	49
020	IW-3	Aqueous	Xylenes (total)	8260B	13000		ug/L	49
020	IW-3	Aqueous	Diisopropyl ether (IPE)	8260B	660	J	ug/L	49
020	IW-3	Aqueous	1,2-Dibromoethane (EDB)	8011	90		ug/L	50
021	IW-4	Aqueous	Benzene	8260B	4100		ug/L	51
021	IW-4	Aqueous	Ethylbenzene	8260B	160		ug/L	51
021	IW-4	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	46		ug/L	51
021	IW-4	Aqueous	Naphthalene	8260B	190		ug/L	51
021	IW-4	Aqueous	Toluene	8260B	9.1		ug/L	51
021	IW-4	Aqueous	Xylenes (total)	8260B	1100		ug/L	51
021	IW-4	Aqueous	Diisopropyl ether (IPE)	8260B	100		ug/L	51
021	IW-4	Aqueous	tert-butyl alcohol (TBA)	8260B	360		ug/L	51
022	IW-5	Aqueous	Benzene	8260B	12000		ug/L	53
022	IW-5	Aqueous	Ethylbenzene	8260B	4200		ug/L	53
022	IW-5	Aqueous	Naphthalene	8260B	860		ug/L	53
022	IW-5	Aqueous	Toluene	8260B	60000		ug/L	53
022	IW-5	Aqueous	Xylenes (total)	8260B	25000		ug/L	53
022	IW-5	Aqueous	Diisopropyl ether (IPE)	8260B	120	J	ug/L	53
022	IW-5	Aqueous	1,2-Dibromoethane (EDB)	8011	3.9		ug/L	54
023	IW-6	Aqueous	Benzene	8260B	180		ug/L	55
023	IW-6	Aqueous	Ethylbenzene	8260B	25		ug/L	55
023	IW-6	Aqueous	Naphthalene	8260B	370		ug/L	55
023	IW-6	Aqueous	Toluene	8260B	18		ug/L	55
023	IW-6	Aqueous	Xylenes (total)	8260B	1500		ug/L	55
023	IW-6	Aqueous	Diisopropyl ether (IPE)	8260B	5.1	J	ug/L	55
023	IW-6	Aqueous	tert-butyl alcohol (TBA)	8260B	150		ug/L	55
024	IW-8	Aqueous	Benzene	8260B	2000		ug/L	57
024	IW-8	Aqueous	Ethylbenzene	8260B	2200		ug/L	57
024	IW-8	Aqueous	Naphthalene	8260B	600		ug/L	57
024	IW-8	Aqueous	Toluene	8260B	35		ug/L	57
024	IW-8	Aqueous	Xylenes (total)	8260B	5100		ug/L	57
024	IW-8	Aqueous	Diisopropyl ether (IPE)	8260B	22		ug/L	57
024	IW-8	Aqueous	1,2-Dibromoethane (EDB)	8011	1.4	PQ	ug/L	58

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
025	IW-9	Aqueous	Benzene	8260B	490		ug/L	59
025	IW-9	Aqueous	Ethylbenzene	8260B	1300		ug/L	59
025	IW-9	Aqueous	Naphthalene	8260B	390		ug/L	59
025	IW-9	Aqueous	Toluene	8260B	57		ug/L	59
025	IW-9	Aqueous	Xylenes (total)	8260B	4700		ug/L	59
025	IW-9	Aqueous	Diisopropyl ether (IPE)	8260B	8.9	J	ug/L	59
025	IW-9	Aqueous	tert-butyl alcohol (TBA)	8260B	150		ug/L	59
025	IW-9	Aqueous	1,2-Dibromoethane (EDB)	8011	0.15		ug/L	60
026	IW-10	Aqueous	Benzene	8260B	300		ug/L	61
026	IW-10	Aqueous	Ethylbenzene	8260B	100		ug/L	61
026	IW-10	Aqueous	Naphthalene	8260B	78		ug/L	61
026	IW-10	Aqueous	Toluene	8260B	6.4		ug/L	61
026	IW-10	Aqueous	Xylenes (total)	8260B	750		ug/L	61
026	IW-10	Aqueous	Diisopropyl ether (IPE)	8260B	18		ug/L	61
026	IW-10	Aqueous	tert-butyl alcohol (TBA)	8260B	200		ug/L	61
027	MW-21	Aqueous	Benzene	8260B	34		ug/L	62
027	MW-21	Aqueous	1,2-Dichloroethane	8260B	31		ug/L	62
027	MW-21	Aqueous	Ethylbenzene	8260B	1.1		ug/L	62
027	MW-21	Aqueous	Toluene	8260B	0.40	J	ug/L	62
027	MW-21	Aqueous	Xylenes (total)	8260B	14		ug/L	62
027	MW-21	Aqueous	Diisopropyl ether (IPE)	8260B	70		ug/L	62
027	MW-21	Aqueous	tert-Amyl alcohol (TAA)	8260B	190		ug/L	62
027	MW-21	Aqueous	tert-butyl alcohol (TBA)	8260B	35	J	ug/L	62
027	MW-21	Aqueous	1,2-Dibromoethane (EDB)	8011	0.52		ug/L	63
028	IW-18	Aqueous	Benzene	8260B	770		ug/L	64
028	IW-18	Aqueous	Ethylbenzene	8260B	390		ug/L	64
028	IW-18	Aqueous	Naphthalene	8260B	66		ug/L	64
028	IW-18	Aqueous	Xylenes (total)	8260B	110		ug/L	64
028	IW-18	Aqueous	Diisopropyl ether (IPE)	8260B	110		ug/L	64
028	IW-18	Aqueous	tert-Amyl alcohol (TAA)	8260B	4300		ug/L	64
028	IW-18	Aqueous	tert-butyl alcohol (TBA)	8260B	400		ug/L	64
028	IW-18	Aqueous	1,2-Dibromoethane (EDB)	8011	0.41		ug/L	65
029	IW-20	Aqueous	Benzene	8260B	1.8		ug/L	66
029	IW-20	Aqueous	Ethylbenzene	8260B	2.1		ug/L	66
029	IW-20	Aqueous	Naphthalene	8260B	2.6		ug/L	66
029	IW-20	Aqueous	Toluene	8260B	1.2		ug/L	66
029	IW-20	Aqueous	Xylenes (total)	8260B	16		ug/L	66
030	MW-1R Duplicate	Aqueous	Benzene	8260B	6600		ug/L	68
030	MW-1R Duplicate	Aqueous	Ethylbenzene	8260B	5500		ug/L	68
030	MW-1R Duplicate	Aqueous	Naphthalene	8260B	990		ug/L	68
030	MW-1R Duplicate	Aqueous	Toluene	8260B	34000		ug/L	68
030	MW-1R Duplicate	Aqueous	Xylenes (total)	8260B	36000		ug/L	68
030	MW-1R Duplicate	Aqueous	Diisopropyl ether (IPE)	8260B	44	J	ug/L	68
030	MW-1R Duplicate	Aqueous	1,2-Dibromoethane (EDB)	8011	17		ug/L	69
031	MW-5 Duplicate	Aqueous	Benzene	8260B	0.14	J	ug/L	70
031	MW-5 Duplicate	Aqueous	tert-Amyl alcohol (TAA)	8260B	9.0	J	ug/L	70
032	MW-8 Duplicate	Aqueous	Benzene	8260B	9500		ug/L	72
032	MW-8 Duplicate	Aqueous	Ethylbenzene	8260B	4900		ug/L	72

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
032	MW-8 Duplicate	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	55	J	ug/L	72
032	MW-8 Duplicate	Aqueous	Naphthalene	8260B	1100		ug/L	72
032	MW-8 Duplicate	Aqueous	Toluene	8260B	55000		ug/L	72
032	MW-8 Duplicate	Aqueous	Xylenes (total)	8260B	30000		ug/L	72
032	MW-8 Duplicate	Aqueous	Diisopropyl ether (IPE)	8260B	200	J	ug/L	72
032	MW-8 Duplicate	Aqueous	1,2-Dibromoethane (EDB)	8011	14	Q	ug/L	73
033	MW-10 Duplicate	Aqueous	Benzene	8260B	6100		ug/L	74
033	MW-10 Duplicate	Aqueous	Ethylbenzene	8260B	2500		ug/L	74
033	MW-10 Duplicate	Aqueous	Naphthalene	8260B	370		ug/L	74
033	MW-10 Duplicate	Aqueous	Toluene	8260B	3900		ug/L	74
033	MW-10 Duplicate	Aqueous	Xylenes (total)	8260B	9900		ug/L	74
033	MW-10 Duplicate	Aqueous	Diisopropyl ether (IPE)	8260B	340		ug/L	74
033	MW-10 Duplicate	Aqueous	tert-Amyl alcohol (TAA)	8260B	7300		ug/L	74
033	MW-10 Duplicate	Aqueous	tert-butyl alcohol (TBA)	8260B	330	J	ug/L	74
033	MW-10 Duplicate	Aqueous	1,2-Dibromoethane (EDB)	8011	18		ug/L	75
034	Field Blank	Aqueous	Naphthalene	8260B	2.5	B	ug/L	76
034	Field Blank	Aqueous	Xylenes (total)	8260B	0.34	J	ug/L	76
035	Field Blank	Aqueous	Naphthalene	8260B	0.84	BJ	ug/L	78
036	Trip Blank	Aqueous	Naphthalene	8260B	0.46	BJ	ug/L	80
039	WSW-2 (PRE)	Aqueous	Benzene	8260B	400		ug/L	84
039	WSW-2 (PRE)	Aqueous	1,2-Dichloroethane	8260B	34		ug/L	84
039	WSW-2 (PRE)	Aqueous	Ethylbenzene	8260B	0.47	J	ug/L	84
039	WSW-2 (PRE)	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.64	J	ug/L	84
039	WSW-2 (PRE)	Aqueous	Naphthalene	8260B	28	B	ug/L	84
039	WSW-2 (PRE)	Aqueous	Xylenes (total)	8260B	81		ug/L	84
039	WSW-2 (PRE)	Aqueous	Diisopropyl ether (IPE)	8260B	49		ug/L	84
039	WSW-2 (PRE)	Aqueous	tert-Amyl alcohol (TAA)	8260B	990		ug/L	84
039	WSW-2 (PRE)	Aqueous	tert-butyl alcohol (TBA)	8260B	48	J	ug/L	84
039	WSW-2 (PRE)	Aqueous	1,2-Dibromoethane (EDB)	8011	0.63		ug/L	85
040	WSW-2 (POST)	Aqueous	Benzene	8260B	0.47	J	ug/L	86
040	WSW-2 (POST)	Aqueous	1,2-Dichloroethane	8260B	1.8		ug/L	86
040	WSW-2 (POST)	Aqueous	Naphthalene	8260B	0.99	BJ	ug/L	86
040	WSW-2 (POST)	Aqueous	Diisopropyl ether (IPE)	8260B	0.71	J	ug/L	86
040	WSW-2 (POST)	Aqueous	tert-Amyl alcohol (TAA)	8260B	480		ug/L	86
040	WSW-2 (POST)	Aqueous	tert-butyl alcohol (TBA)	8260B	34	J	ug/L	86
041	WSW-3 (PRE)	Aqueous	1,2-Dichloroethane	8260B	0.82	J	ug/L	88
043	WSW-4	Aqueous	1,2-Dibromoethane (EDB)	8011	0.028		ug/L	93
044	WSW-5	Aqueous	1,2-Dibromoethane (EDB)	8011	0.036		ug/L	95
051	WSW-12	Aqueous	tert-Amyl alcohol (TAA)	8260B	19	J	ug/L	108
061	WSW-22	Aqueous	Benzene	8260B	0.21	J	ug/L	128
061	WSW-22	Aqueous	Xylenes (total)	8260B	0.40	J	ug/L	128
062	WSW-23	Aqueous	Benzene	8260B	0.15	J	ug/L	130
062	WSW-23	Aqueous	Xylenes (total)	8260B	0.36	J	ug/L	130
063	WSW-24 (PRE)	Aqueous	1,2-Dibromoethane (EDB)	8011	0.049		ug/L	133
068	WSW-28	Aqueous	1,2-Dibromoethane (EDB)	8011	0.045		ug/L	143
078	WSW-38	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.62	J	ug/L	162

Sample Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
(235 detections)							

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-1R**
Date Sampled: **09/26/2012 1132**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-001**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	10/02/2012 1722	BDC		94489
2	5030B	8260B	100	10/04/2012 0303	JJG		94603

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**7200**		**50**	**6.6**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**130**		**50**	**7.4**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**5800**		**50**	**17**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		50	20	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**1000**		**50**	**20**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**33000**		**100**	**33**	**ug/L**	**2**
Xylenes (total)	**1330-20-7**	**8260B**	**33000**		**100**	**33**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
1,2-Dichloroethane-d4		86	70-130		116	70-130
Bromofluorobenzene		108	70-130		102	70-130
Toluene-d8		85	70-130		101	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	10/02/2012 1722	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**38**	**J**	**500**	**20**	**ug/L**	**1**
[illegible]hanol	64-17-5	8260B	ND		50000	1700	ug/L	1
[illegible]3-Dimethyl-1-butanol	624-95-3	8260B	ND		5000	50	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		5000	10	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		5000	340	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		500	10	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		5000	340	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5000	50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits
Bromofluorobenzene		108	70-130
1,2-Dichloroethane-d4		86	70-130
Toluene-d8		85	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-1R**
Date Sampled: **09/26/2012 1132**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-001**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 0839	RDR	09/30/2012 1222	94323
2	8011	8011	50	10/03/2012 1759	MPM	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**16**		**0.99**	**0.99**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		108	57-137	N	0.00	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-002**

Description: **MW-4R** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1200**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1444	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1444	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
thanol	64-17-5	8260B	ND		1000	33	ug/L	1
,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 0901	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-4R**
Date Sampled: **09/26/2012 1200**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-002**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 0901	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		96	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-003**

Description: **MW-5R** Matrix: **Aqueous**

Date Sampled: **09/26/2012 0954**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1336	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1336	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
thanol	64-17-5	8260B	ND		1000	33	ug/L	1
,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 0922	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-5R**
Date Sampled: **09/26/2012 0954**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-003**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 0922	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		96	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-6R**
Date Sampled: **09/25/2012 1425**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-004**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	10/02/2012 1659	BDC		94489
2	5030B	8260B	10	10/04/2012 0327	JJG		94603

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**2000**		**10**	**1.3**	**ug/L**	**2**
1,2-Dichloroethane	**107-06-2**	**8260B**	**40**		**5.0**	**0.74**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**1200**		**10**	**3.3**	**ug/L**	**2**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	2.0	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**350**		**5.0**	**2.0**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**150**		**10**	**3.3**	**ug/L**	**2**
Xylenes (total)	**1330-20-7**	**8260B**	**4200**		**10**	**3.3**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		79	70-130		105	70-130
Bromofluorobenzene		93	70-130		101	70-130
Toluene-d8		96	70-130		103	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	10/02/2012 1659	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**28**	**J**	**50**	**2.0**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		5000	170	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		500	5.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	1.0	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**1100**		**500**	**34**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		50	1.0	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**86**	**J**	**500**	**34**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		500	5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		79	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-6R**
Date Sampled: **09/25/2012 1425**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-004**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	5	10/03/2012 1820	MPM	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**2.0**		**0.097**	**0.097**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		101	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-7R**
Date Sampled: **09/25/2012 1352**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-005**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1614	BDC		94489
2	5030B	8260B	5	10/03/2012 1622	BDC		94578

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**200**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**5.8**		**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**15**		**1.0**	**0.33**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**27**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**12**		**1.0**	**0.33**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**1000**		**5.0**	**1.7**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		115	70-130		114	70-130
Bromofluorobenzene		110	70-130		100	70-130
Toluene-d8		100	70-130		106	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1614	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**6.8**	**J**	**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**180**		**100**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**150**		**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		110	70-130
1,2-Dichloroethane-d4		115	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-7R**
Date Sampled: **09/25/2012 1352**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-005**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1004	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		103	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-006**

Description: **MW-8** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1108**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	200	10/02/2012 1744	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**9300**		**200**	**26**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**210**		**200**	**29**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**4600**		**200**	**66**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		200	80	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**960**		**200**	**80**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**47000**		**200**	**66**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**26000**		**200**	**66**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		83	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		96	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	200	10/02/2012 1744	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**180**	**J**	**2000**	**80**	**ug/L**	**1**
[redacted]thanol	64-17-5	8260B	ND		200000	6600	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND		20000	200	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		20000	40	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20000	1300	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		2000	40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20000	1300	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		20000	200	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		92	70-130
1,2-Dichloroethane-d4		83	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	20	10/03/2012 1841	MPM	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-8**
Date Sampled: **09/26/2012 1108**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-006**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	20	10/03/2012 1841	MPM	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**14**		**0.40**	**0.40**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		79	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-9R**
Date Sampled: **09/25/2012 1334**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-007**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1359	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1359	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1046	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-9R**
Date Sampled: **09/25/2012 1334**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-007**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1046	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.025	0.025	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		111	57-137

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-008**

Description: **MW-10R** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1116**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1637	BDC		94489
2	5030B	8260B	10	10/03/2012 1710	BDC		94578
3	5030B	8260B	50	10/05/2012 1554	BDC		94767

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**3100**		**50**	**6.6**	**ug/L**	**3**
1,2-Dichloroethane	**107-06-2**	**8260B**	**260**		**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**2200**		**10**	**3.3**	**ug/L**	**2**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**250**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**3500**		**10**	**3.3**	**ug/L**	**2**
Xylenes (total)	**1330-20-7**	**8260B**	**2400**		**50**	**17**	**ug/L**	**3**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits	Q	Run 3 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130		111	70-130		91	70-130
Bromofluorobenzene		126	70-130		95	70-130		95	70-130
Toluene-d8		99	70-130		106	70-130		102	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1637	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**370**		**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**5400**		**100**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**290**		**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		126	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-10R**
Date Sampled: **09/25/2012 1116**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-008**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	50	10/03/2012 1903	MPM	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**25**		**1.3**	**1.3**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		126	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-11R**
Date Sampled: **09/26/2012 1229**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-009**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0108	DD		94513

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**2.8**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**4.4**		**1.0**	**0.33**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**3.3**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**0.34**	**J**	**1.0**	**0.33**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**64**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0108	DD		94513

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**0.59**	**J**	**10**	**0.40**	**ug/L**	**1**
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**120**		**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1129	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-11R**
Date Sampled: **09/26/2012 1229**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-009**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1129	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.051**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		100	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-010**

Description: **MW-14R** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1235**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0130	DD		94513

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0130	DD		94513

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**15**	**J**	**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1150	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-14R**
Date Sampled: **09/25/2012 1235**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-010**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1150	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		95	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-15R**
Date Sampled: **09/25/2012 1226**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-011**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0152	DD		94513

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	**107-06-2**	**8260B**	**12**		**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0152	DD		94513

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND	S	100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1211	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-15R**
Date Sampled: **09/25/2012 1226**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-011**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1211	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.76**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		115	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-16**
Date Sampled: **09/25/2012 1318**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-012**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0214	DD		94513

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**4.9**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**1.1**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**4.8**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0214	DD		94513

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1232	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-16**
Date Sampled: **09/25/2012 1318**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-012**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1232	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.025**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		96	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-013**

Description: **MW-17R** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1311**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0236	DD		94513

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**45**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**3.6**		**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**2.8**		**1.0**	**0.40**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**4.2**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**29**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0236	DD		94513

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**14**		**10**	**0.40**	**ug/L**	**1**
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**15**	**J**	**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1254	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-17R**
Date Sampled: **09/25/2012 1311**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-013**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1254	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.096**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		112	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-014**

Description: **MW-18R** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1301**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0257	DD		94513

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	**107-06-2**	**8260B**	**19**		**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0257	DD		94513

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**17**		**10**	**0.40**	**ug/L**	**1**
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	5	10/03/2012 1924	MPM	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-18R**
Date Sampled: **09/25/2012 1301**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-014**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	5	10/03/2012 1924	MPM	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**1.8**		**0.097**	**0.097**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		120	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-20**
Date Sampled: **09/25/2012 1338**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-015**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0613	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		96	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0613	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]hanol	64-17-5	8260B	ND		1000	33	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1336	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-20**
Date Sampled: **09/25/2012 1338**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-015**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1336	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		104	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-016**

Description: **TW-1** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1031**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/03/2012 1406	BDC		94571
2	5030B	8260B	100	10/06/2012 0144	DD		94808

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**12000**		**100**	**13**	**ug/L**	**2**
1,2-Dichloroethane	107-06-2	8260B	ND		20	2.9	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**3000**		**20**	**6.6**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**48**		**20**	**8.0**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**680**		**20**	**8.0**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**11000**		**100**	**33**	**ug/L**	**2**
Xylenes (total)	**1330-20-7**	**8260B**	**15000**		**20**	**6.6**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
1,2-Dichloroethane-d4		98	70-130		127	70-130
Bromofluorobenzene		101	70-130		108	70-130
Toluene-d8		98	70-130		101	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/03/2012 1406	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**180**	**J**	**200**	**8.0**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	20000	660	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		2000	20	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		2000	4.0	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		2000	130	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		200	4.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		2000	130	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2000	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-1**
Date Sampled: **09/26/2012 1031**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-016**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	20	10/03/2012 1945	MPM	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	13		0.39	0.39	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		124	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-017**

Description: **TW-2** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1107**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/03/2012 1449	BDC		94571
2	5030B	8260B	100	10/06/2012 0206	DD		94808

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**6200**		**20**	**2.6**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		20	2.9	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**1300**		**20**	**6.6**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**120**		**20**	**8.0**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**390**		**20**	**8.0**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**16000**		**100**	**33**	**ug/L**	**2**
Xylenes (total)	**1330-20-7**	**8260B**	**6400**		**20**	**6.6**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
1,2-Dichloroethane-d4		98	70-130		127	70-130
Bromofluorobenzene		100	70-130		102	70-130
Toluene-d8		98	70-130		104	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/03/2012 1449	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**290**		**200**	**8.0**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	20000	660	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		2000	20	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		2000	4.0	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		2000	130	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		200	4.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		2000	130	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2000	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-2**
Date Sampled: **09/26/2012 1107**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-017**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1418	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		113	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-3**
Date Sampled: **09/25/2012 1111**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-018**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0635	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**330**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**7.3**		**1.0**	**0.33**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**20**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**17**		**1.0**	**0.33**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**52**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0635	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**23**		**10**	**0.40**	**ug/L**	**1**
[illegible]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[illegible],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**540**		**100**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**32**	**J**	**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		91	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1522	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **TW-3**
Date Sampled: **09/25/2012 1111**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-018**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1522	RDR	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.64		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		114	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **IW-2**
Date Sampled: **09/26/2012 1112**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-019**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/03/2012 1511	BDC		94571
2	5030B	8260B	200	10/06/2012 0228	DD		94808

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**25000**		**200**	**26**	**ug/L**	**2**
1,2-Dichloroethane	107-06-2	8260B	ND		20	2.9	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**3600**		**20**	**6.6**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**290**		**20**	**8.0**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**870**		**20**	**8.0**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**60000**		**200**	**66**	**ug/L**	**2**
Xylenes (total)	**1330-20-7**	**8260B**	**26000**		**200**	**66**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130		123	70-130
Bromofluorobenzene		101	70-130		108	70-130
Toluene-d8		98	70-130		96	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/03/2012 1511	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**760**		**200**	**8.0**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	20000	660	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		2000	20	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		2000	4.0	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		2000	130	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		200	4.0	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**3000**		**2000**	**130**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2000	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **NI27063-019**
Description: **IW-2**
Matrix: **Aqueous**
Date Sampled: **09/26/2012 1112**
Date Received: **09/27/2012**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1543	RDR	09/30/2012 1222	94323
2	8011	8011	50	10/03/2012 2006	MPM	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**33**		**0.98**	**0.98**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		100	57-137	N	0.00	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-020**

Description: **IW-3** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1020**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	200	10/03/2012 1636	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**14000**		**200**	**26**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		200	29	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**2400**		**200**	**66**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**410**		**200**	**80**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**640**		**200**	**80**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**27000**		**200**	**66**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**13000**		**200**	**66**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	200	10/03/2012 1636	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**660**	**J**	**2000**	**80**	**ug/L**	**1**
[redacted]thanol	64-17-5	8260B	ND	L	200000	6600	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND		20000	200	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		20000	40	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20000	1300	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		2000	40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20000	1300	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		20000	200	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **IW-3**
Date Sampled: **09/26/2012 1020**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-020**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1604	RDR	09/30/2012 1222	94323
2	8011	8011	100	10/03/2012 2028	MPM	09/30/2012 1222	94323

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**90**		**1.9**	**1.9**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		128	57-137	N	0.00	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-021**

Description: **IW-4** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1010**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1155	BDC		94571
2	5030B	8260B	20	10/06/2012 0250	DD		94808

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**4100**		**20**	**2.6**	**ug/L**	**2**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**160**		**1.0**	**0.33**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**46**		**1.0**	**0.40**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**190**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**9.1**		**1.0**	**0.33**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**1100**		**20**	**6.6**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130		124	70-130
Bromofluorobenzene		102	70-130		105	70-130
Toluene-d8		98	70-130		104	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1155	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**100**		**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**360**		**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **IW-4**
Date Sampled: **09/26/2012 1010**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-021**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 1958	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0061	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		128	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-022**

Description: **IW-5** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1144**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	10/03/2012 1554	BDC		94571
3	5030B	8260B	200	10/09/2012 1806	BDC		94973

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**12000**		**100**	**13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		100	15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**4200**		**100**	**33**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		100	40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**860**		**100**	**40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**60000**		**200**	**66**	**ug/L**	**3**
Xylenes (total)	**1330-20-7**	**8260B**	**25000**		**100**	**33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 3 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130		95	70-130
Bromofluorobenzene		100	70-130		100	70-130
Toluene-d8		99	70-130		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	10/03/2012 1554	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**120**	**J**	**1000**	**40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	100000	3300	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	100	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		10000	20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		10000	670	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		1000	20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	670	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		10000	100	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **IW-5**
Date Sampled: **09/26/2012 1144**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-022**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	5	10/03/2012 2049	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**3.9**		**0.097**	**0.097**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		121	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-023**

Description: **IW-6** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1359**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1221	BDC		94571
2	5030B	8260B	5	10/06/2012 0334	DD		94808

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**180**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**25**		**1.0**	**0.33**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**370**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**18**		**1.0**	**0.33**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**1500**		**5.0**	**1.7**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
1,2-Dichloroethane-d4		100	70-130		113	70-130
Bromofluorobenzene		105	70-130		101	70-130
Toluene-d8		100	70-130		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1221	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**5.1**	**J**	**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**150**		**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **IW-6**
Date Sampled: **09/25/2012 1359**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-023**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 2123	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		87	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-024**

Description: **IW-8** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1428**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1242	BDC		94571
2	5030B	8260B	20	10/06/2012 0356	DD		94808

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**2000**		**20**	**2.6**	**ug/L**	**2**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**2200**		**20**	**6.6**	**ug/L**	**2**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**600**		**20**	**8.0**	**ug/L**	**2**
Toluene	**108-88-3**	**8260B**	**35**		**1.0**	**0.33**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**5100**		**20**	**6.6**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130		110	70-130
Bromofluorobenzene		107	70-130		90	70-130
Toluene-d8		98	70-130		103	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1242	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**22**		**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		107	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Laboratory ID: **NI27063-024**
Description: **IW-8**
Matrix: **Aqueous**
Date Sampled: **09/25/2012 1428**
Date Received: **09/27/2012**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	10/05/2012 1137	MPM	10/04/2012 1030	94676
3	8011	8011	5	10/05/2012 1158	MPM	10/04/2012 1030	94676

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**1.4**	**PQ**	**0.12**	**0.12**	**ug/L**	**3**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits	Q	Run 3 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		130	57-137	N	431	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **IW-9**
Date Sampled: **09/25/2012 1409**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-025**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1303	BDC		94571
2	5030B	8260B	20	10/06/2012 0418	DD		94808

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**490**		**20**	**2.6**	**ug/L**	**2**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**1300**		**20**	**6.6**	**ug/L**	**2**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**390**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**57**		**1.0**	**0.33**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**4700**		**20**	**6.6**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
1,2-Dichloroethane-d4		96	70-130		107	70-130
Bromofluorobenzene		106	70-130		90	70-130
Toluene-d8		99	70-130		102	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1303	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**8.9**	**J**	**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**150**		**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits
Bromofluorobenzene		106	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **IW-9**
Date Sampled: **09/25/2012 1409**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-025**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 2206	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.15**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		132	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **IW-10**
Date Sampled: **09/25/2012 1210**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-026**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1324	BDC		94571
2	5030B	8260B	5	10/06/2012 0440	DD		94808

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**300**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**100**		**1.0**	**0.33**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**78**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**6.4**		**1.0**	**0.33**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**750**		**5.0**	**1.7**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
1,2-Dichloroethane-d4		98	70-130		104	70-130
Bromofluorobenzene		100	70-130		91	70-130
Toluene-d8		97	70-130		103	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1324	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**18**		**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**200**		**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-21**
Date Sampled: **09/25/2012 1159**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-027**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	10/06/2012 1552	MLH		94822

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**34**		**1.0**	**0.13**	**ug/L**	**2**
1,2-Dichloroethane	**107-06-2**	**8260B**	**31**		**1.0**	**0.15**	**ug/L**	**2**
Ethylbenzene	**100-41-4**	**8260B**	**1.1**		**1.0**	**0.33**	**ug/L**	**2**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	2
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	2
Toluene	**108-88-3**	**8260B**	**0.40**	**J**	**1.0**	**0.33**	**ug/L**	**2**
Xylenes (total)	**1330-20-7**	**8260B**	**14**		**1.0**	**0.33**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		103	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	10/06/2012 1552	MLH		94822

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**70**		**10**	**0.40**	**ug/L**	**2**
[illegible]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	2
[illegible]3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	2
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	2
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**190**		**100**	**6.7**	**ug/L**	**2**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	2
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**35**	**J**	**100**	**6.7**	**ug/L**	**2**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		103	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 2227	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-21**
Date Sampled: **09/25/2012 1159**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-027**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 2227	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.52**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		91	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-028**

Description: **IW-18** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1141**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0657	BDC		94563
2	5030B	8260B	5	10/03/2012 1925	JJG		94615

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**770**		**5.0**	**0.66**	**ug/L**	**2**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**390**		**5.0**	**1.7**	**ug/L**	**2**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**66**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**110**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	70-130		114	70-130
Bromofluorobenzene		98	70-130		102	70-130
Toluene-d8		96	70-130		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0657	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**110**		**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**4300**		**100**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**400**		**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **IW-18**
Date Sampled: **09/25/2012 1141**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-028**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 2248	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.41**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		122	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **IW-20**
Date Sampled: **09/25/2012 1148**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-029**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1133	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**1.8**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**2.1**		**1.0**	**0.33**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**2.6**		**1.0**	**0.40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**1.2**		**1.0**	**0.33**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**16**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1133	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[illegible],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 2310	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **IW-20**
Date Sampled: **09/25/2012 1148**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-029**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 2310	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.025	0.025	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		104	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

H = Out of holding time
N = Recovery is out of criteria

Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-1R Duplicate**
Date Sampled: **09/26/2012 1132**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-030**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/03/2012 1532	BDC		94571
2	5030B	8260B	200	10/06/2012 0502	DD		94808

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**6600**		**20**	**2.6**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		20	2.9	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**5500**		**20**	**6.6**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		20	8.0	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**990**		**20**	**8.0**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**34000**		**200**	**66**	**ug/L**	**2**
Xylenes (total)	**1330-20-7**	**8260B**	**36000**		**200**	**66**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130		105	70-130
Bromofluorobenzene		102	70-130		99	70-130
Toluene-d8		99	70-130		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/03/2012 1532	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**44**	**J**	**200**	**8.0**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	20000	660	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		2000	20	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		2000	4.0	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		2000	130	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		200	4.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		2000	130	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2000	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-1R Duplicate**
Date Sampled: **09/26/2012 1132**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-030**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	20	10/03/2012 2131	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**17**		**0.40**	**0.40**	**ug/L**	**2**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		105	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-5 Duplicate**
Date Sampled: **09/26/2012 0954**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-031**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0720	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**0.14**	**J**	**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		96	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0720	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[illegible],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**9.0**	**J**	**100**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		92	70-130
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 2352	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-5 Duplicate**
Date Sampled: **09/26/2012 0954**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-031**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/02/2012 2352	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		87	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-032**

Description: **MW-8 Duplicate** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1108**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	10/03/2012 1615	BDC		94571
2	5030B	8260B	200	10/06/2012 0524	DD		94808

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**9500**		**100**	**13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		100	15	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**4900**		**100**	**33**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**55**	**J**	**100**	**40**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**1100**		**100**	**40**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**55000**		**200**	**66**	**ug/L**	**2**
Xylenes (total)	**1330-20-7**	**8260B**	**30000**		**100**	**33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
1,2-Dichloroethane-d4		100	70-130		105	70-130
Bromofluorobenzene		102	70-130		97	70-130
Toluene-d8		100	70-130		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	10/03/2012 1615	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**200**	**J**	**1000**	**40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND	L	100000	3300	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	100	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		10000	20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		10000	670	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		1000	20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	670	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		10000	100	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-8 Duplicate**
Date Sampled: **09/26/2012 1108**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-032**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 0014	MPM	10/01/2012 1503	94390
2	8011	8011	20	10/03/2012 2153	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**14**	**Q**	**0.40**	**0.40**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		95	57-137	N	0.00	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-033**

Description: **MW-10 Duplicate** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1116**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/04/2012 0102	DD		94602
2	5030B	8260B	50	10/05/2012 1619	BDC		94767

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**6100**		**20**	**2.6**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		20	2.9	ug/L	1
Ethylbenzene	**100-41-4**	**8260B**	**2500**		**20**	**6.6**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		20	8.0	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**370**		**20**	**8.0**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**3900**		**20**	**6.6**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**9900**		**50**	**17**	**ug/L**	**2**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130		90	70-130
Bromofluorobenzene		90	70-130		91	70-130
Toluene-d8		100	70-130		101	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	10/04/2012 0102	DD		94602

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**340**		**200**	**8.0**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		20000	660	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		2000	20	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		2000	4.0	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**7300**		**2000**	**130**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		200	4.0	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**330**	**J**	**2000**	**130**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2000	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **MW-10 Duplicate**
Date Sampled: **09/25/2012 1116**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-033**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	50	10/03/2012 2214	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	18		0.95	0.95	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		117	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **Field Blank**
Date Sampled: **09/25/2012 1030**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-034**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1346	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**2.5**	**B**	**1.0**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**0.34**	**J**	**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1346	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]hanol	64-17-5	8260B	ND		1000	33	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 0056	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **Field Blank**
Date Sampled: **09/25/2012 1030**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-034**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 0056	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		92	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **Field Blank**
Date Sampled: **09/26/2012 1400**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-035**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1409	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**0.84**	**BJ**	**1.0**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1409	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 0118	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **Field Blank**
Date Sampled: **09/26/2012 1400**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-035**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 0118	MPM	10/01/2012 1503	94390

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		98	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **Trip Blank**
Date Sampled: **09/25/2012 1035**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-036**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1432	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**0.46**	**BJ**	**1.0**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1432	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **Trip Blank**
Date Sampled: **09/26/2012 1435**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-037**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1457	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1457	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-038**
Description: **WSW-1** Matrix: **Aqueous**
Date Sampled: **09/25/2012 1024**
Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1521	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1521	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 0909	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-1**
Date Sampled: **09/25/2012 1024**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-038**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 0909	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-039**
Description: **WSW-2 (PRE)** Matrix: **Aqueous**
Date Sampled: **09/25/2012 1220**
Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1545	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**400**		**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**34**		**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**0.47**	**J**	**1.0**	**0.33**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.64**	**J**	**1.0**	**0.40**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260B**	**28**	**B**	**1.0**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**81**		**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		103	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1545	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**49**		**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**990**		**100**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**48**	**J**	**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		103	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1012	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-2 (PRE)**
Date Sampled: **09/25/2012 1220**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-039**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1012	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.63**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		97	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-040**
Description: **WSW-2 (POST)** Matrix: **Aqueous**
Date Sampled: **09/25/2012 1225**
Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1608	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**0.47**	**J**	**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	**107-06-2**	**8260B**	**1.8**		**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**0.99**	**BJ**	**1.0**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1608	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	**108-20-3**	**8260B**	**0.71**	**J**	**10**	**0.40**	**ug/L**	**1**
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**480**		**100**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	**75-65-0**	**8260B**	**34**	**J**	**100**	**6.7**	**ug/L**	**1**
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		100	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1033	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-2 (POST)**
Date Sampled: **09/25/2012 1225**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-040**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1033	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		103	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-041**

Description: **WSW-3 (PRE)** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1251**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1633	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	**107-06-2**	**8260B**	**0.82**	**J**	**1.0**	**0.15**	**ug/L**	**1**
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1633	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		112	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1054	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-3 (PRE)**
Date Sampled: **09/25/2012 1251**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-041**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1054	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		106	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-042**
Description: **WSW-3 (POST)** Matrix: **Aqueous**
Date Sampled: **09/25/2012 1257**
Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1657	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1657	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1115	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-3 (POST)**
Date Sampled: **09/25/2012 1257**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-042**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1115	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		101	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-4**
Date Sampled: **09/25/2012 1307**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-043**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1721	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		107	70-130
Toluene-d8		106	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1721	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		107	70-130
1,2-Dichloroethane-d4		111	70-130
Toluene-d8		106	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1137	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-4**
Date Sampled: **09/25/2012 1307**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-043**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1137	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.028**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		117	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-5**
Date Sampled: **09/25/2012 1320**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-044**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1745	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		115	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1745	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[illegible]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		115	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1158	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-5**
Date Sampled: **09/25/2012 1320**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-044**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1158	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.036**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		96	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-045**
Description: **WSW-6** Matrix: **Aqueous**
Date Sampled: **09/25/2012 1330**
Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1809	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		117	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1809	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		117	70-130
Toluene-d8		102	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1219	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-6**
Date Sampled: **09/25/2012 1330**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-045**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1219	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		110	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-046**

Description: **WSW-7** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1340**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1833	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		120	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		108	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1833	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[illegible]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		120	70-130
Toluene-d8		108	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1240	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-7**
Date Sampled: **09/25/2012 1340**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-046**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1240	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		124	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-8**
Date Sampled: **09/25/2012 1350**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-047**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1857	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		115	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1857	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		115	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1302	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-8**
Date Sampled: **09/25/2012 1350**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-047**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1302	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		115	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-048**
Description: **WSW-9** Matrix: **Aqueous**
Date Sampled: **09/25/2012 1405**
Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1921	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1921	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		118	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1323	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-9**
Date Sampled: **09/25/2012 1405**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-048**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1323	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		101	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-10**
Date Sampled: **09/25/2012 1415**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-049**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1945	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		119	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1945	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		119	70-130
Toluene-d8		102	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1344	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-10**
Date Sampled: **09/25/2012 1415**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-049**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1344	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		116	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-11**
Date Sampled: **09/26/2012 1000**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-050**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 2010	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		104	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 2010	BDC		94481

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND	S	100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND	S	100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		112	70-130
Toluene-d8		104	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1405	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-11**
Date Sampled: **09/26/2012 1000**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-050**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1405	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		105	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-051**
Description: **WSW-12** Matrix: **Aqueous**
Date Sampled: **09/26/2012 1010**
Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1259	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1259	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	**75-85-4**	**8260B**	**19**	**J**	**100**	**6.7**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1427	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure
ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-12**
Date Sampled: **09/26/2012 1010**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-051**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1427	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		101	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-052**

Description: **WSW-13** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1017**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1321	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1321	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1448	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-13**
Date Sampled: **09/26/2012 1017**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-052**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1448	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		100	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-053**

Description: **WSW-14** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1041**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1344	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1344	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1509	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-14**
Date Sampled: **09/26/2012 1041**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-053**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1509	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		114	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-15**
Date Sampled: **09/26/2012 1030**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-054**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1406	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1406	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1530	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-15**
Date Sampled: **09/26/2012 1030**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-054**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1530	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		109	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-16**
Date Sampled: **09/26/2012 1105**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-055**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1429	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		96	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1429	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[illegible],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1552	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-16**
Date Sampled: **09/26/2012 1105**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-055**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1552	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		112	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-17**
Date Sampled: **09/26/2012 1111**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-056**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1452	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1452	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1613	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-17**
Date Sampled: **09/26/2012 1111**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-056**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1613	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-057**

Description: **WSW-18** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1116**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1514	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1514	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1634	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-18**
Date Sampled: **09/26/2012 1116**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-057**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/03/2012 1634	MPM	10/01/2012 1821	94394

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		121	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-19**
Date Sampled: **09/26/2012 1120**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-058**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1536	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1536	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[illegible],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 0832	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-19**
Date Sampled: **09/26/2012 1120**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-058**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 0832	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		127	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-20**
Date Sampled: **09/26/2012 1135**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-059**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1559	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1559	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 0935	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-20**
Date Sampled: **09/26/2012 1135**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-059**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 0935	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		110	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-21**
Date Sampled: **09/26/2012 1140**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-060**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1621	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1621	BDC		94478

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	LS	1000	33	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND	S	100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND	S	100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 0956	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-21**
Date Sampled: **09/26/2012 1140**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-060**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 0956	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		108	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-22**
Date Sampled: **09/26/2012 1145**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-061**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1807	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**0.21**	**J**	**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**0.40**	**J**	**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1807	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]hanol	64-17-5	8260B	ND		1000	33	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1017	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-22**
Date Sampled: **09/26/2012 1145**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-061**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1017	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		123	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-062**

Description: **WSW-23** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1200**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1829	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	**71-43-2**	**8260B**	**0.15**	**J**	**1.0**	**0.13**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	**1330-20-7**	**8260B**	**0.36**	**J**	**1.0**	**0.33**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/02/2012 1829	BDC		94489

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	S	1000	33	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND	S	100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND	S	100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND	S	100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND	S	100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1039	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-23**
Date Sampled: **09/26/2012 1200**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-062**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1039	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		129	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-063**

Description: **WSW-24 (PRE)** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1237**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	10/03/2012 1903	JJG		94615

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	2
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	2
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	2
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	2
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	2
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		114	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	10/03/2012 1903	JJG		94615

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	2
[redacted]thanol	64-17-5	8260B	ND		1000	33	ug/L	2
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	2
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	2
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	2
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	2
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	2
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		114	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1100	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-24 (PRE)**
Date Sampled: **09/25/2012 1237**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-063**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1100	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.049**		**0.020**	**0.020**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		108	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-064**

Description: **WSW-24 (POST)** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1242**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0804	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0804	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[redacted],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		92	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1121	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-24 (POST)**
Date Sampled: **09/25/2012 1242**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-064**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1121	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		102	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-065**

Description: **WSW-25** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1315**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0826	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		94	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0826	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[illegible],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		94	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1142	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-25**
Date Sampled: **09/25/2012 1315**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-065**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1142	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-066**

Description: **WSW-26** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1345**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0848	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0848	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1203	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-26**
Date Sampled: **09/25/2012 1345**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-066**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1203	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		100	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-27**
Date Sampled: **09/25/2012 1355**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-067**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0911	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0911	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[illegible],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		95	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1224	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-27**
Date Sampled: **09/25/2012 1355**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-067**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1224	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		123	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-28**
Date Sampled: **09/25/2012 1430**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-068**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0933	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		94	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0933	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		94	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1246	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-28**
Date Sampled: **09/25/2012 1430**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-068**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1246	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**0.045**		**0.019**	**0.019**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		129	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-29**
Date Sampled: **09/26/2012 0955**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-069**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0955	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		96	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0955	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1307	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-29**
Date Sampled: **09/26/2012 0955**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-069**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1307	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		108	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-070**

Description: **WSW-30** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1052**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1017	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		94	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1017	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[illegible],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		94	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1328	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-30**
Date Sampled: **09/26/2012 1052**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-070**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1328	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		111	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-071**

Description: **WSW-31** Matrix: **Aqueous**

Date Sampled: **09/26/2012 1131**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1040	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		96	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1040	BDC		94563

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND		1000	33	ug/L	1
[illegible],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		111	70-130
Toluene-d8		96	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1349	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-31**
Date Sampled: **09/26/2012 1131**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-071**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1349	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		121	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-072**
Description: **WSW-32** Matrix: **Aqueous**
Date Sampled: **09/25/2012 1105**
Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	10/03/2012 1818	JJG		94615

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	2
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	2
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	2
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	2
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	2
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		94	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	10/03/2012 1818	JJG		94615

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	2
[illegible]thanol	64-17-5	8260B	ND		1000	33	ug/L	2
[illegible],3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	2
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	2
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	2
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	2
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	2
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		94	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1410	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-32**
Date Sampled: **09/25/2012 1105**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-072**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1410	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		111	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-073**

Description: **WSW-33** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1115**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	10/03/2012 1840	JJG		94615

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	2
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	2
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	2
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	2
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	2
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		94	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	1	10/03/2012 1840	JJG		94615

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	2
[illegible]thanol	64-17-5	8260B	ND		1000	33	ug/L	2
[illegible]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	2
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	2
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	2
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	2
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	2
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		94	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1432	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-33**
Date Sampled: **09/25/2012 1115**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-073**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1432	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-34**
Date Sampled: **09/25/2012 1039**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-074**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0943	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 0943	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[redacted]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[redacted]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1453	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-34**
Date Sampled: **09/25/2012 1039**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-074**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1453	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		98	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-35**
Date Sampled: **09/25/2012 1125**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-075**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1005	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1005	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[illegible]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		98	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1514	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-35**
Date Sampled: **09/25/2012 1125**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-075**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1514	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		107	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **NI27063-076**

Description: **WSW-36** Matrix: **Aqueous**

Date Sampled: **09/25/2012 1137**

Date Received: **09/27/2012**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1027	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1027	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1535	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | * = Reportable result (only when report all runs) | S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-36**
Date Sampled: **09/25/2012 1137**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-076**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1535	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		94	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-37**
Date Sampled: **09/25/2012 1149**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-077**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1049	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1049	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1557	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-37**
Date Sampled: **09/25/2012 1149**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-077**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1557	RDR	10/01/2012 1821	94395

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		114	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
* = Reportable result (only when report all runs)

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

H = Out of holding time
N = Recovery is out of criteria

Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-38**
Date Sampled: **09/25/2012 1156**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-078**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1111	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260B**	**0.62**	**J**	**1.0**	**0.40**	**ug/L**	**1**
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	10/03/2012 1111	BDC		94571

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
[illegible]thanol	64-17-5	8260B	ND	L	1000	33	ug/L	1
[illegible]3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1721	RBH	10/02/2012 1126	94471

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-38**
Date Sampled: **09/25/2012 1156**
Date Received: **09/27/2012**

Laboratory ID: **NI27063-078**
Matrix: **Aqueous**

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/04/2012 1721	RBH	10/02/2012 1126	94471

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND	S	0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		96	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
* = Reportable result (only when report all runs)

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94478-001
Batch: 94478
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	10/02/2012 0748
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/02/2012 0748
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	10/02/2012 0748
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	10/02/2012 0748
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	10/02/2012 0748
Ethanol	ND		1	1000	33	ug/L	10/02/2012 0748
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	10/02/2012 0748
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	10/02/2012 0748

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94478-002
Batch: 94478
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1200		1	121	70-130	10/02/2012 0620
tert-Amyl methyl ether (TAME)	50	55		1	110	70-130	10/02/2012 0620
tert-Butyl formate (TBF)	250	290		1	114	70-130	10/02/2012 0620
Diisopropyl ether (IPE)	50	51		1	101	70-130	10/02/2012 0620
3,3-Dimethyl-1-butanol	1000	1000		1	103	70-130	10/02/2012 0620
Ethanol	5000	8100	N	1	161	70-130	10/02/2012 0620
Ethyl-tert-butyl ether (ETBE)	50	55		1	110	70-130	10/02/2012 0620
tert-butyl alcohol (TBA)	1000	1300		1	126	70-130	10/02/2012 0620

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94478-003 **Matrix:** Aqueous
Batch: 94478 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1200		1	122	0.92	70-130	20	10/02/2012 0642
tert-Amyl methyl ether (TAME)	50	54		1	108	1.3	70-130	20	10/02/2012 0642
tert-Butyl formate (TBF)	250	280		1	111	2.4	70-130	20	10/02/2012 0642
Diisopropyl ether (IPE)	50	50		1	100	0.80	70-130	20	10/02/2012 0642
3,3-Dimethyl-1-butanol	1000	1100		1	106	2.4	70-130	20	10/02/2012 0642
Ethanol	5000	8100	N	1	163	0.96	70-130	20	10/02/2012 0642
Ethyl-tert-butyl ether (ETBE)	50	54		1	109	1.0	70-130	20	10/02/2012 0642
tert-butyl alcohol (TBA)	1000	1200		1	125	1.1	70-130	20	10/02/2012 0642

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI27063-059DU **Matrix:** Aqueous
Batch: 94478 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Diisopropyl ether (IPE)	ND	ND		1	0.00	20	10/02/2012 1643
Ethanol	ND	ND		1	0.00	20	10/02/2012 1643
3,3-Dimethyl-1-butanol	ND	ND		1	0.00	20	10/02/2012 1643
Ethyl-tert-butyl ether (ETBE)	ND	ND		1	0.00	20	10/02/2012 1643
tert-Amyl alcohol (TAA)	ND	ND		1	0.00	20	10/02/2012 1643
tert-Amyl methyl ether (TAME)	ND	ND		1	0.00	20	10/02/2012 1643
tert-butyl alcohol (TBA)	ND	ND		1	0.00	20	10/02/2012 1643
tert-Butyl formate (TBF)	ND	ND		1	0.00	20	10/02/2012 1643

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: NI27063-060MS
Batch: 94478
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Diisopropyl ether (IPE)	ND	20	17		1	86	70-130	10/02/2012 1747
Ethanol	ND	2000	1300	N	1	67	70-130	10/02/2012 1747
3,3-Dimethyl-1-butanol	ND	400	210	N	1	53	70-130	10/02/2012 1747
Ethyl-tert-butyl ether (ETBE)	ND	20	19		1	94	70-130	10/02/2012 1747
tert-Amyl alcohol (TAA)	ND	400	300		1	74	70-130	10/02/2012 1747
tert-Amyl methyl ether (TAME)	ND	20	18		1	91	70-130	10/02/2012 1747
tert-butyl alcohol (TBA)	ND	400	350		1	87	70-130	10/02/2012 1747
tert-Butyl formate (TBF)	ND	100	1.6	N	1	1.6	70-130	10/02/2012 1747

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94478-001
Batch: 94478
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/02/2012 0748
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	10/02/2012 0748
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/02/2012 0748
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	10/02/2012 0748
Naphthalene	ND		1	1.0	0.40	ug/L	10/02/2012 0748
Toluene	ND		1	1.0	0.33	ug/L	10/02/2012 0748
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/02/2012 0748

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94478-002
Batch: 94478
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	48		1	96	70-130	10/02/2012 0620
1,2-Dichloroethane	50	49		1	99	70-130	10/02/2012 0620
Ethylbenzene	50	51		1	102	70-130	10/02/2012 0620
Methyl tertiary butyl ether (MTBE)	50	52		1	103	70-130	10/02/2012 0620
Naphthalene	50	59		1	118	70-130	10/02/2012 0620
Toluene	50	48		1	95	70-130	10/02/2012 0620
Xylenes (total)	100	100		1	103	70-130	10/02/2012 0620

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94478-003
Batch: 94478
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	47		1	94	2.0	70-130	20	10/02/2012 0642
1,2-Dichloroethane	50	49		1	97	1.5	70-130	20	10/02/2012 0642
Ethylbenzene	50	49		1	99	2.9	70-130	20	10/02/2012 0642
Methyl tertiary butyl ether (MTBE)	50	51		1	101	2.2	70-130	20	10/02/2012 0642
Naphthalene	50	58		1	116	2.0	70-130	20	10/02/2012 0642
Toluene	50	47		1	94	1.2	70-130	20	10/02/2012 0642
Xylenes (total)	100	100		1	101	1.6	70-130	20	10/02/2012 0642

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI27063-059DU
Batch: 94478
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Benzene	ND	ND		1	0.00	20	10/02/2012 1643
1,2-Dichloroethane	ND	ND		1	0.00	20	10/02/2012 1643
Ethylbenzene	ND	ND		1	0.00	20	10/02/2012 1643
Methyl tertiary butyl ether (MTBE)	ND	ND		1	0.00	20	10/02/2012 1643
Naphthalene	ND	ND		1	0.00	20	10/02/2012 1643
Toluene	ND	ND		1	0.00	20	10/02/2012 1643
Xylenes (total)	ND	ND		1	0.00	20	10/02/2012 1643

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS - MS

Sample ID: NI27063-060MS
Batch: 94478
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	20	18		1	90	72-127	10/02/2012 1747
1,2-Dichloroethane	ND	20	19		1	95	59-143	10/02/2012 1747
Ethylbenzene	ND	20	16		1	82	79-132	10/02/2012 1747
Methyl tertiary butyl ether (MTBE)	ND	20	18		1	88	60-140	10/02/2012 1747
Naphthalene	ND	20	17		1	87	62-136	10/02/2012 1747
Toluene	ND	20	17		1	85	75-125	10/02/2012 1747
Xylenes (total)	ND	40	31		1	77	70-130	10/02/2012 1747

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
ere applicable. all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94481-001
Batch: 94481
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	10/02/2012 1220
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/02/2012 1220
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	10/02/2012 1220
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	10/02/2012 1220
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	10/02/2012 1220
Ethanol	ND		1	1000	33	ug/L	10/02/2012 1220
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	10/02/2012 1220
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	10/02/2012 1220

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		91	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94481-002
Batch: 94481
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1200		1	117	70-130	10/02/2012 0951
tert-Amyl methyl ether (TAME)	50	53		1	106	70-130	10/02/2012 0951
tert-Butyl formate (TBF)	250	280		1	112	70-130	10/02/2012 0951
Diisopropyl ether (IPE)	50	55		1	110	70-130	10/02/2012 0951
3,3-Dimethyl-1-butanol	1000	1200		1	119	70-130	10/02/2012 0951
Ethanol	5000	5800		1	115	70-130	10/02/2012 0951
Ethyl-tert-butyl ether (ETBE)	50	50		1	101	70-130	10/02/2012 0951
tert-butyl alcohol (TBA)	1000	1100		1	115	70-130	10/02/2012 0951

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		107	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94481-003 **Matrix:** Aqueous
Batch: 94481 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1100		1	109	6.6	70-130	20	10/02/2012 1015
tert-Amyl methyl ether (TAME)	50	48		1	96	10	70-130	20	10/02/2012 1015
tert-Butyl formate (TBF)	250	280		1	113	1.3	70-130	20	10/02/2012 1015
Diisopropyl ether (IPE)	50	53		1	105	4.1	70-130	20	10/02/2012 1015
3,3-Dimethyl-1-butanol	1000	1100		1	114	4.4	70-130	20	10/02/2012 1015
Ethanol	5000	5600		1	113	2.4	70-130	20	10/02/2012 1015
Ethyl-tert-butyl ether (ETBE)	50	51		1	102	1.6	70-130	20	10/02/2012 1015
tert-butyl alcohol (TBA)	1000	1100		1	107	7.0	70-130	20	10/02/2012 1015

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		106	70-130

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI27063-049DU **Matrix:** Aqueous
Batch: 94481 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Diisopropyl ether (IPE)	ND	ND		1	0.00	20	10/02/2012 2033
Ethanol	ND	ND		1	0.00	20	10/02/2012 2033
3,3-Dimethyl-1-butanol	ND	ND		1	0.00	20	10/02/2012 2033
Ethyl-tert-butyl ether (ETBE)	ND	ND		1	0.00	20	10/02/2012 2033
tert-Amyl alcohol (TAA)	ND	ND		1	0.00	20	10/02/2012 2033
tert-Amyl methyl ether (TAME)	ND	ND		1	0.00	20	10/02/2012 2033
tert-butyl alcohol (TBA)	ND	ND		1	0.00	20	10/02/2012 2033
tert-Butyl formate (TBF)	ND	ND		1	0.00	20	10/02/2012 2033

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		118	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
ere applicable. all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: NI27063-050MS
Batch: 94481
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Diisopropyl ether (IPE)	ND	50	62		1	124	70-130	10/02/2012 2058
Ethanol	ND	5000	5400		1	109	70-130	10/02/2012 2058
3,3-Dimethyl-1-butanol	ND	1000	1300		1	127	70-130	10/02/2012 2058
Ethyl-tert-butyl ether (ETBE)	ND	50	63		1	126	70-130	10/02/2012 2058
tert-Amyl alcohol (TAA)	ND	1000	1300		1	126	70-130	10/02/2012 2058
tert-Amyl methyl ether (TAME)	ND	50	56		1	112	70-130	10/02/2012 2058
tert-butyl alcohol (TBA)	ND	1000	1500	N	1	149	70-130	10/02/2012 2058
tert-Butyl formate (TBF)	ND	250	0.29	N	1	0.12	70-130	10/02/2012 2058

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		116	70-130
1,2-Dichloroethane-d4		118	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94481-001
Batch: 94481
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/02/2012 1220
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	10/02/2012 1220
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/02/2012 1220
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	10/02/2012 1220
Naphthalene	**0.47**	**J**	**1**	**1.0**	**0.40**	**ug/L**	**10/02/2012 1220**
Toluene	ND		1	1.0	0.33	ug/L	10/02/2012 1220
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/02/2012 1220

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		91	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable. all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94481-002
Batch: 94481
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	48		1	96	70-130	10/02/2012 0951
1,2-Dichloroethane	50	52		1	105	70-130	10/02/2012 0951
Ethylbenzene	50	50		1	100	70-130	10/02/2012 0951
Methyl tertiary butyl ether (MTBE)	50	57		1	113	70-130	10/02/2012 0951
Naphthalene	50	55		1	110	70-130	10/02/2012 0951
Toluene	50	49		1	98	70-130	10/02/2012 0951
Xylenes (total)	100	110		1	112	70-130	10/02/2012 0951

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		107	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94481-003
Batch: 94481
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	49		1	99	2.5	70-130	20	10/02/2012 1015
1,2-Dichloroethane	50	49		1	97	7.5	70-130	20	10/02/2012 1015
Ethylbenzene	50	50		1	99	0.54	70-130	20	10/02/2012 1015
Methyl tertiary butyl ether (MTBE)	50	54		1	107	5.2	70-130	20	10/02/2012 1015
Naphthalene	50	55		1	110	0.035	70-130	20	10/02/2012 1015
Toluene	50	52		1	103	5.3	70-130	20	10/02/2012 1015
Xylenes (total)	100	100		1	103	7.8	70-130	20	10/02/2012 1015

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI27063-049DU
Batch: 94481
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Benzene	ND	ND		1	0.00	20	10/02/2012 2033
1,2-Dichloroethane	ND	ND		1	0.00	20	10/02/2012 2033
Ethylbenzene	ND	ND		1	0.00	20	10/02/2012 2033
Methyl tertiary butyl ether (MTBE)	ND	ND		1	0.00	20	10/02/2012 2033
Naphthalene	ND	ND		1	0.00	20	10/02/2012 2033
Toluene	ND	ND		1	0.00	20	10/02/2012 2033
Xylenes (total)	ND	ND		1	0.00	20	10/02/2012 2033

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		108	70-130

Volatile Organic Compounds by GC/MS - MS

Sample ID: NI27063-050MS
Batch: 94481
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	50	58		1	116	72-127	10/02/2012 2058
1,2-Dichloroethane	ND	50	64		1	127	59-143	10/02/2012 2058
Ethylbenzene	ND	50	54		1	108	79-132	10/02/2012 2058
Methyl tertiary butyl ether (MTBE)	ND	50	64		1	128	60-140	10/02/2012 2058
Naphthalene	ND	50	54		1	108	62-136	10/02/2012 2058
Toluene	ND	50	53		1	107	75-125	10/02/2012 2058
Xylenes (total)	ND	100	120		1	115	70-130	10/02/2012 2058

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		118	70-130
Bromofluorobenzene		116	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

[redacted]ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94489-001 **Matrix:** Aqueous
Batch: 94489 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	10/02/2012 1034
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/02/2012 1034
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	10/02/2012 1034
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	10/02/2012 1034
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	10/02/2012 1034
Ethanol	ND		1	1000	33	ug/L	10/02/2012 1034
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	10/02/2012 1034
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	10/02/2012 1034

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		96	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94489-002 **Matrix:** Aqueous
Batch: 94489 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	970		1	97	70-130	10/02/2012 0904
tert-Amyl methyl ether (TAME)	50	46		1	93	70-130	10/02/2012 0904
tert-Butyl formate (TBF)	250	210		1	85	70-130	10/02/2012 0904
Diisopropyl ether (IPE)	50	47		1	93	70-130	10/02/2012 0904
3,3-Dimethyl-1-butanol	1000	980		1	98	70-130	10/02/2012 0904
Ethanol	5000	4000		1	79	70-130	10/02/2012 0904
Ethyl-tert-butyl ether (ETBE)	50	47		1	94	70-130	10/02/2012 0904
tert-butyl alcohol (TBA)	1000	940		1	94	70-130	10/02/2012 0904

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94489-003 **Matrix:** Aqueous
Batch: 94489 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	950		1	95	2.0	70-130	20	10/02/2012 0927
tert-Amyl methyl ether (TAME)	50	48		1	96	3.1	70-130	20	10/02/2012 0927
tert-Butyl formate (TBF)	250	220		1	88	4.0	70-130	20	10/02/2012 0927
Diisopropyl ether (IPE)	50	49		1	99	6.0	70-130	20	10/02/2012 0927
3,3-Dimethyl-1-butanol	1000	950		1	95	3.2	70-130	20	10/02/2012 0927
Ethanol	5000	4800		1	96	19	70-130	20	10/02/2012 0927
Ethyl-tert-butyl ether (ETBE)	50	48		1	97	2.9	70-130	20	10/02/2012 0927
tert-butyl alcohol (TBA)	1000	910		1	91	3.6	70-130	20	10/02/2012 0927

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI27063-061DU **Matrix:** Aqueous
Batch: 94489 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Diisopropyl ether (IPE)	ND	ND		1	0.00	20	10/02/2012 1852
Ethanol	ND	ND		1	0.00	20	10/02/2012 1852
3,3-Dimethyl-1-butanol	ND	ND		1	0.00	20	10/02/2012 1852
Ethyl-tert-butyl ether (ETBE)	ND	ND		1	0.00	20	10/02/2012 1852
tert-Amyl alcohol (TAA)	ND	ND		1	0.00	20	10/02/2012 1852
tert-Amyl methyl ether (TAME)	ND	ND		1	0.00	20	10/02/2012 1852
tert-butyl alcohol (TBA)	ND	ND		1	0.00	20	10/02/2012 1852
tert-Butyl formate (TBF)	ND	ND		1	0.00	20	10/02/2012 1852

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		86	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: NI27063-062MS
Batch: 94489
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Diisopropyl ether (IPE)	ND	50	42		1	84	70-130	10/02/2012 1914
Ethanol	ND	5000	2400	N	1	49	70-130	10/02/2012 1914
3,3-Dimethyl-1-butanol	ND	1000	600	N	1	60	70-130	10/02/2012 1914
Ethyl-tert-butyl ether (ETBE)	ND	50	43		1	85	70-130	10/02/2012 1914
tert-Amyl alcohol (TAA)	ND	1000	510	N	1	51	70-130	10/02/2012 1914
tert-Amyl methyl ether (TAME)	ND	50	41		1	81	70-130	10/02/2012 1914
tert-butyl alcohol (TBA)	ND	1000	530	N	1	53	70-130	10/02/2012 1914
tert-Butyl formate (TBF)	ND	250	1.4	N	1	0.57	70-130	10/02/2012 1914

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94489-001
Batch: 94489
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/02/2012 1034
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	10/02/2012 1034
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/02/2012 1034
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	10/02/2012 1034
Naphthalene	ND		1	1.0	0.40	ug/L	10/02/2012 1034
Toluene	ND		1	1.0	0.33	ug/L	10/02/2012 1034
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/02/2012 1034

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94489-002 **Matrix:** Aqueous
Batch: 94489 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	47		1	93	70-130	10/02/2012 0904
1,2-Dichloroethane	50	45		1	89	70-130	10/02/2012 0904
Ethylbenzene	50	47		1	94	70-130	10/02/2012 0904
Methyl tertiary butyl ether (MTBE)	50	43		1	86	70-130	10/02/2012 0904
Naphthalene	50	57		1	114	70-130	10/02/2012 0904
Toluene	50	46		1	91	70-130	10/02/2012 0904
Xylenes (total)	100	93		1	93	70-130	10/02/2012 0904

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94489-003 **Matrix:** Aqueous
Batch: 94489 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	49		1	98	4.6	70-130	20	10/02/2012 0927
1,2-Dichloroethane	50	44		1	88	1.6	70-130	20	10/02/2012 0927
Ethylbenzene	50	48		1	96	2.3	70-130	20	10/02/2012 0927
Methyl tertiary butyl ether (MTBE)	50	44		1	89	3.6	70-130	20	10/02/2012 0927
Naphthalene	50	55		1	110	3.6	70-130	20	10/02/2012 0927
Toluene	50	48		1	96	5.8	70-130	20	10/02/2012 0927
Xylenes (total)	100	95		1	95	2.1	70-130	20	10/02/2012 0927

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI27063-061DU
Batch: 94489
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Benzene	0.21	ND		1	0.00	20	10/02/2012 1852
1,2-Dichloroethane	ND	ND		1	0.00	20	10/02/2012 1852
Ethylbenzene	ND	ND		1	0.00	20	10/02/2012 1852
Methyl tertiary butyl ether (MTBE)	ND	ND		1	0.00	20	10/02/2012 1852
Naphthalene	ND	ND		1	0.00	20	10/02/2012 1852
Toluene	ND	ND		1	0.00	20	10/02/2012 1852
Xylenes (total)	0.40	ND		1	0.00	20	10/02/2012 1852

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		86	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		96	70-130

Volatile Organic Compounds by GC/MS - MS

Sample ID: NI27063-062MS
Batch: 94489
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	0.15	50	44		1	87	72-127	10/02/2012 1914
1,2-Dichloroethane	ND	50	37		1	74	59-143	10/02/2012 1914
Ethylbenzene	ND	50	43		1	87	79-132	10/02/2012 1914
Methyl tertiary butyl ether (MTBE)	ND	50	37		1	74	60-140	10/02/2012 1914
Naphthalene	ND	50	43		1	86	62-136	10/02/2012 1914
Toluene	ND	50	43		1	87	75-125	10/02/2012 1914
Xylenes (total)	0.36	100	88		1	87	70-130	10/02/2012 1914

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		89	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94513-001 **Matrix:** Aqueous
Batch: 94513 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	10/01/2012 2029
tert-Amyl methyl ether (TAME)	**2.3**	**J**	**1**	**10**	**0.20**	**ug/L**	**10/01/2012 2029**
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	10/01/2012 2029
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	10/01/2012 2029
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	10/01/2012 2029
Ethanol	ND		1	1000	33	ug/L	10/01/2012 2029
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	10/01/2012 2029
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	10/01/2012 2029

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		96	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94513-002 **Matrix:** Aqueous
Batch: 94513 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
ert-Amyl alcohol (TAA)	1000	1000		1	102	70-130	10/02/2012 1952
tert-Amyl methyl ether (TAME)	50	50		1	100	70-130	10/02/2012 1952
tert-Butyl formate (TBF)	250	260		1	103	70-130	10/02/2012 1952
Diisopropyl ether (IPE)	50	46		1	93	70-130	10/02/2012 1952
3,3-Dimethyl-1-butanol	1000	870		1	87	70-130	10/02/2012 1952
Ethanol	5000	7100	N	1	143	70-130	10/02/2012 1952
Ethyl-tert-butyl ether (ETBE)	50	51		1	103	70-130	10/02/2012 1952
tert-butyl alcohol (TBA)	1000	1100		1	108	70-130	10/02/2012 1952

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N - Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ - RPD is out of criteria
are applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94513-003
Batch: 94513
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1000		1	104	1.6	70-130	20	10/02/2012 2014
tert-Amyl methyl ether (TAME)	50	52		1	103	3.1	70-130	20	10/02/2012 2014
tert-Butyl formate (TBF)	250	260		1	104	1.3	70-130	20	10/02/2012 2014
Diisopropyl ether (IPE)	50	48		1	96	3.6	70-130	20	10/02/2012 2014
3,3-Dimethyl-1-butanol	1000	880		1	88	1.1	70-130	20	10/02/2012 2014
Ethanol	5000	8100	N	1	163	13	70-130	20	10/02/2012 2014
Ethyl-tert-butyl ether (ETBE)	50	52		1	104	1.4	70-130	20	10/02/2012 2014
tert-butyl alcohol (TBA)	1000	1100		1	109	1.1	70-130	20	10/02/2012 2014

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI27063-009DU
Batch: 94513
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Diisopropyl ether (IPE)	0.59	0.67	J	1	13	20	10/03/2012 0447
Ethanol	ND	ND		1	0.00	20	10/03/2012 0447
3,3-Dimethyl-1-butanol	ND	ND		1	0.00	20	10/03/2012 0447
Ethyl-tert-butyl ether (ETBE)	ND	ND		1	0.00	20	10/03/2012 0447
tert-Amyl alcohol (TAA)	ND	22	J	1	0.00	20	10/03/2012 0447
tert-Amyl methyl ether (TAME)	ND	ND		1	0.00	20	10/03/2012 0447
tert-butyl alcohol (TBA)	120	140		1	12	20	10/03/2012 0447
tert-Butyl formate (TBF)	ND	ND		1	0.00	20	10/03/2012 0447

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: NI27063-011MS
Batch: 94513
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Diisopropyl ether (IPE)	ND	50	51		1	101	70-130	10/03/2012 0509
Ethanol	ND	5000	5200		1	104	70-130	10/03/2012 0509
3,3-Dimethyl-1-butanol	ND	1000	880		1	88	70-130	10/03/2012 0509
Ethyl-tert-butyl ether (ETBE)	ND	50	55		1	109	70-130	10/03/2012 0509
tert-Amyl alcohol (TAA)	ND	1000	1000		1	101	70-130	10/03/2012 0509
tert-Amyl methyl ether (TAME)	ND	50	53		1	107	70-130	10/03/2012 0509
tert-butyl alcohol (TBA)	ND	1000	1200		1	121	70-130	10/03/2012 0509
tert-Butyl formate (TBF)	ND	250	0.88	N	1	0.35	70-130	10/03/2012 0509

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94513-001
Batch: 94513
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/01/2012 2029
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	10/01/2012 2029
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/01/2012 2029
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	10/01/2012 2029
Naphthalene	ND		1	1.0	0.40	ug/L	10/01/2012 2029
Toluene	ND		1	1.0	0.33	ug/L	10/01/2012 2029
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/01/2012 2029

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94513-002
Batch: 94513
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	43		1	87	70-130	10/02/2012 1952
1,2-Dichloroethane	50	47		1	93	70-130	10/02/2012 1952
Ethylbenzene	50	43		1	86	70-130	10/02/2012 1952
Methyl tertiary butyl ether (MTBE)	50	49		1	97	70-130	10/02/2012 1952
Naphthalene	50	54		1	109	70-130	10/02/2012 1952
Toluene	50	42		1	83	70-130	10/02/2012 1952
Xylenes (total)	100	89		1	89	70-130	10/02/2012 1952

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94513-003
Batch: 94513
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	45		1	90	3.6	70-130	20	10/02/2012 2014
1,2-Dichloroethane	50	47		1	95	1.6	70-130	20	10/02/2012 2014
Ethylbenzene	50	45		1	90	4.4	70-130	20	10/02/2012 2014
Methyl tertiary butyl ether (MTBE)	50	49		1	97	0.0062	70-130	20	10/02/2012 2014
Naphthalene	50	54		1	107	1.2	70-130	20	10/02/2012 2014
Toluene	50	44		1	89	6.2	70-130	20	10/02/2012 2014
Xylenes (total)	100	91		1	91	1.8	70-130	20	10/02/2012 2014

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		100	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI27063-009DU
Batch: 94513
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Benzene	2.8	2.2	+	1	23	20	10/03/2012 0447
1,2-Dichloroethane	ND	ND		1	0.00	20	10/03/2012 0447
Ethylbenzene	4.4	3.4	+	1	24	20	10/03/2012 0447
Methyl tertiary butyl ether (MTBE)	ND	ND		1	0.00	20	10/03/2012 0447
Naphthalene	3.3	3.1		1	7.5	20	10/03/2012 0447
Toluene	0.34	0.54	+	1	46	20	10/03/2012 0447
Xylenes (total)	64	57		1	11	20	10/03/2012 0447

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - MS

Sample ID: NI27063-011MS
Batch: 94513
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	ND	50	48		1	96	72-127	10/03/2012 0509
1,2-Dichloroethane	12	50	59		1	94	59-143	10/03/2012 0509
Ethylbenzene	ND	50	50		1	100	79-132	10/03/2012 0509
Methyl tertiary butyl ether (MTBE)	ND	50	50		1	101	60-140	10/03/2012 0509
Naphthalene	ND	50	56		1	112	62-136	10/03/2012 0509
Toluene	ND	50	47		1	95	75-125	10/03/2012 0509
Xylenes (total)	ND	100	98		1	98	70-130	10/03/2012 0509

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94563-001
Batch: 94563
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	10/03/2012 0517
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/03/2012 0517
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	10/03/2012 0517
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	10/03/2012 0517
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	10/03/2012 0517
Ethanol	ND		1	1000	33	ug/L	10/03/2012 0517
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	10/03/2012 0517
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	10/03/2012 0517

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		95	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94563-002
Batch: 94563
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	850		1	85	70-130	10/03/2012 0342
tert-Amyl methyl ether (TAME)	50	46		1	92	70-130	10/03/2012 0342
tert-Butyl formate (TBF)	250	200		1	81	70-130	10/03/2012 0342
Diisopropyl ether (IPE)	50	43		1	86	70-130	10/03/2012 0342
3,3-Dimethyl-1-butanol	1000	840		1	84	70-130	10/03/2012 0342
Ethanol	5000	4200		1	84	70-130	10/03/2012 0342
Ethyl-tert-butyl ether (ETBE)	50	43		1	86	70-130	10/03/2012 0342
tert-butyl alcohol (TBA)	1000	770		1	77	70-130	10/03/2012 0342

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		84	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94563-003 **Matrix:** Aqueous
Batch: 94563 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	820		1	82	3.6	70-130	20	10/03/2012 0404
tert-Amyl methyl ether (TAME)	50	46		1	92	0.97	70-130	20	10/03/2012 0404
tert-Butyl formate (TBF)	250	210		1	84	4.0	70-130	20	10/03/2012 0404
Diisopropyl ether (IPE)	50	45		1	89	3.9	70-130	20	10/03/2012 0404
3,3-Dimethyl-1-butanol	1000	800		1	80	5.0	70-130	20	10/03/2012 0404
Ethanol	5000	4300		1	87	3.1	70-130	20	10/03/2012 0404
Ethyl-tert-butyl ether (ETBE)	50	44		1	88	2.3	70-130	20	10/03/2012 0404
tert-butyl alcohol (TBA)	1000	730		1	73	5.0	70-130	20	10/03/2012 0404

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		96	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94563-001 **Matrix:** Aqueous
Batch: 94563 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/03/2012 0517
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	10/03/2012 0517
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/03/2012 0517
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	10/03/2012 0517
Naphthalene	ND		1	1.0	0.40	ug/L	10/03/2012 0517
Toluene	ND		1	1.0	0.33	ug/L	10/03/2012 0517
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/03/2012 0517

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		95	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94563-002
Batch: 94563
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	45		1	89	70-130	10/03/2012 0342
1,2-Dichloroethane	50	37		1	75	70-130	10/03/2012 0342
Ethylbenzene	50	46		1	92	70-130	10/03/2012 0342
Methyl tertiary butyl ether (MTBE)	50	40		1	79	70-130	10/03/2012 0342
Naphthalene	50	52		1	104	70-130	10/03/2012 0342
Toluene	50	44		1	88	70-130	10/03/2012 0342
Xylenes (total)	100	91		1	91	70-130	10/03/2012 0342

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		84	70-130
Toluene-d8		96	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94563-003
Batch: 94563
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	46		1	91	2.6	70-130	20	10/03/2012 0404
1,2-Dichloroethane	50	38		1	76	0.95	70-130	20	10/03/2012 0404
Ethylbenzene	50	47		1	94	2.7	70-130	20	10/03/2012 0404
Methyl tertiary butyl ether (MTBE)	50	41		1	81	2.5	70-130	20	10/03/2012 0404
Naphthalene	50	52		1	104	0.27	70-130	20	10/03/2012 0404
Toluene	50	45		1	90	2.1	70-130	20	10/03/2012 0404
Xylenes (total)	100	92		1	92	1.7	70-130	20	10/03/2012 0404

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		96	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94571-001 **Matrix:** Aqueous
Batch: 94571 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	10/03/2012 0838
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/03/2012 0838
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	10/03/2012 0838
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	10/03/2012 0838
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	10/03/2012 0838
Ethanol	ND		1	1000	33	ug/L	10/03/2012 0838
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	10/03/2012 0838
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	10/03/2012 0838

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94571-002 **Matrix:** Aqueous
Batch: 94571 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1200		1	123	70-130	10/03/2012 0710
tert-Amyl methyl ether (TAME)	50	55		1	110	70-130	10/03/2012 0710
tert-Butyl formate (TBF)	250	270		1	110	70-130	10/03/2012 0710
Diisopropyl ether (IPE)	50	52		1	103	70-130	10/03/2012 0710
3,3-Dimethyl-1-butanol	1000	1100		1	106	70-130	10/03/2012 0710
Ethanol	5000	6800	N	1	136	70-130	10/03/2012 0710
Ethyl-tert-butyl ether (ETBE)	50	55		1	111	70-130	10/03/2012 0710
tert-butyl alcohol (TBA)	1000	1200		1	124	70-130	10/03/2012 0710

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
ere applicable. all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94571-003 **Matrix:** Aqueous
Batch: 94571 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1200		1	117	4.6	70-130	20	10/03/2012 0732
tert-Amyl methyl ether (TAME)	50	54		1	109	1.5	70-130	20	10/03/2012 0732
tert-Butyl formate (TBF)	250	270		1	109	1.0	70-130	20	10/03/2012 0732
Diisopropyl ether (IPE)	50	50		1	99	3.9	70-130	20	10/03/2012 0732
3,3-Dimethyl-1-butanol	1000	990		1	99	7.1	70-130	20	10/03/2012 0732
Ethanol	5000	7600	N	1	153	11	70-130	20	10/03/2012 0732
Ethyl-tert-butyl ether (ETBE)	50	55		1	109	1.3	70-130	20	10/03/2012 0732
tert-butyl alcohol (TBA)	1000	1200		1	117	6.2	70-130	20	10/03/2012 0732

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI27063-016DU **Matrix:** Aqueous
Batch: 94571 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Diisopropyl ether (IPE)	180	190	J	20	0.47	20	10/03/2012 1428
Ethanol	ND	ND		20	0.00	20	10/03/2012 1428
3,3-Dimethyl-1-butanol	ND	ND		20	0.00	20	10/03/2012 1428
Ethyl-tert-butyl ether (ETBE)	ND	ND		20	0.00	20	10/03/2012 1428
tert-Amyl alcohol (TAA)	ND	ND		20	0.00	20	10/03/2012 1428
tert-Amyl methyl ether (TAME)	ND	ND		20	0.00	20	10/03/2012 1428
tert-butyl alcohol (TBA)	ND	ND		20	0.00	20	10/03/2012 1428
tert-Butyl formate (TBF)	ND	ND		20	0.00	20	10/03/2012 1428

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94571-001
Batch: 94571
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/03/2012 0838
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	10/03/2012 0838
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/03/2012 0838
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	10/03/2012 0838
Naphthalene	ND		1	1.0	0.40	ug/L	10/03/2012 0838
Toluene	ND		1	1.0	0.33	ug/L	10/03/2012 0838
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/03/2012 0838

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94571-002
Batch: 94571
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	47		1	94	70-130	10/03/2012 0710
1,2-Dichloroethane	50	49		1	98	70-130	10/03/2012 0710
Ethylbenzene	50	48		1	97	70-130	10/03/2012 0710
Methyl tertiary butyl ether (MTBE)	50	52		1	104	70-130	10/03/2012 0710
Naphthalene	50	57		1	114	70-130	10/03/2012 0710
Toluene	50	47		1	94	70-130	10/03/2012 0710
Xylenes (total)	100	98		1	98	70-130	10/03/2012 0710

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94571-003
Batch: 94571
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	47		1	94	0.092	70-130	20	10/03/2012 0732
1,2-Dichloroethane	50	48		1	96	2.1	70-130	20	10/03/2012 0732
Ethylbenzene	50	48		1	96	0.73	70-130	20	10/03/2012 0732
Methyl tertiary butyl ether (MTBE)	50	51		1	101	2.2	70-130	20	10/03/2012 0732
Naphthalene	50	54		1	108	5.4	70-130	20	10/03/2012 0732
Toluene	50	47		1	95	0.20	70-130	20	10/03/2012 0732
Xylenes (total)	100	99		1	99	0.52	70-130	20	10/03/2012 0732

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI27063-016DU
Batch: 94571
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Benzene	12000	9200		20	2.5	20	10/03/2012 1428
1,2-Dichloroethane	ND	ND		20	0.00	20	10/03/2012 1428
Ethylbenzene	3000	2900		20	2.3	20	10/03/2012 1428
Methyl tertiary butyl ether (MTBE)	48	48		20	0.32	20	10/03/2012 1428
Naphthalene	680	670		20	1.4	20	10/03/2012 1428
Toluene	11000	8600		20	1.8	20	10/03/2012 1428
Xylenes (total)	15000	15000		20	0.25	20	10/03/2012 1428

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94578-001
Batch: 94578
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/03/2012 1238
Toluene	ND		1	1.0	0.33	ug/L	10/03/2012 1238
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/03/2012 1238

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		104	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94578-002
Batch: 94578
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ethylbenzene	50	49		1	98	70-130	10/03/2012 1101
Toluene	50	48		1	96	70-130	10/03/2012 1101
Xylenes (total)	100	93		1	93	70-130	10/03/2012 1101

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		106	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94578-003
Batch: 94578
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ethylbenzene	50	46		1	92	5.9	70-130	20	10/03/2012 1125
Toluene	50	46		1	92	4.5	70-130	20	10/03/2012 1125
Xylenes (total)	100	96		1	96	2.9	70-130	20	10/03/2012 1125

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94578-003
Batch: 94578
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: NI27063-005DU
Batch: 94578
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Result (ug/L)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Ethylbenzene	15	17		5	1.7	20	10/03/2012 1646
Toluene	12	14		5	0.14	20	10/03/2012 1646
Xylenes (total)	1000	990		5	0.55	20	10/03/2012 1646

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		103	70-130

Volatile Organic Compounds by GC/MS - MS

Sample ID: NI27063-008MS
Batch: 94578
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ethylbenzene	2200	500	2700		10	94	79-132	10/03/2012 1734
Toluene	3500	500	4100		10	119	75-125	10/03/2012 1734
Xylenes (total)	2400	1000	9500	N	10	40	70-130	10/03/2012 1734

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		105	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94602-001
Batch: 94602
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	10/03/2012 2230
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/03/2012 2230
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	10/03/2012 2230
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	10/03/2012 2230
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	10/03/2012 2230
Ethanol	ND		1	1000	33	ug/L	10/03/2012 2230
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	10/03/2012 2230
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	10/03/2012 2230

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		92	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94602-002
Batch: 94602
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	960		1	96	70-130	10/03/2012 2053
tert-Amyl methyl ether (TAME)	50	47		1	94	70-130	10/03/2012 2053
tert-Butyl formate (TBF)	250	240		1	97	70-130	10/03/2012 2053
Diisopropyl ether (IPE)	50	48		1	96	70-130	10/03/2012 2053
3,3-Dimethyl-1-butanol	1000	970		1	97	70-130	10/03/2012 2053
Ethanol	5000	5500		1	110	70-130	10/03/2012 2053
Ethyl-tert-butyl ether (ETBE)	50	48		1	95	70-130	10/03/2012 2053
tert-butyl alcohol (TBA)	1000	940		1	94	70-130	10/03/2012 2053

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		92	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL

N - Recovery is out of criteria
+ - RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94602-003
Batch: 94602
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	930		1	93	3.2	70-130	20	10/03/2012 2117
tert-Amyl methyl ether (TAME)	50	47		1	93	1.5	70-130	20	10/03/2012 2117
tert-Butyl formate (TBF)	250	230		1	91	6.5	70-130	20	10/03/2012 2117
Diisopropyl ether (IPE)	50	47		1	93	3.0	70-130	20	10/03/2012 2117
3,3-Dimethyl-1-butanol	1000	930		1	93	3.8	70-130	20	10/03/2012 2117
Ethanol	5000	5100		1	102	6.9	70-130	20	10/03/2012 2117
Ethyl-tert-butyl ether (ETBE)	50	46		1	92	3.2	70-130	20	10/03/2012 2117
tert-butyl alcohol (TBA)	1000	890		1	89	5.3	70-130	20	10/03/2012 2117

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94602-001
Batch: 94602
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/03/2012 2230
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	10/03/2012 2230
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/03/2012 2230
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	10/03/2012 2230
Naphthalene	ND		1	1.0	0.40	ug/L	10/03/2012 2230
Toluene	ND		1	1.0	0.33	ug/L	10/03/2012 2230

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		92	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94602-002
Batch: 94602
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	47		1	93	70-130	10/03/2012 2053
1,2-Dichloroethane	50	45		1	90	70-130	10/03/2012 2053
Ethylbenzene	50	46		1	92	70-130	10/03/2012 2053
Methyl tertiary butyl ether (MTBE)	50	45		1	89	70-130	10/03/2012 2053
Naphthalene	50	51		1	102	70-130	10/03/2012 2053
Toluene	50	45		1	89	70-130	10/03/2012 2053

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		92	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94602-003
Batch: 94602
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	46		1	91	2.2	70-130	20	10/03/2012 2117
1,2-Dichloroethane	50	44		1	88	2.3	70-130	20	10/03/2012 2117
Ethylbenzene	50	45		1	90	1.6	70-130	20	10/03/2012 2117
Methyl tertiary butyl ether (MTBE)	50	43		1	86	4.1	70-130	20	10/03/2012 2117
Naphthalene	50	48		1	96	6.4	70-130	20	10/03/2012 2117
Toluene	50	45		1	89	0.047	70-130	20	10/03/2012 2117

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		99	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94603-001
Batch: 94603
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/03/2012 2136
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/03/2012 2136
Toluene	ND		1	1.0	0.33	ug/L	10/03/2012 2136
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/03/2012 2136

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94603-002
Batch: 94603
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	51		1	102	70-130	10/03/2012 1949
Ethylbenzene	50	51		1	102	70-130	10/03/2012 1949
Toluene	50	51		1	102	70-130	10/03/2012 1949
Xylenes (total)	100	100		1	101	70-130	10/03/2012 1949

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		110	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94603-003
Batch: 94603
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	51		1	101	0.87	70-130	20	10/03/2012 2014
Ethylbenzene	50	49		1	97	4.7	70-130	20	10/03/2012 2014
Toluene	50	49		1	98	4.2	70-130	20	10/03/2012 2014

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94603-003
Batch: 94603
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Xylenes (total)	100	96		1	96	5.5	70-130	20	10/03/2012 2014

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		107	70-130

Volatile Organic Compounds by GC/MS - MS

Sample ID: NI27063-004MS
Batch: 94603
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	2000	500	2400		10	85	72-127	10/04/2012 0617
Ethylbenzene	1200	500	1700		10	93	79-132	10/04/2012 0617
Toluene	150	500	680		10	105	75-125	10/04/2012 0617
Xylenes (total)	4200	1000	5100		10	94	70-130	10/04/2012 0617

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		104	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94615-001
Batch: 94615
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	10/03/2012 1733
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/03/2012 1733
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	10/03/2012 1733
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	10/03/2012 1733
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	10/03/2012 1733
Ethanol	ND		1	1000	33	ug/L	10/03/2012 1733

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94615-001
Batch: 94615
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	10/03/2012 1733
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	10/03/2012 1733

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		94	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94615-002
Batch: 94615
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	850		1	85	70-130	10/03/2012 1603
tert-Amyl methyl ether (TAME)	50	48		1	96	70-130	10/03/2012 1603
tert-Butyl formate (TBF)	250	220		1	90	70-130	10/03/2012 1603
Diisopropyl ether (IPE)	50	43		1	86	70-130	10/03/2012 1603
3,3-Dimethyl-1-butanol	1000	780		1	78	70-130	10/03/2012 1603
Ethanol	5000	3900		1	79	70-130	10/03/2012 1603
Ethyl-tert-butyl ether (ETBE)	50	46		1	92	70-130	10/03/2012 1603
tert-butyl alcohol (TBA)	1000	790		1	79	70-130	10/03/2012 1603

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94615-003
Batch: 94615
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	900		1	90	5.3	70-130	20	10/03/2012 1626

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94615-003
Batch: 94615
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl methyl ether (TAME)	50	48		1	95	1.4	70-130	20	10/03/2012 1626
tert-Butyl formate (TBF)	250	230		1	92	2.0	70-130	20	10/03/2012 1626
Diisopropyl ether (IPE)	50	42		1	84	3.4	70-130	20	10/03/2012 1626
3,3-Dimethyl-1-butanol	1000	850		1	85	8.1	70-130	20	10/03/2012 1626
Ethanol	5000	4700		1	93	17	70-130	20	10/03/2012 1626
Ethyl-tert-butyl ether (ETBE)	50	45		1	90	1.9	70-130	20	10/03/2012 1626
tert-butyl alcohol (TBA)	1000	820		1	82	3.6	70-130	20	10/03/2012 1626

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94615-001
Batch: 94615
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/03/2012 1733
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	10/03/2012 1733
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/03/2012 1733
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	10/03/2012 1733
Naphthalene	ND		1	1.0	0.40	ug/L	10/03/2012 1733
Toluene	ND		1	1.0	0.33	ug/L	10/03/2012 1733
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/03/2012 1733

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		94	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94615-002
Batch: 94615
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	45		1	89	70-130	10/03/2012 1603
1,2-Dichloroethane	50	45		1	89	70-130	10/03/2012 1603
Ethylbenzene	50	45		1	90	70-130	10/03/2012 1603
Methyl tertiary butyl ether (MTBE)	50	43		1	86	70-130	10/03/2012 1603
Naphthalene	50	54		1	107	70-130	10/03/2012 1603
Toluene	50	45		1	90	70-130	10/03/2012 1603
Xylenes (total)	100	90		1	90	70-130	10/03/2012 1603

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94615-003
Batch: 94615
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	43		1	85	4.7	70-130	20	10/03/2012 1626
1,2-Dichloroethane	50	41		1	83	7.7	70-130	20	10/03/2012 1626
Ethylbenzene	50	44		1	87	3.2	70-130	20	10/03/2012 1626
Methyl tertiary butyl ether (MTBE)	50	42		1	83	3.1	70-130	20	10/03/2012 1626
Naphthalene	50	52		1	103	3.8	70-130	20	10/03/2012 1626
Toluene	50	42		1	85	5.9	70-130	20	10/03/2012 1626
Xylenes (total)	100	87		1	87	2.8	70-130	20	10/03/2012 1626

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		98	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94767-001
Batch: 94767
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/05/2012 1125
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/05/2012 1125

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		97	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94767-002
Batch: 94767
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	50		1	100	70-130	10/05/2012 0948
Xylenes (total)	100	100		1	100	70-130	10/05/2012 0948

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
,2-Dichloroethane-d4		100	70-130
Toluene-d8		101	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94767-003
Batch: 94767
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	50		1	100	0.43	70-130	20	10/05/2012 1012
Xylenes (total)	100	98		1	98	1.7	70-130	20	10/05/2012 1012

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94767-003
Batch: 94767
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		99	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94808-001
Batch: 94808
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/05/2012 2205
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/05/2012 2205
Naphthalene	ND		1	1.0	0.40	ug/L	10/05/2012 2205
Toluene	ND		1	1.0	0.33	ug/L	10/05/2012 2205
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/05/2012 2205

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94808-002
Batch: 94808
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	51		1	101	70-130	10/05/2012 2036
Ethylbenzene	50	52		1	104	70-130	10/05/2012 2036
Naphthalene	50	55		1	109	70-130	10/05/2012 2036
Toluene	50	52		1	105	70-130	10/05/2012 2036
Xylenes (total)	100	100		1	104	70-130	10/05/2012 2036

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94808-002
Batch: 94808
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94808-003
Batch: 94808
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	52		1	104	2.8	70-130	20	10/05/2012 2058
Ethylbenzene	50	54		1	107	3.2	70-130	20	10/05/2012 2058
Naphthalene	50	53		1	106	2.9	70-130	20	10/05/2012 2058
Toluene	50	53		1	106	1.2	70-130	20	10/05/2012 2058
Xylenes (total)	100	100		1	101	2.5	70-130	20	10/05/2012 2058

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		100	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94822-001
Batch: 94822
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	10/06/2012 1337
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	10/06/2012 1337
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	10/06/2012 1337
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	10/06/2012 1337
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	10/06/2012 1337
Ethanol	ND		1	1000	33	ug/L	10/06/2012 1337
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	10/06/2012 1337
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	10/06/2012 1337

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94822-001
Batch: 94822
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94822-002
Batch: 94822
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1100		1	107	70-130	10/06/2012 1212
tert-Amyl methyl ether (TAME)	50	49		1	98	70-130	10/06/2012 1212
tert-Butyl formate (TBF)	250	230		1	91	70-130	10/06/2012 1212
Diisopropyl ether (IPE)	50	49		1	98	70-130	10/06/2012 1212
3,3-Dimethyl-1-butanol	1000	980		1	98	70-130	10/06/2012 1212
Ethanol	5000	7400	N	1	147	70-130	10/06/2012 1212
Ethyl-tert-butyl ether (ETBE)	50	49		1	99	70-130	10/06/2012 1212
tert-butyl alcohol (TBA)	1000	1100		1	108	70-130	10/06/2012 1212

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94822-003
Batch: 94822
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1100		1	111	4.1	70-130	20	10/06/2012 1233
tert-Amyl methyl ether (TAME)	50	51		1	102	4.1	70-130	20	10/06/2012 1233
tert-Butyl formate (TBF)	250	240		1	95	4.3	70-130	20	10/06/2012 1233
Diisopropyl ether (IPE)	50	51		1	102	3.9	70-130	20	10/06/2012 1233
3,3-Dimethyl-1-butanol	1000	990		1	99	0.45	70-130	20	10/06/2012 1233
Ethanol	5000	7500	N	1	150	2.1	70-130	20	10/06/2012 1233

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94822-003
Batch: 94822
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ethyl-tert-butyl ether (ETBE)	50	52		1	104	4.9	70-130	20	10/06/2012 1233
tert-butyl alcohol (TBA)	1000	1100		1	111	2.9	70-130	20	10/06/2012 1233

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94822-001
Batch: 94822
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	10/06/2012 1337
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	10/06/2012 1337
Ethylbenzene	ND		1	1.0	0.33	ug/L	10/06/2012 1337
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	10/06/2012 1337
Naphthalene	ND		1	1.0	0.40	ug/L	10/06/2012 1337
Toluene	ND		1	1.0	0.33	ug/L	10/06/2012 1337
Xylenes (total)	ND		1	1.0	0.33	ug/L	10/06/2012 1337

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94822-002
Batch: 94822
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	50	47		1	94	70-130	10/06/2012 1212
1,2-Dichloroethane	50	46		1	93	70-130	10/06/2012 1212

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94822-002
Batch: 94822
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Ethylbenzene	50	40		1	80	70-130	10/06/2012 1212
Methyl tertiary butyl ether (MTBE)	50	50		1	99	70-130	10/06/2012 1212
Naphthalene	50	41		1	82	70-130	10/06/2012 1212
Toluene	50	42		1	85	70-130	10/06/2012 1212
Xylenes (total)	100	80		1	80	70-130	10/06/2012 1212

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94822-003
Batch: 94822
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	49		1	98	5.0	70-130	20	10/06/2012 1233
1,2-Dichloroethane	50	49		1	97	4.9	70-130	20	10/06/2012 1233
Ethylbenzene	50	42		1	84	4.6	70-130	20	10/06/2012 1233
Methyl tertiary butyl ether (MTBE)	50	51		1	103	3.4	70-130	20	10/06/2012 1233
Naphthalene	50	42		1	84	2.7	70-130	20	10/06/2012 1233
Toluene	50	44		1	88	3.5	70-130	20	10/06/2012 1233
Xylenes (total)	100	82		1	82	3.4	70-130	20	10/06/2012 1233

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		102	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: NQ94973-001
Batch: 94973
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Toluene	ND		1	1.0	0.33	ug/L	10/09/2012 0847

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		94	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: NQ94973-002
Batch: 94973
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Toluene	30	31		1	103	70-130	10/09/2012 0709

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		102	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: NQ94973-003
Batch: 94973
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Toluene	30	31		1	103	0.59	70-130	20	10/09/2012 0734

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		109	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MB

Sample ID: NQ94323-001
Batch: 94323
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 09/30/2012 1222

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	10/02/2012 0757

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		105	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: NQ94323-002
Batch: 94323
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 09/30/2012 1222

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.24		1	95	60-140	10/02/2012 0818

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		104	57-137

EDB & DBCP by Microextraction - MS

Sample ID: NI27063-017MS
Batch: 94323
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 09/30/2012 1222

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	ND	0.25	0.20		1	80	60-140	10/02/2012 1440

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		101	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MSD

Sample ID: NI27063-017MD
Batch: 94323
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 09/30/2012 1222

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	ND	0.25	0.25	+	1	101	22	60-140	20	10/02/2012 1501

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		117	57-137

EDB & DBCP by Microextraction - MB

Sample ID: NQ94390-001
Batch: 94390
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/01/2012 1503

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.0062	ug/L	10/02/2012 1647

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		98	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: NQ94390-002
Batch: 94390
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/01/2012 1503

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.22		1	89	60-140	10/02/2012 1708

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		101	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MS

Sample ID: NI27063-022MS
Batch: 94390
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/01/2012 1503

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	3.9	0.24	3.2	N	1	-82	60-140	10/02/2012 2041

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		101	57-137

EDB & DBCP by Microextraction - MSD

Sample ID: NI27063-022MD
Batch: 94390
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/01/2012 1503

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	3.9	0.24	3.2	N	1	-52	2.3	60-140	20	10/02/2012 2102

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		106	57-137

EDB & DBCP by Microextraction - MB

Sample ID: NQ94394-001
Batch: 94394
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/01/2012 1821

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	10/03/2012 0827

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		105	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
re applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - LCS

Sample ID: NQ94394-002
Batch: 94394
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/01/2012 1821

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.23		1	93	60-140	10/03/2012 0848

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		103	57-137

EDB & DBCP by Microextraction - MS

Sample ID: NI27063-038MS
Batch: 94394
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/01/2012 1821

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	ND	0.25	0.23		1	94	60-140	10/03/2012 0930

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		96	57-137

EDB & DBCP by Microextraction - MSD

Sample ID: NI27063-038MD
Batch: 94394
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/01/2012 1821

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	ND	0.25	0.22		1	87	5.3	60-140	20	10/03/2012 0951

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		88	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MB

Sample ID: NQ94395-001
Batch: 94395
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/01/2012 1821

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	10/04/2012 0751

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		109	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: NQ94395-002
Batch: 94395
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/01/2012 1821

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.26		1	104	60-140	10/04/2012 0811

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		106	57-137

EDB & DBCP by Microextraction - MS

Sample ID: NI27063-058MS
Batch: 94395
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/01/2012 1821

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	ND	0.25	0.32	Q	1	131	60-140	10/04/2012 0853

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane	N	146	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MSD

Sample ID: NI27063-058MD
Batch: 94395
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/01/2012 1821

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	ND	0.25	0.26	+	1	103	23	60-140	20	10/04/2012 0914

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		105	57-137

EDB & DBCP by Microextraction - MB

Sample ID: NQ94471-001
Batch: 94471
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/02/2012 1126

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	10/04/2012 1639

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		101	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: NQ94471-002
Batch: 94471
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/02/2012 1126

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.25		1	100	60-140	10/04/2012 1700

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		99	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MS

Sample ID: NI27063-078MS
Batch: 94471
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/02/2012 1126

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	ND	0.23	0.14	N	1	59	60-140	10/04/2012 1743

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane	N	53	57-137

EDB & DBCP by Microextraction - MSD

Sample ID: NI27063-078MD
Batch: 94471
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/02/2012 1126

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
1,2-Dibromoethane (EDB)	ND	0.23	0.20	+	1	85	35	60-140	20	10/04/2012 1804

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		84	57-137

EDB & DBCP by Microextraction - MB

Sample ID: NQ94676-001
Batch: 94676
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/04/2012 1030

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	10/05/2012 1055

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		94	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria
ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - LCS

Sample ID: NQ94676-002
Batch: 94676
Analytical Method: 8011
Matrix: Aqueous
Prep Method: 8011
Prep Date: 10/04/2012 1030

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.23		1	94	60-140	10/05/2012 1116

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		96	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N - Recovery is out of criteria
+ - RPD is out of criteria

ere applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791 9111
www.shealylab.com

Chain of Custody Record

Number 30030

Client: MCLI	Report to Contact: B. SHANE	Sampler (Print/Sign Name): [redacted] BRIAN OWEN	Quote No:
Address: 735 B Dooley Rd.	Telephone No. / Fax No. / Email: 803-808-2015	Waybill No.	Page: 1 of 10
City: LEXINGTON	State: SC	Zip Code: 29073	Number of Containers
Project Name: Smith's Grocery	Preservative: 1. Ungres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCl 6. Na Thio. 7. NaOH		Bottle (See Instructions on back)
Project Number	P.O Number		Preservative
			Lot No. NE2706h

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	C=Comp Grab	Matrix: GW	DW	WW	S	Other	Analysis: BTEX, MtbE, Naph, MtBE	BTEX, Naph, 8 oxy's, EDB	EDB	Remarks / Cooler ID
MW-1R	9-26	1132	G						X	X	X	
MW-2	—	—	—						—	—	—	Dry
MW-3	—	—	—						—	—	—	Dry
MW-4R	9-26	1240	G						X	X	X	
MW-5	9-26	954										
MW-6	9-25	1421										
MW-7	9-25	1532										
MW-8	9-26	1159										
MW-9R	9-25	1334										
MW-10	9-25	1114	X						X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler	9-26-12	1800	1. Received by	9-26-12	1800
2. Relinquished by	9-27-12	1245	2. Received by	9-27-12	1245
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by	9/27/12	1345	4. Laboratory Received by	9-27-12	1345

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check) ☑ Yes ☐ No ☐ Ice Pack — Receipt Temp. 1.0 °C / 1.0 — Temp. Blanks ☐ / ☐ — 9/27/12

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com
Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services Inc
Document Number: F-AD-016
Revision Number: 9

Page 1 of 1
Replaces Date: 11/5/11
Effective Date: 10/11/12

Sample Receipt Checklist (SRC)

Client: Mr. CJ Cooler Inspected by/date: ECC 9/27/12 Lot #: NI27063

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐		2. If custody seals were present, were they intact and unbroken?

Cooler ID/temperature upon receipt: 1 @ °C 1 @ °C / °C / °C
Method: ☐ Temperature Blank ☑ Against Bottles (Trip Blank)
Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

If response is No (or Yes for 4, 15, 16), an explanation/resolution must be provided.

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____. (For coolers received via commercial courier, PMs are to be notified immediately.)
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☐	No ☑		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☑	No ☐	NA ☐	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/pheno/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc.) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH) with the SR # (number)

Sample(s) See list below were received with bubbles >6 mm in diameter.

Sample(s) _____ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb.

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: _____ Date of response: _____

Comments: -029(1), -032(1), -039(4), -043(2), -044(2), -045(3), -048(3), -049(3), -050(2), -051(4), -053(2), -054(1), -055(1), -058(1), -059(2), -062(1), -067(2), -062(5), -064(4), -065(1), -072(3), -074(1), -076(1), -077(1)

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 30029

Client	Report to Contact	Sampler (Printed Name)	Quote No.
MEI	B Shone	Brian Owen	
Address	Telephone No / Fax No / Email	Waybill No	Page
235-B Dooley Rd.	803-808-2045		2 of 10
City / State / Zip Code	Preservative		Number of Containers
Lexington SC 29073	1. Unpres. 4. HNO3 7. NaOH		Bottle (See Instructions on back)
Project Name	2. NaOH/ZnA 5. HCL		Preservative
Smiths Grocery	3. H2SO4 6. Na Thio.		Lot No.
Project Number / P.O Number			NE27063

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	Grab/Composite	Matrix: GW	DW	WW	S	Other	Analysis: BTEX, MtBE, MNA	VOA, 8 oxy, EtOH	EDB	Remarks / Cooler ID
MW-11R	9-26	12 07	G						X	X	X	
MW-12	—	—	—						—	—	—	Dry
MW-13	—	—	—						—	—	—	Dry
MW-14	9-27	12 55	G						X	X	X	
MW-15		12 26										
MW-16		13 19										4 VOA's
MW-17		13 11										
MW-18		13 01	X						X	X	X	
MW-19	—	—	—						—	—	—	Dry
MW-20	X	13 39	G						X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify):

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler	9-26-12	1800	1. Received by	9.26.12	1800
2. Relinquished by	9.27.12	1245	2. Received by	9.27.12	1245
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by	Date 9/27/12	Time 1345	4. Laboratory Received by	Date 9.27.12	Time 1345

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☑ Yes ☐ No ☐ Ice Pack | Receipt Temp. 1.0 °C 1.0 | Temp. Blank ☑ Y ☐ N

CC 9/27/12

Level 1 Report v2.1

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791 9700 Fax No. (803) 791 9111
www.shealylab.com

Chain of Custody Record

Number 30028

Client	Report to Contact	Sampler (Printed Name)	Quote No.
MEC	B. SHANE	BRIAN OWEN	
Address	Telephone No. / Fax No. / Email	Waybill No.	Page 3 of 10
235 B Dooley Rd.			Number of Containers
City / State / Zip Code	Preservative		Bottle (See Instructions on back)
LEXINGTON SC 29073	1. Unpres 4. HNO_3 7. NaOH		Preservative
Project Name	2. NaOH/ZnA 5. HCl		Lot No.
SMITHS GROCERY	3. H_2SO_4 8. Na Thio.		IN2067

Project Number	P.O. Number		Grab/Comp	Matrix					Analysis				Remarks / Cooler ID
Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	GW	DW	WW	S	Other		Btex, Naph, MTBE	12 DK1 Poly, Eth	EDB	
IN-1	9-24	1021	G							X	X	X	
IN-2	9-24	1107											
IN-3	9-25	1111											
IN-7	9-24	1112											
IN-3		1020											
IN-4		1010											
IN-5	X	1144											
IN-6	9-25	1359											
IN-8		1428											
IN-9	X	1409	X							X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT)
☐ Standard _ Rush (Please Specify)

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler	9-26-12	1800	1. Received by	9.26.12	1800
2. Relinquished by	9.27.12	1245	2. Received by	9.27.12	1245
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by	9/27/12	1345	4. Laboratory Representative	9.27.12	1345

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☑ Yes ☐ No ☐ Ice Pack | Receipt Temp 1-6 °C | Temp Blank ☑ Y ☐ N

IN

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc. 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 30027

Client	MECI
Address	235 B Dooley Rd.
City / State / Zip Code	Lexington / SC / 29073
Project Name	Smith's Groc.
Project Number	
P.O. Number	
Report to Contact	B. Shane
Telephone No. / Fax No. / Email	
Sampler (Printed Name)	Brian Owen
Waybill No.	
Quote No.	
Page	4 of 10
Lot No.	IN27063

Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Bisulfate

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	GW	DW	WW	S	Other	Btex, Naph, Mtbe	12DCA, 8oxy, Eth	EDB	Remarks / Cooler ID
IN-10	9-25	12 10	G						X	X		3 VOA's
IN-11	—	—	—						—	—	—	DRY
IN-16	9-25	11 59	G						X	X	X	
IN-18	9-25	11 41	G						X	X	X	
IN-19	—	—	—						—	—	—	Not Located
IN-20	9-25	11 48	G						X	X	X	4 VOA's
MW-1R Duplicate	9-26	11 32	↓						↓	↓	↓	
MW-3 Duplicate	9-26	9 54	↓						↓	↓	↓	
MW-8 Duplicate	9-26	11 09	↓						↓	↓	↓	
MW-10 Duplicate	9-25	11 20	X						X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

Relinquished by	Date	Time	Received by	Date	Time
1. Relinquished by / Sampler: [signature]	9-26-12	1800	1. Received by: [signature]	9-26-12	1800
2. Relinquished by: [signature]	9-27-12	1245	2. Received by: [signature]	9-27-12	1245
3. Relinquished by			3. Received by		
4. Relinquished by: [signature]	9/27/12	1345	4. Laboratory Received by: [signature]	9-27-12	1345

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check): ☑ Yes ☐ No ☐ Ice Pack — Receipt Temp. 1.0 °C (1.0) — Temp. Blank ☑ Y ☐ N

SHEALY ENVIRONMENTAL SERVICES, INC.

Chain of Custody Record

Sheely Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 30026

Client: MECI
Report to Contact: B. SHANE
Sampler (Printed Name): BRIAN OWEN
Quote No:
Address: 235 B Dooley Rd.
Telephone No. / Fax No. / Email:
Waybill No:
Page 5 of 10
City: LEXINGTON State: SC Zip Code: 29073
Project Name: SMITHS GROCERY
Project Number:
P O Number:
Lot No. L12-27063

Preservative: 1. None 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	GW	DW	WW	S	Other	Analysis: Bio/naph/mtbe	1,2-DCA, Benz, Eth	EDB	Remarks / Cooler ID
FIELD BLANK	9-25	10:30	G						X	X	X	
FIELD BLANK	9-26	14:00							X	X	X	
TRIP BLANK	9-25	10:35							X	X		
TRIP BLANK	9-26	14:35							X	X		

Turn Around Time Required (Prior lab approval required for expedited TAT) ☐ Standard ☐ Rush (Please Specify)
Sample Disposal ☐ Return to Client ☐ Disposal by Lab
QC Requirements (Specify)
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

Relinquished by	Date	Time	Received by	Date	Time
1. Relinquished by / Sampler: [signature]	9-26-12	1800	1. Received by [signature]	9-26-12	1800
2. Relinquished by [signature]	9-27-12	1245	2. Received by [signature]	9-27-12	1245
3. Relinquished by			3. Received by		
4. Relinquished by [signature]	9/27/12	1345	4. Laboratory Received by [signature]	9-27-12	1345

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY Received on ice (Check) ☑ Yes ☐ No ☐ Ice Pack Receipt Temp. 1.0 °C (1.0) Temp Blank ☑ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 20557

Client	Report to Contact	Sampler (Printed Name)	Quote No.
MEC	B. Shaw	Chris Lashley	
Address	Telephone No. / Fax No. / Email	Waybill No.	Page
235-A Deer, Rd	803-356-2043		1 of 1
City / State / Zip Code	Preservative		Number of Containers
Lexington SC 29073	1. Unpres. 4. HNO3 7. NaOH		Bottle (See Instructions on back)
Project Name	2. NaOH/ZnA 5. HCL		Preservative
Smith Grease	3. H2SO4 6. Na Thio.		Lot No. KJ 27563
Project Number / P.O. Number	Matrix	Analysis	Remarks / Cooler ID

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	GW	DW	WW	S	Other	Base, neutral, acid	1,2 DCA	S compounds	Ethanol	EDB	Remarks / Cooler ID
WSW-1	9-25	1029	G		X				X	X	X	X	X	1ppb Low
WSW-2 (PRE)		1220												Detection
WSW-2 (Post)		1225												Limits
WSW-3 (PRE)		1251												
WSW-3 (Post)		1257												
WSW-4		1307												
WSW-5		1320												
WSW-6		1330												
WSW-7		1340												
WSW-8	9-25	1350	G		X				X	X	X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Dispose by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler: Chris Lashley	9.26.12	1800	1. Received by	9.26.12	1800
2. Relinquished by	9.27.12	1045	2. Received by	9.27.12	1045
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by	9/27/12	1345	4. Laboratory Received by	9.27.12	1345

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Circle) ☐ Yes ☐ No ☐ Ice Pack — Receipt Temp. 1.0 °C — Temp. Blank ☐ Y ☐ N

1.0

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc. 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 20558

Client	Report to Contact	Sampler (Printed Name)	Quote No.
MEA	B Shaw	Chris Lashley	
Address	Telephone No. / Fax No. / Email	Waybill No.	Page
235 B Dooley Rd	803-808-2045		2 of 10
City / State / Zip Code	Preservative		Number of Containers
Lexington SC 29073	1. Dupres 4. HNO3 7. NaOH		Below (See Instructions on back)
Project Name	2. NaOH/ZnA 5. HCL		Preservative
Smith Grocery	3. H2SO4 6. Na2S2O3		Lot No.
Project Number	P.O Number		IN27063

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: GRO, Naphth, MTBE	1,2 DCA	EDC	Ethanol	EDB	Remarks / Cooler ID
LWSW-9	9-25	1405	G		X				X	X	X	X	X	1ppb Low
LWSW-10	9-25	1415												Detection
LWSW-11	9-26	1000												Limits
LWSW-12	9-26	1010												
LWSW-13	9-26	1011												
LWSW-14	9-26	1041												
LWSW-15	9-26	1050												
LWSW-16	9-26	1105												
LWSW-17	9-26	1111												
LWSW-18	9-26	1116	G		X				X	X	X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler	9-26-12	1800	1. Received by	9/26/12	1800
2. Relinquished by	9-27-12	1245	2. Received by	9/27/12	1245
3. Relinquished by			3. Received by		
4. Relinquished by	9/27/12	1345	4. Laboratory Received by	9.27.12	1345

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack — Receipt Temp. 1.0 °C / 1.0 — Temp. Blank ☑ Y ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 20559

Client	Report to Contact	Sampler (Printed Name)	Quote No.
MEC	B. Shane	Chris Lashy	
Address: 235 S Docks Rd	Telephone No. / Fax No. / Email: 803-808-2045	Waybill No.	Page: 8 of 10
City: Lexington; State: SC; Zip Code: 29073	Preservative: 1. Unpres 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na2S2O3		Number of Containers; Bottle (See Instructions on back); Preservative
Project Name: Smiths Grocery			Lot No.: UD2-7063
Project Number	P.O Number	Matrix: Soil/Solid, Composite, GW, DW, WW, S, Other	Analysis

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	Soil/Solid	Composite	GW	DW	WW	S	Other	Remarks / Cooler ID
WSW-19	9-26	1120	G			X				
WSW-20	"	1135	"			"				
WSW-21	"	1140	"			"				
WSW-22	"	1145	"			"				
WSW-23	9-26	1200	"			"				
WSW-24 (PEC)	9-25	1237	"			"				
WSW-24 (POST)	"	1242	"			"				
WSW-25	"	1315	"			"				
WSW-26	"	1345	"			"				
WSW-27	9-25	1355	G			X				

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Relinquished by / Sampler	Date	Time	Received by	Date	Time
1	Chris Lashy	9-26-12	1800		9-26-12	1800
2		9-27-12	1245		9-27-12	1245
3		Date	Time		Date	Time
4		9/27/12	1345		9-27-12	1345

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check): ☐ Yes ☐ No ☐ Ice Pack; Receipt Temp: 1.0 °C; Temp. Blank: ☐ Y ☐ N

1 of 1

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No (803) 791-9111
www.shealylab.com

SHEALY

Chain of Custody Record

Number 20560

Client: MEC	Report to Contact: B Shaw	Sampler (Printed Name): Chris Leahy	Quote No.
Address: 235 B. Dooly Rd	Telephone No. / Fax No. / Email: 803-808-2093	Waybill No.	Page: 9 of 10
City: Lexington	State: SC	Zip Code: 29073	Number of Containers
Project Name: Smith Grassy	Preservative: 1. Ureres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH		Bottle (See Instructions on back)
Project Number	P.O. Number		Preservative
			Lot No. NI2363

Sample I.D. / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: Btex, naphth mtbe	1,2 DCA	8 oxygenates	Ethanol	EDB	Remarks / Cooler ID
WSW-28	9-25	1430	G		X				X	X	X	X	X	Lppb Low
WSW-29	9-26	955												Detection
WSW-30	9-26	1052												Limit
WSW-31	9-26	1131												
WSW-32	9-25	1105												
WSW-33		1115												
WSW-34		1039												
WSW-35		1125												
WSW-36		1137												
WSW-37	9-25	1149	G		X				X	X	X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐ High Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler: Chris Leahy	9-26-12	1800	1. Received by	9-26-12	1800
2. Relinquished by	9-27-12	0845	2. Received by: A Ewen	9-27-12	1245
3. Relinquished by			3. Received by		
4. Relinquished by	9/27/12	1345	4. Laboratory Received by	9-27-12	1345

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check) ☑ Yes ☐ No ☐ Ice Pack — Receipt Temp. 1.0 °C — Temp. Blank ☑ Y / ☐ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Midlands Environmental Consultants, Inc.
235 Dooley Rd
Lexington, SC 29073
Attention: Bryan Shane

Project Name: **Smith's Grocery**

Project Number: **12-3946**

Lot Number: **NI28028**

Date Completed: **10/12/2012**

Kelly M. Maberry
Project Manager

ACCREDITED IN ACCORDANCE WITH nelac

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative

Midlands Environmental Consultants, Inc.

Lot Number: NI28028

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary

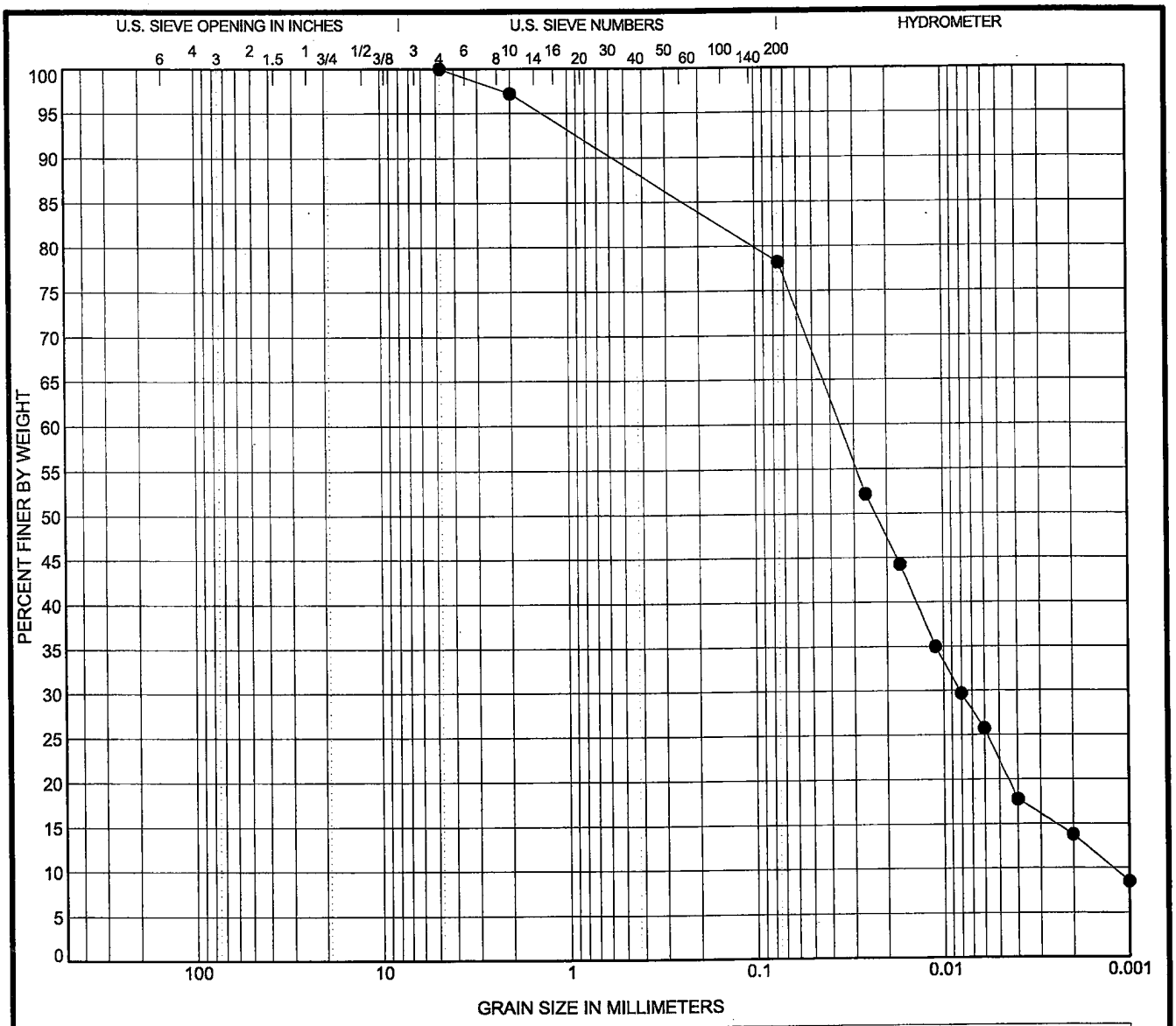
Midlands Environmental Consultants, Inc.

Lot Number: NI28028

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	MW-11R (54')	Solid	09/26/2012 0900	09/28/2012
002	MW-7R (43')	Solid	09/26/2012 0930	09/28/2012

(2 samples)

Subcontracted Data



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen		Sample Description	LL	PL	PI
● MW-11R	54.0 ft	**Silt with sand (ML) visual description**	–	–	–

Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D1140					**0.0**	**21.8**	**64.4**	**13.8**

Percent Finer

Sieve Size	200	10	4
% Finer	78.2	97.2	100.0

Tested By	Tested Date	Reviewed By	Calc By
DH	10/4/12	SRH	MDE

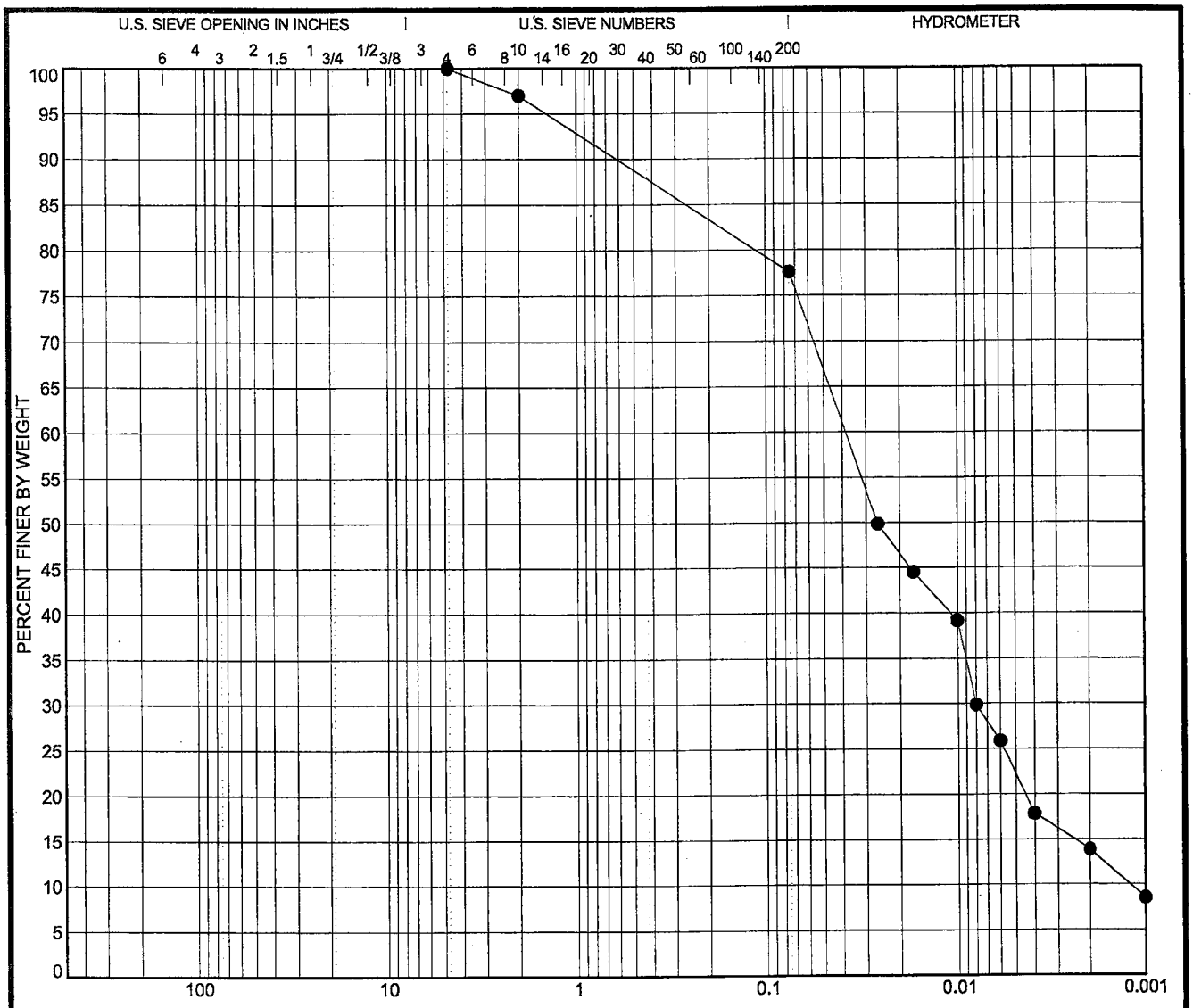
Schnabel ENGINEERING

GRADATION CURVE

Project: Shealy Laboratory
NI 28028
West Columbia, SC

Contract: 08190058.00.148

SIEVE 1/SHEET HYDROMETERS-2.GPJ SCHNABEL DATA TEMPLATE 2008 04 22.GDT 10/10/12



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen		Sample Description	LL	PL	PI
● MW-7R	43.0 ft	**Silt with sand (ML) visual description**	–	–	–

Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D1140					**0.0**	**22.4**	**63.7**	**13.9**

Percent Finer

Sieve Size	200	10	4
% Finer	77.6	97.0	100.0

Tested By	Tested Date	Reviewed By	Calc By
DH	10/4/12	SRH	MDE

Schnabel ENGINEERING

GRADATION CURVE

Project: Shealy Laboratory
NI 28028
West Columbia, SC

Contract: 08190058.00.149

SIEVE 1/SHEET HYDROMETERS-2.GPJ SCHNABEL DATA TEMPLATE 2008 04 22.GDT 10/10/12

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

SHEALY

Chain of Custody Record

Number 20571

Client: MEC1	Report to Contact: B. Shane	Sampler (Printed Name): John C. Bryant	Quote No.
Address: 735B Dooley Rd	Telephone No. / Fax No. / Email	Waybill No.	Page 1 of 1
City: Lexington / State: SC / Zip Code: 29073	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCl 6. Na Thio. 7. NaOH		Number of Containers / Bottle (See instructions on back) / Preservative
Project Name: Smith's Grocery			Lot No. 112828
Project Number	P.O. Number		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: Gravimetric / Hydrocarbons	Remarks / Cooler ID
MW-11R (54')	9/28	9:00	G				X		X	
MW-7R (43')	9/28	9:30	G				X		X	

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler	9/28/12	1200	1. Received by	9/28/12	1200
2. Relinquished by	9/28/12	1155	2. Received by	9/28/12	1155
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by	9/28/12	1400	4. Laboratory Received by	9/28/12	Time 1400

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check): ☑ Yes ☐ No ☐ Ice Pack — Receipt Temp. 4.0 °C — Temp. Blank ☐ Y ☑ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc
Document Number: FAD-016
Revision Number: 9

Page 1 of 1
Replaces Date: 03/06/11
Effective Date: 10/17/11

Sample Receipt Checklist (SRC)

Client: MCI Cooler Inspected by/date: ECE 9/26/12 Lot #: NI28028

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐		2. If custody seals were present, were they intact and unbroken?
Cooler ID/temperature upon receipt: / °C / °C (Trip Blank °C from VOA lot) / °C			
Method: ☐ Temperature Blank ☑ Against Bottles ☐ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other _____. (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☑	No ☐		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☐	No ☐	NA ☑	16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/TRPH/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH) with the SR # (number) _____

Sample(s) _____ were received with bubbles >6 mm in diameter.

Sample(s) _____ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: _____ Date of response: _____

Comments: _____

APPENDIX C:

TAX MAP

Tax Data Obtained from York County GIS Department

Tax Map Data
(Water Supply Well Locations)

Smith's Grocery
3716 Charlotte Highway
York, South Carolina
SCDHEC Site ID# 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 29, 2012
Apendix C

ID	Tax Map #	Owner
A	4560000043 Site WSW-1	Byrum Boyd A Life Estate 3176 Charlotte Highway York, SC 29745
B	4890401024 WSW-2 GAC Unit	Gary A. Wiggam 3043 Clover Circle York, SC 29745
C	4890401023 WSW-3 GAC Unit	Susan W. & Tony H. Hill 3049 Clover Circle York, SC 29745
D	4890401022 WSW-4	Michelle Belcher 2101 Pinewild Court York, SC 29745
E	4890401019 WSW-5	Henry Ray Emser 2106 Pinewild Court York, SC 29745
F	4890401018 WSW-6	Clyde W. & Iris R. Dooley 2100 Pinewild Court York, SC 29745
G	4890401017 WSW-7	Susan K. Trear & John A. Okain 3071 Clover Circle York, SC 29745
H	4890401016 WSW-8	Lewis F. & Lana D. Hefner III 3077 Clover Circle York, SC 29745
I	4890401015 WSW-9	Richard J. Bedner Jr. 3085 Clover Circle York, SC 29745
J	4890401013 WSW-10	Paul & Irene Caltagirone 3140 Tallamore Lane York, SC 29745
K	4890401012 WSW-11	Robert C. & Jetta L. Baumgardner 3130 Tallamore Lane York, SC 29745
L	4890401011 WSW-12	Victor & Evelyn Bresg 3124 Tallamore Lane York, SC 29745
M	4890401010 WSW-13	Albert B. Small 3118 Tallamore Lane York, SC 29745
N	4890401009 WSW-14	Richard W. & Vicie L. Judy 3112 Tallamore Lane York, SC 29745
O	4890401008 WSW-15	William L. & Leah H. Youngblood 3106 Tallamore Lane York, SC 29745
P	4890401007 WSW-16	Scott A. Reed 3100 Tallamore Lane York, SC 29745
Q	4890401006 WSW-17	Steve A. & Layliona T. Edison 3001 Clover Circle York, SC 29745
R	4890401005 WSW-18	Jeff C. & Marcy A. Buck 3011 Clover Circle York, SC 29745
S	4890401004 WSW-19	Ramon L. Guzman 3017 Clover Circle York, SC 29745
T	4890401003 WSW-20	Kevin A. & Ursula A. Shuler 3023 Clover Circle York, SC 29745
U	4890401002 WSW-21	Joseph J. Galambos 3029 Clover Circle York, SC 29745
V	4890401001 WSW-22	Everette D. & Janet E. Crook 3035 Clover Circle York, SC 29745
W	4890401027 WSW-23	Michael V. McCarter 3032 Clover Circle York, SC 29745
X	4890401028 WSW-24 GAC UNIT	Christopher D. Jeter 3040 Clover Circle York, SC 29745
Y	4890401029 WSW-25	Kenny L. Tamara L. Beasley 3050 Clover Circle York, SC 29745
Z	4890401030 WSW-26	Michael D. & Leann R. Lowrey 3060 Clover Circle York, SC 29745
AA	4890401031 WSW-27	Joseph C. Elaine D. Biggers 3070 Clover Circle York, SC 29745
BB	4890401032 WSW-28	Robert B. & Jacie Braden 3129 Tallamore Lane York, SC 29745
CC	4890401033 WSW-29	William D. & Betty L. Tyndall 3121 Tallamore Lane York, SC 29745
DD	4890401025 WSW-30	James K. & Catherine G. North 3016 Clover Circle York, SC 29745
EE	4890401026 WSW-31	Debra L. Goransson 3022 Clover Circle York, SC 29745
FF	4530101002 WSW-32	Jeffery V. & Rebecca Laney 2111 Old McKinney Road York, SC 29745
GG	4540000024 WSW-33	John E. & Sally Schimepfinig 2131 Old McKinney Road York, SC 29745
HH	4560000003 WSW-34	Frontis T. & Etta H. Hemphill 2146 Old McKinney Road York, SC 29745
II	4560000007 WSW-35	William & Daisy Lowery 2143 Old Son Lowery Road York, SC 29745
JJ	4560000008 WSW-36	Frontis Tyree Hemphill 2140 Old Son Lowery Road York, SC 29745
KK	4560000040 WSW-37	
LL	4560000010 WSW-38	Forest L. & Helen W. Montgomery 3243 Charlotte Higway York, SC 29745

Tax Data Obtained from York County GIS Department

Tax Map Data
(Water Supply Well Owner Information)

Smith's Grocery
3116 Charlotte Highway
York, South Carolina
SCDHEC Site ID# 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 29, 2012
Apendix CA

APPENDIX D:

SOIL BORING/FIELD SCREENING LOGS & 1903 FORMS

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** GPW-1

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 72.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Direct Push Water Sample-No Soil	72.0	72.0
Temporary Boring Abandoned		
by Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Portland-Bentonite		
Cement Slurry on 04/16/12.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: GPW-1

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 72.0 ft. Date Started: 04/16/2012 Date Completed: 04/16/2012

10. CASING: ☐ Threaded ☐ Welded
Diam.: _____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
_____ in. to _____ ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☑ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 72.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B ✓ C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** GPW-2

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 66.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Direct Push Water Sample-No Soil	66.0	66.0
Temporary Boring Abandoned		
by Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Portland-Bentonite		
Cement Slurry on 04/16/12.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
GPW-2

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 04/16/2012
66.0 ft. Date Completed: 04/16/2012

10. CASING: ☐ Threaded ☐ Welded
Diam.: _____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
_____ in. to _____ ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET.
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☑ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 66.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** GPW-3

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 70.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Direct Push Water Sample-No Soil	70.0	70.0
Temporary Boring Abandoned		
by Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Portland-Bentonite		
Cement Slurry on 04/16/12.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
GPW-3

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 70.0 ft. Date Started: 04/16/2012 Date Completed: 04/16/2012

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft. **NOTE: MULTIPLE SCREENS**
____ ft. and ____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☑ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 70.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois
(last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** GPW-4

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 80.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Direct Push Water Sample-No Soil	80.0	80.0
Temporary Boring Abandoned		
by Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Portland-Bentonite		
Cement Slurry on 04/16/12.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
GPW-4

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 80.0 ft. Date Started: 04/16/2012 Date Completed: 04/16/2012

10. CASING: ☐ Threaded ☐ Welded
Diam.: _____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
_____ in. to _____ ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☑ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 80.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/08/2012
Well Driller

If D Level Driller, provide supervising driller's name:

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** GPW-5

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 75.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Direct Push Water Sample-No Soil	75.0	75.0
Temporary Boring Abandoned		
by Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Portland-Bentonite		
Cement Slurry on 04/16/12.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
GPW-5

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 75.0 ft. Date Started: 04/16/2012 Date Completed: 04/16/2012

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☑ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 75.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** GPW-6

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 75.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Direct Push Water Sample-No Soil	75.0	75.0
Temporary Boring Abandoned		
by Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Portland-Bentonite		
Cement Slurry on 04/17/12.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
GPW-6

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 75.0 ft. Date Started: 04/17/2012 Date Completed: 04/17/2012

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☑ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 75.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** GPW-7

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 75.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Direct Push Water Sample-No Soil	75.0	75.0
Temporary Boring Abandoned		
by Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Portland-Bentonite		
Cement Slurry on 04/17/12.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
GPW-7

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 75.0 ft. Date Started: 04/17/2012 Date Completed: 04/17/2012

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☑ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 75.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** GPW-8

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 75.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Direct Push Water Sample-No Soil	75.0	75.0
Temporary Boring Abandoned		
by Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Portland-Bentonite		
Cement Slurry on 04/17/12.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
GPW-8

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 04/17/2012
75.0 ft. Date Completed: 04/17/2012

10. CASING: ☐ Threaded ☐ Welded
Diam.: _____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
_____ in. to _____ ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☑ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 75.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** GPW-9

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 35.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Direct Push Water Sample-No Soil	35.0	35.0
Temporary Boring Abandoned		
by Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Portland-Bentonite		
Cement Slurry on 04/17/12.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
GPW-9

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 35.0 ft. Date Started: 04/17/2012 Date Completed: 04/17/2012

10. CASING: ☐ Threaded ☐ Welded
Diam.: _____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
_____ in. to _____ ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☑ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 35.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** GPW-10

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 35.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Direct Push Water Sample-No Soil	35.0	35.0
Temporary Boring Abandoned		
by Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Portland-Bentonite		
Cement Slurry on 04/17/12.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
GPW-10

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 35.0 ft. Date Started: 04/17/2012 Date Completed: 04/17/2012

10. CASING: ☐ Threaded ☐ Welded
Diam.: _____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
_____ in. to _____ ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☑ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 35.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** GPW-11

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 40.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Direct Push Water Sample-No Soil	40.0	40.0
Temporary Boring Abandoned		
by Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Portland-Bentonite		
Cement Slurry on 04/17/12.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
GPW-11

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 04/17/2012
40.0 ft. Date Completed: 04/17/2012

10. CASING: ☐ Threaded ☐ Welded
Diam.: _____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
_____ in. to _____ ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☑ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 40.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not Installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: FR-1 **PUBLIC SYSTEM NUMBER:** 09322

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0.0 ft. to 188.5 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Fractured Rock Boring		
Abandoned by James Darby		
Well Drilling, LLC via tremie		
pipe with approximately 31.42		
Gallons of Portlant Bentonite		
Cement Slurry on 08/29/2012.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: FR-1

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 188.5 ft. Date Started: 07/10/2012 Date Completed: 07/13/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 99.8 ft. depth
in. to ft. depth
Height: Above/Below Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Diam.:
Slot/Gauge: Length:
Set Between: ft. and ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 41.8 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield:

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ft. to ft.
Effective size Uniformity Coefficient

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From 0.0 ft. to 188.5 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type
Well Disinfected ☐ Yes ☐ No Type: Amount:

18. PUMP: Date installed: Not installed ☐
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Chad Julian **CERT. NO.:** 01422
Address: (Print) Level: (A) B C D (circle one)
2512 Zinker Road
Rock Hill, South Carolina 29732
Telephone No.: Fax No.: 803-329-2424

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Chad Julian Well Driller Date: 09/03/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (03/2004)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois
(last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: FR-2 **PUBLIC SYSTEM NUMBER:** 09322

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0.0 ft. to 204.2 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Fractured Rock Boring		
Abandoned by James Darby		
Well Drilling, LLC via tremie		
pipe with approximately 34.03		
Gallons of Portlant Bentonite		
Cement Slurry on 08/29/2012.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
FR-2

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 204.2 ft. Date Started: 07/10/2012 Date Completed: 07/13/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6.25 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.25 in. to 120.8 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 44.2 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 204.2 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Chad Julian **CERT. NO.:** 01422
Address: (Print) Level: (A) B C D (circle one)
2512 Zinker Road
Rock Hill, South Carolina 29732
Telephone No.: Fax No.: 803-329-2424

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Chad Julian Date: 09/03/2012
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (03/2004)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: FR-3 **PUBLIC SYSTEM NUMBER:** 09322

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0.0 ft. to 203.8 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Fractured Rock Boring		
Abandoned by James Darby		
Well Drilling, LLC via tremie		
pipe with approximately 33.97		
Gallons of Portlant Bentonite		
Cement Slurry on 08/29/2012.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
FR-3

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 203.8 ft. Date Started: 07/10/2012 Date Completed: 07/13/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6.25 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.25 in. to 107.7 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 41.7 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 203.8 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Chad Julian **CERT. NO.:** 01422
Address: (Print) Level: (A) B C D (circle one)
2512 Zinker Road
Rock Hill, South Carolina 29732
Telephone No.: Fax No.: 803-329-2424

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Chad Julian Well Driller Date: 09/03/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (03/2004)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: FR-4 **PUBLIC SYSTEM NUMBER:** 09322

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0.0 ft. to 200.3 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Fractured Rock Boring		
Abandoned by James Darby		
Well Drilling, LLC via tremie		
pipe with approximately 33.38		
Gallons of Portlant Bentonite		
Cement Slurry on 08/29/2012.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
FR-4

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 200.3 ft. Date Started: 07/10/2012 Date Completed: 07/13/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6.25 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.25 in. to 100.7 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 43.5 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 200.3 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Chad Julian **CERT. NO.:** 01422
Address: (Print) Level: (A) B C D (circle one)
2512 Zinker Road
Rock Hill, South Carolina 29732
Telephone No.: Fax No.: 803-329-2424

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: Chad Julian Well Driller Date: 09/03/2012
If D Level Driller, provide supervising driller's name:

DHEC 1903 (03/2004) COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: FR-5 **PUBLIC SYSTEM NUMBER:** 09322

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0.0 ft. to 203.8 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Fractured Rock Boring		
Abandoned by James Darby		
Well Drilling, LLC via tremie		
pipe with approximately 33.96		
Gallons of Portlant Bentonite		
Cement Slurry on 08/29/2012.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: FR-5

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 203.8 ft. Date Started: 07/10/2012 Date Completed: 07/13/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6.25 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.25 in. to 111.1 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 47.2 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 203.8 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Chad Julian **CERT. NO.:** 01422
Address: (Print) Level: (A) B C D (circle one)
2512 Zinker Road
Rock Hill, South Carolina 29732
Telephone No.: Fax No.: 803-329-2424

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Chad Julian Well Driller Date: 09/03/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (03/2004)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: FR-6 **PUBLIC SYSTEM NUMBER:** 09322

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0.0 ft. to 204.1 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Fractured Rock Boring		
Abandoned by James Darby		
Well Drilling, LLC via tremie		
pipe with approximately 34.02		
Gallons of Portlant Bentonite		
Cement Slurry on 08/29/2012.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS: FR-6		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 204.1 ft. Date Started: 07/10/2012 Date Completed: 07/13/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6.25 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.25 in. to 101.5 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 46.7 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 204.1 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Chad Julian **CERT. NO.:** 01422
Address: (Print) Level: (A) B C D (circle one)
2512 Zinker Road
Rock Hill, South Carolina 29732
Telephone No.: Fax No.: 803-329-2424

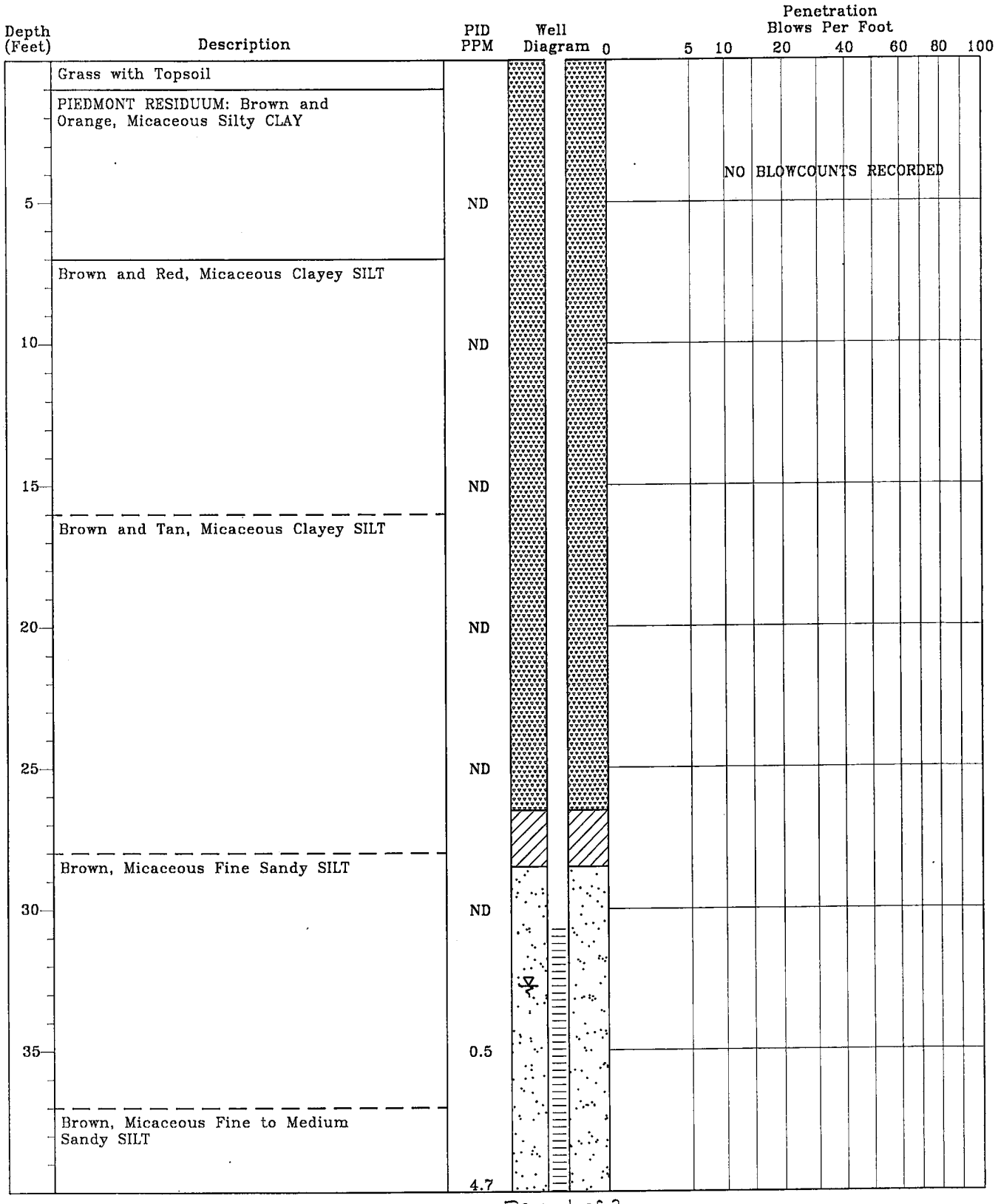
20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: Chad Julian Well Driller Date: 09/03/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (03/2004) COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

APPENDIX E:

WELL COMPLETION LOGS & 1903 FORMS



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-5R (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram	Penetration Blows Per Foot 0 5 10 20 40 60 80 100
	Boring Terminated at 40.5 Feet Below Ground Surface (BGS). Monitoring Well Installed to 40.5 Feet BGS. Groundwater Measured at 32.84 Feet Below Top of Casing on 09/26/2012.			NO BLOWCOUNTS RECORDED
45				
50				
55				
60				
65				
70				
75				

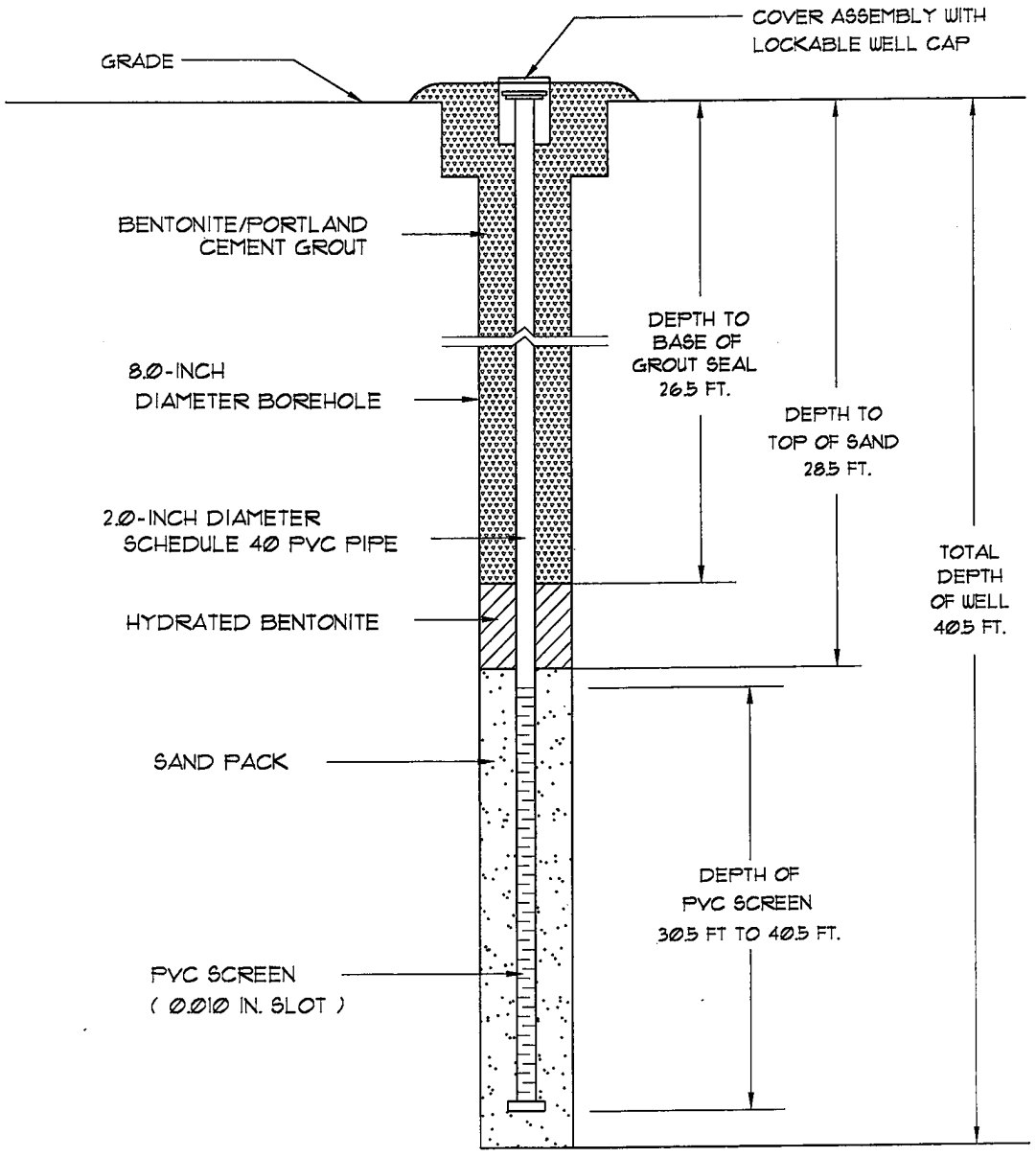
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-5R (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

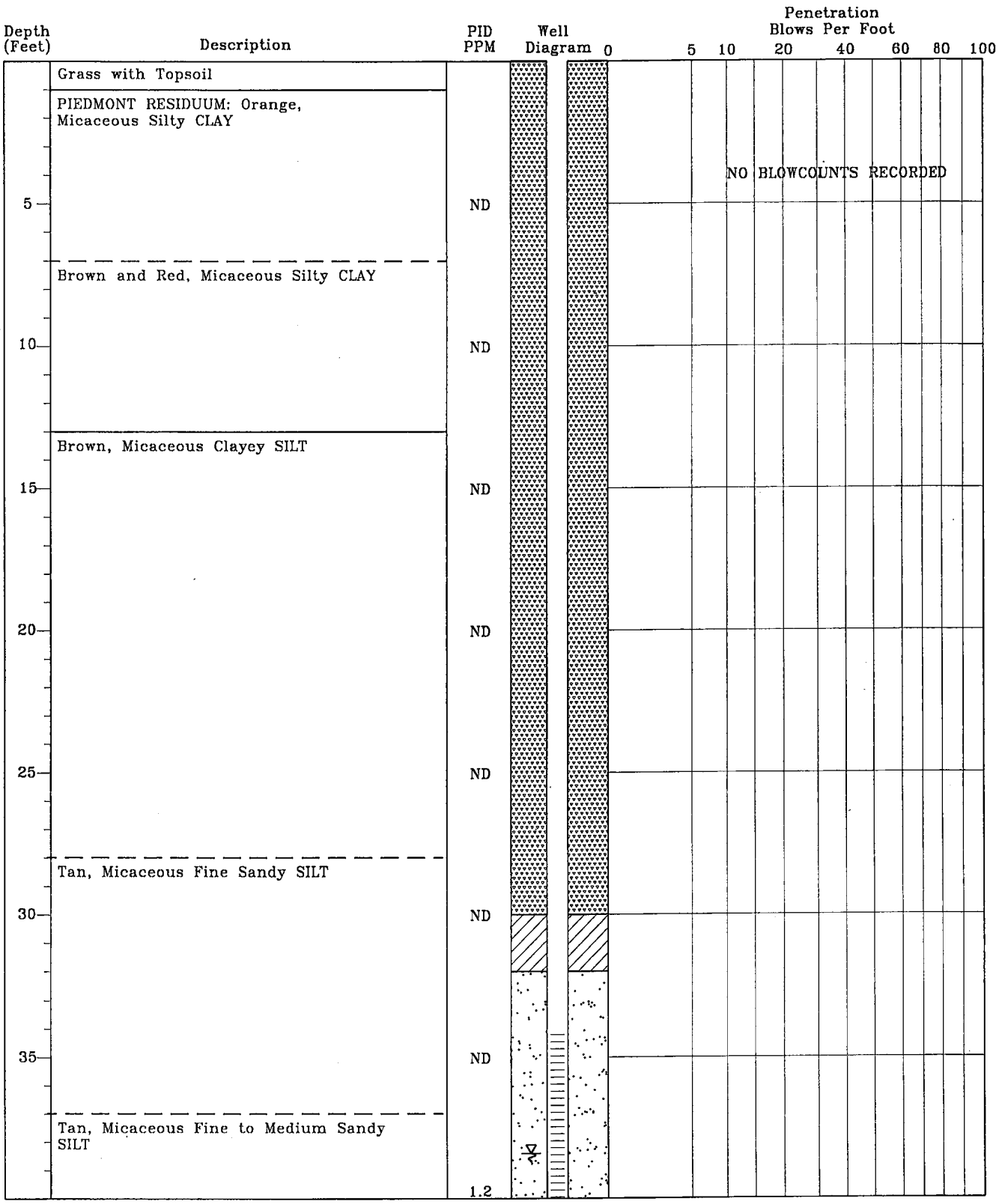
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	MW-5R (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Pobing Services
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-6R (09322)
Date Drilled:	08/28/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram	Penetration Blows Per Foot 0 5 10 20 40 60 80 100
	Brown, Micaceous Fine to Medium Sandy SILT			
		ND		NO BLOWCOUNTS RECORDED
45	Boring Terminated at 44.0 Feet Below Ground Surface (BGS). Monitoring Well Installed to 44.0 Feet BGS. Groundwater Measured at 38.15 Feet Below Top of Casing on 09/25/2012.			
50				
55				
60				
65				
70				
75				

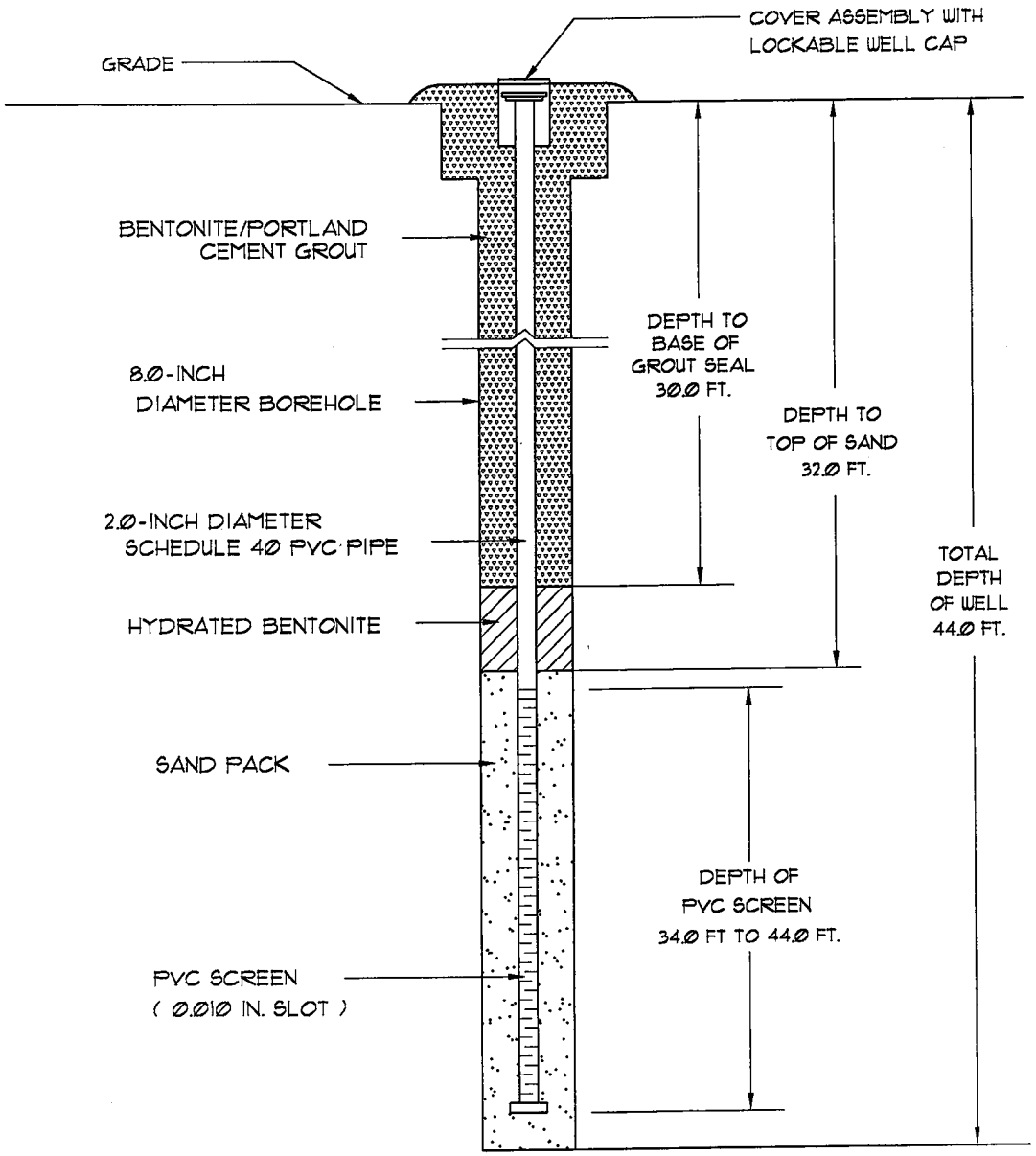
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-6R (09322)
Date Drilled:	08/28/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

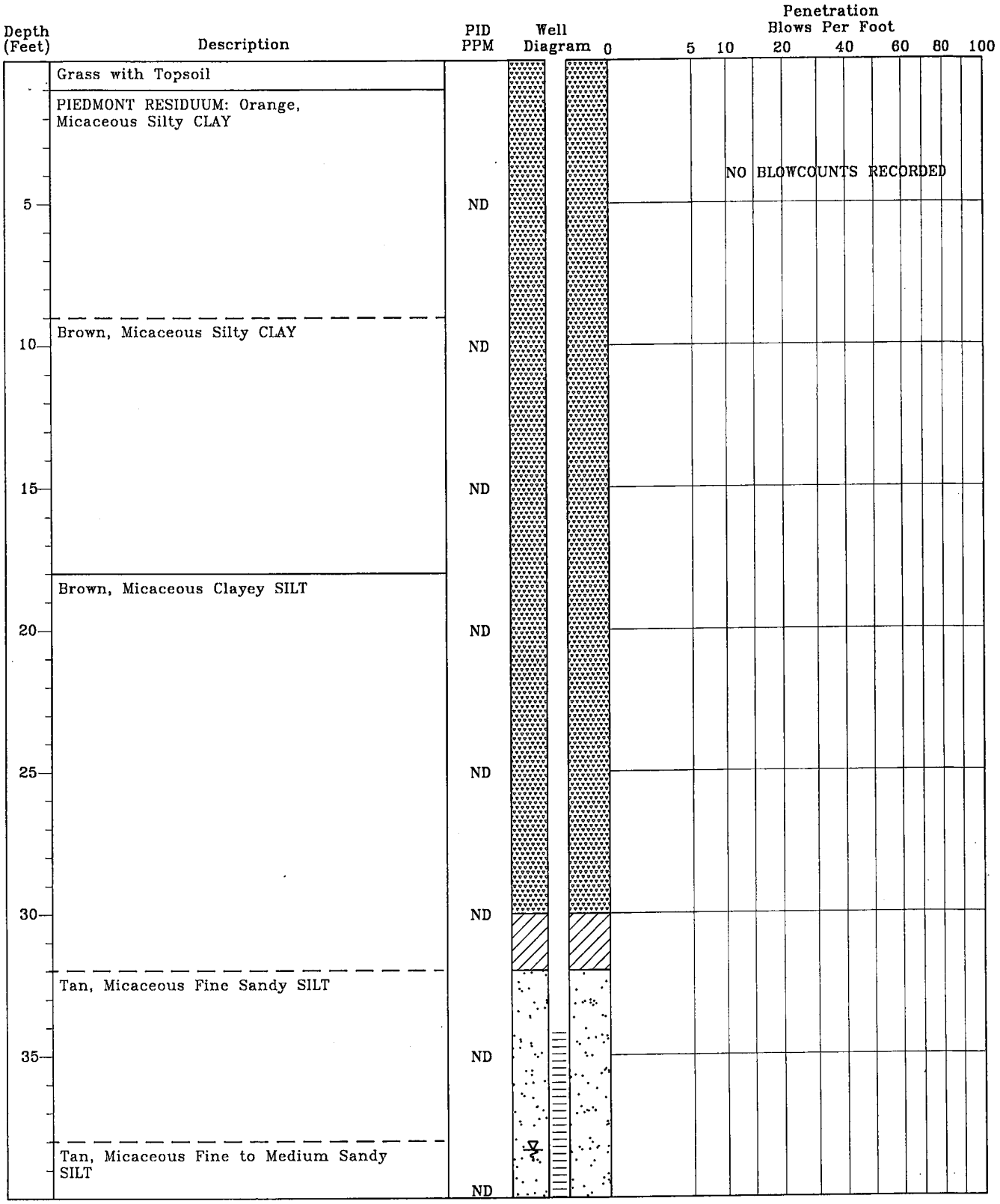
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	MW-6R (09322)
Date Drilled:	08/28/12
Drilled By:	Environmental Drilling & Pobing Services
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-7R (09322)
Date Drilled:	08/30/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram	Penetration Blows Per Foot 0 5 10 20 40 60 80 100
	Brown, Micaceous Fine to Medium Sandy SILT			NO BLOWCOUNTS RECORDED
		ND		
45	Boring Terminated at 44.0 Feet Below Ground Surface (BGS). Monitoring Well Installed to 44.0 Feet BGS. Groundwater Measured at 37.32 Feet Below Top of Casing on 09/25/2012.			
50				
55				
60				
65				
70				
75				

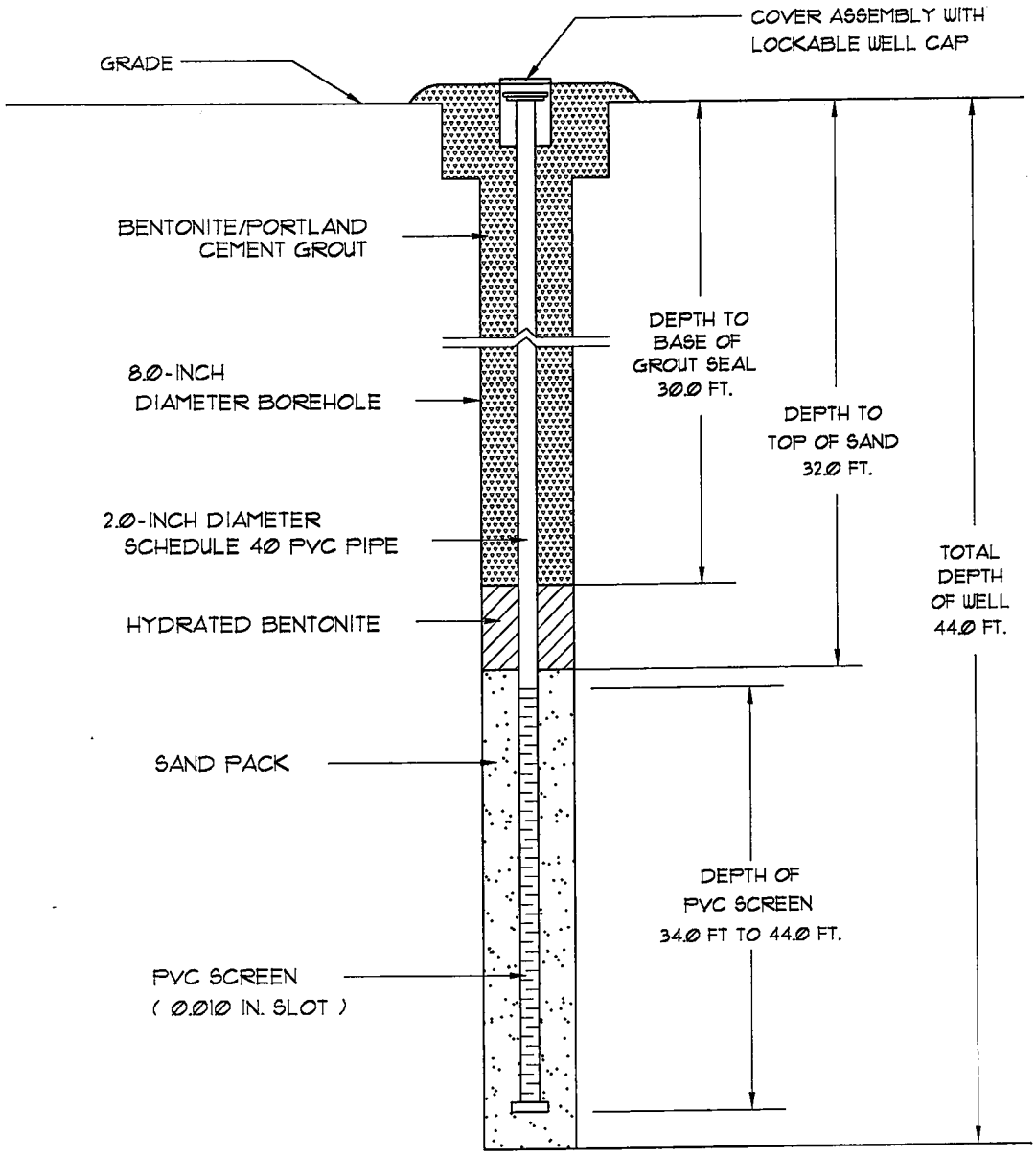
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-7R (09322)
Date Drilled:	08/30/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

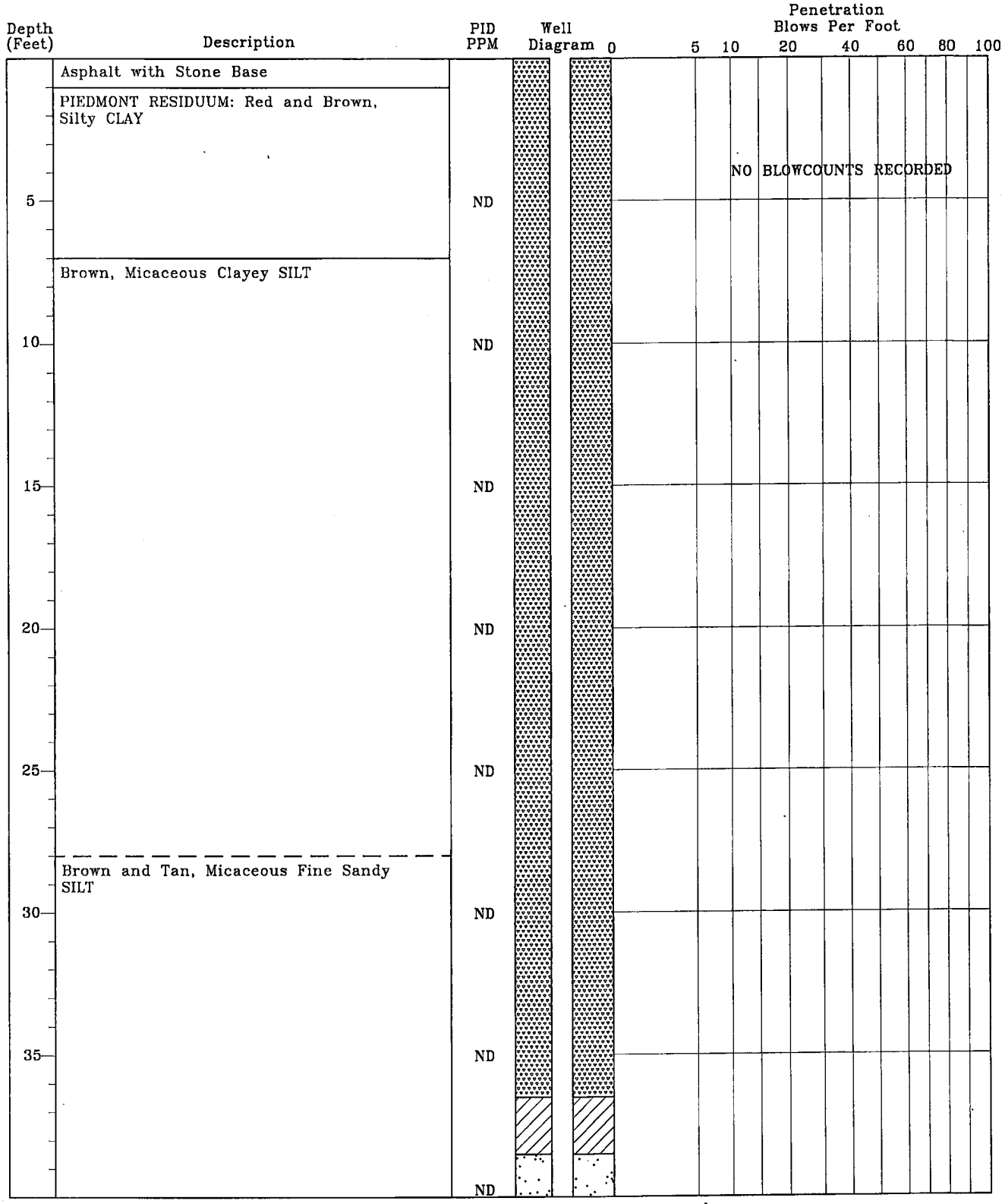
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	MW-7R (09322)
Date Drilled:	08/30/12
Drilled By:	Environmental Drilling & Poboing Services
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	R. Ariail

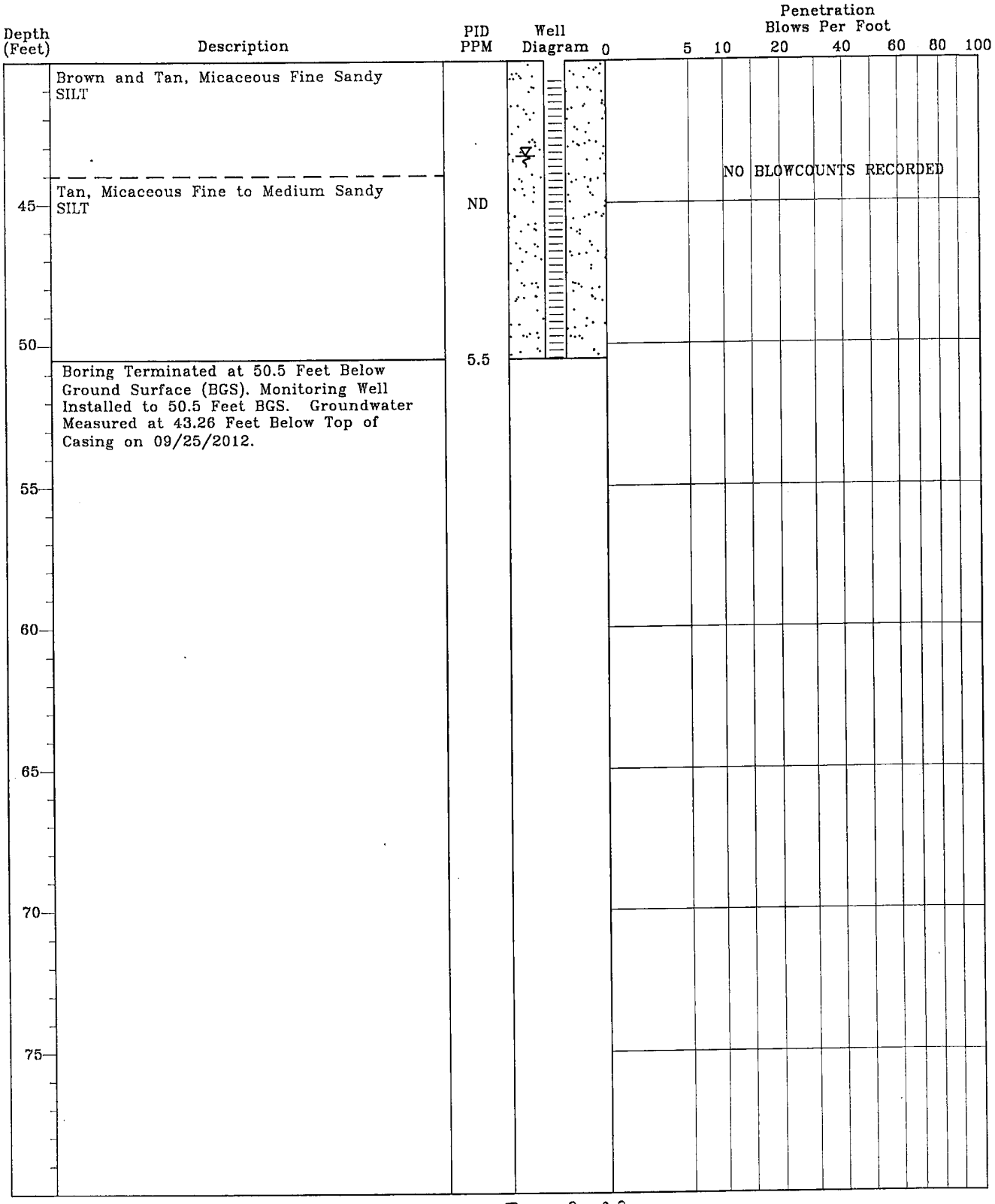
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-10R (09332)
Date Drilled:	08/28/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



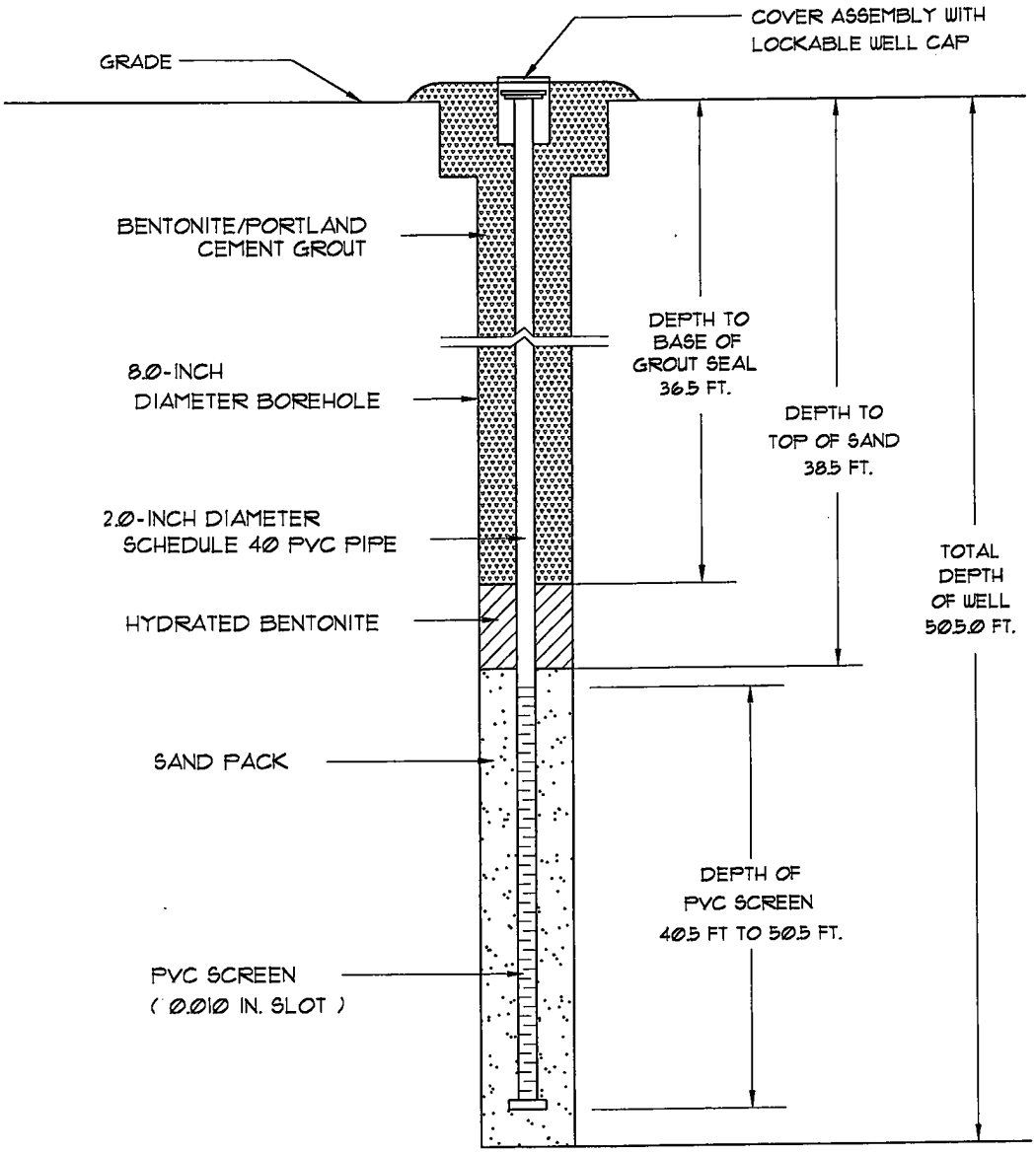
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-10R (09332)
Date Drilled:	08/28/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

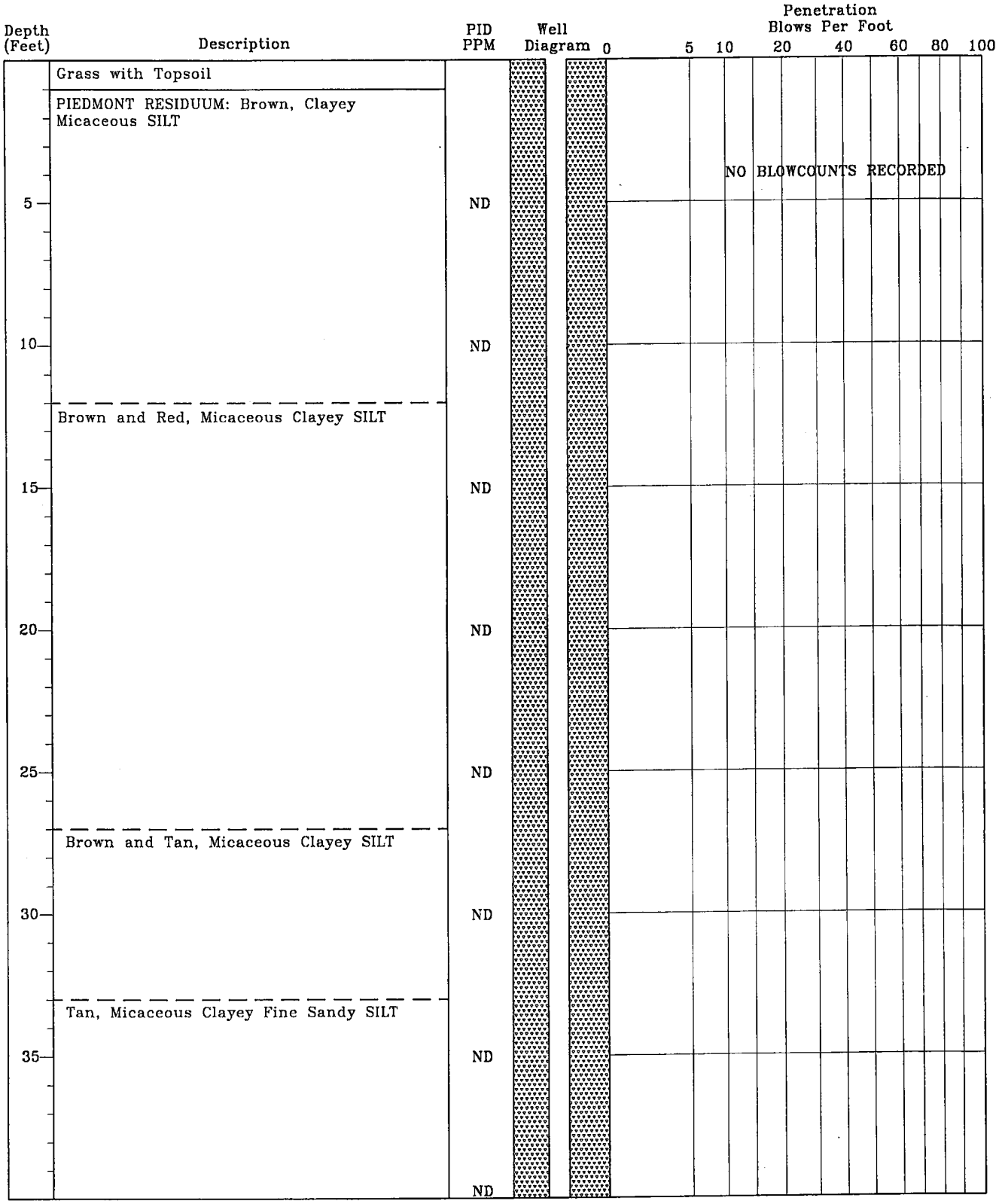
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	MW-10R (09322)
Date Drilled:	08/28/12
Drilled By:	Environmental Drilling & Poboing Services
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	R. Ariail

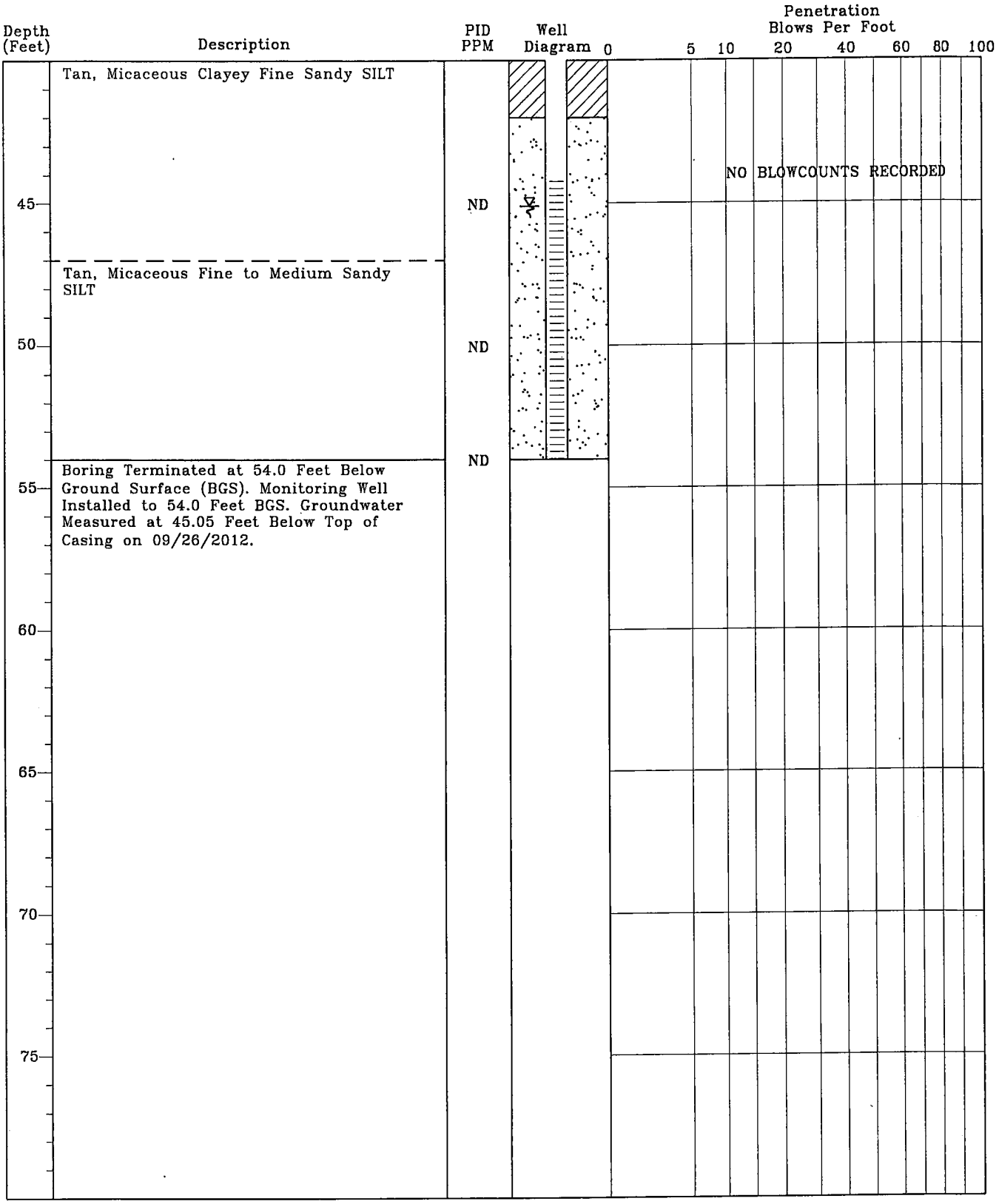
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-11R (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



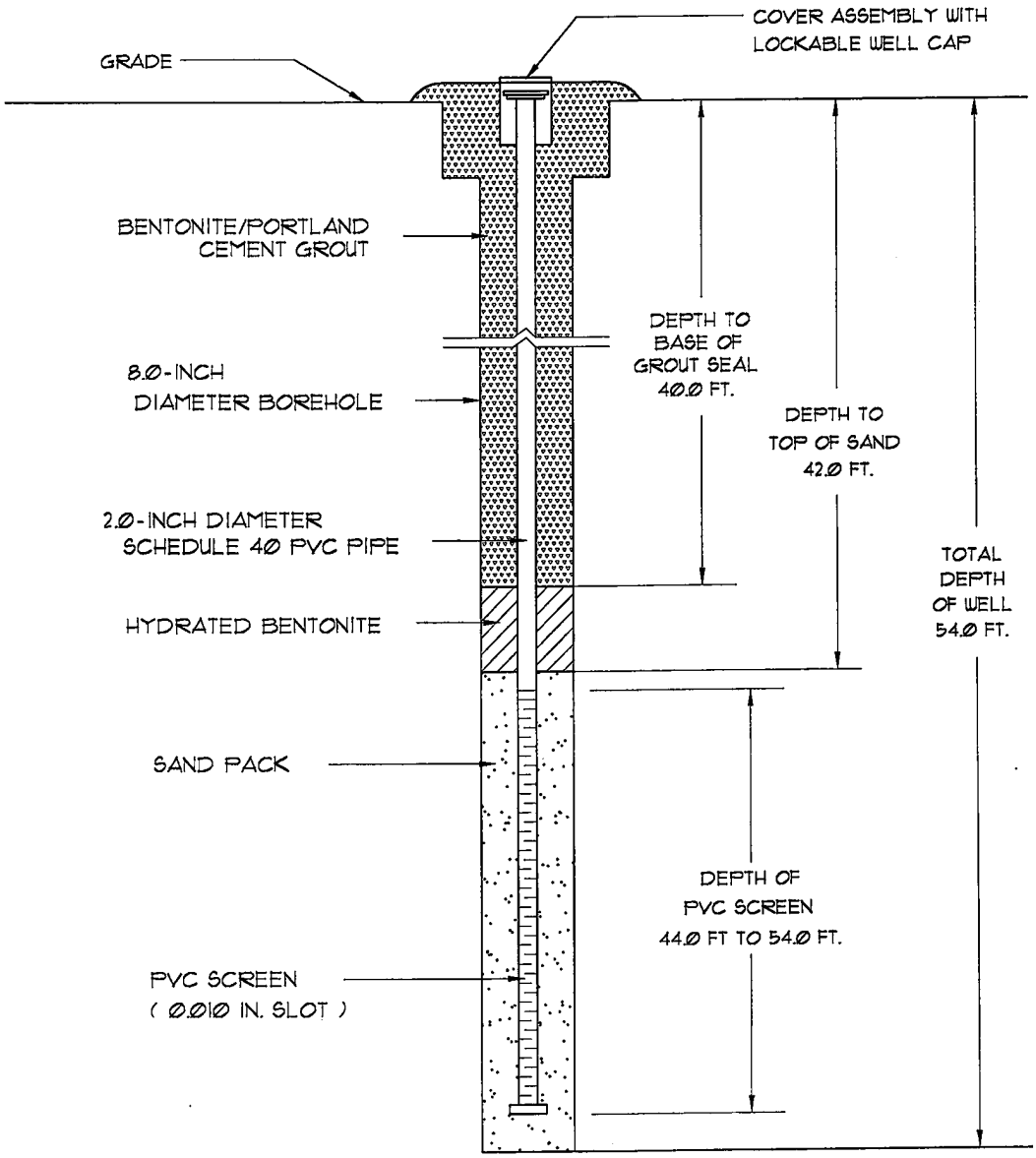
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-11R (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

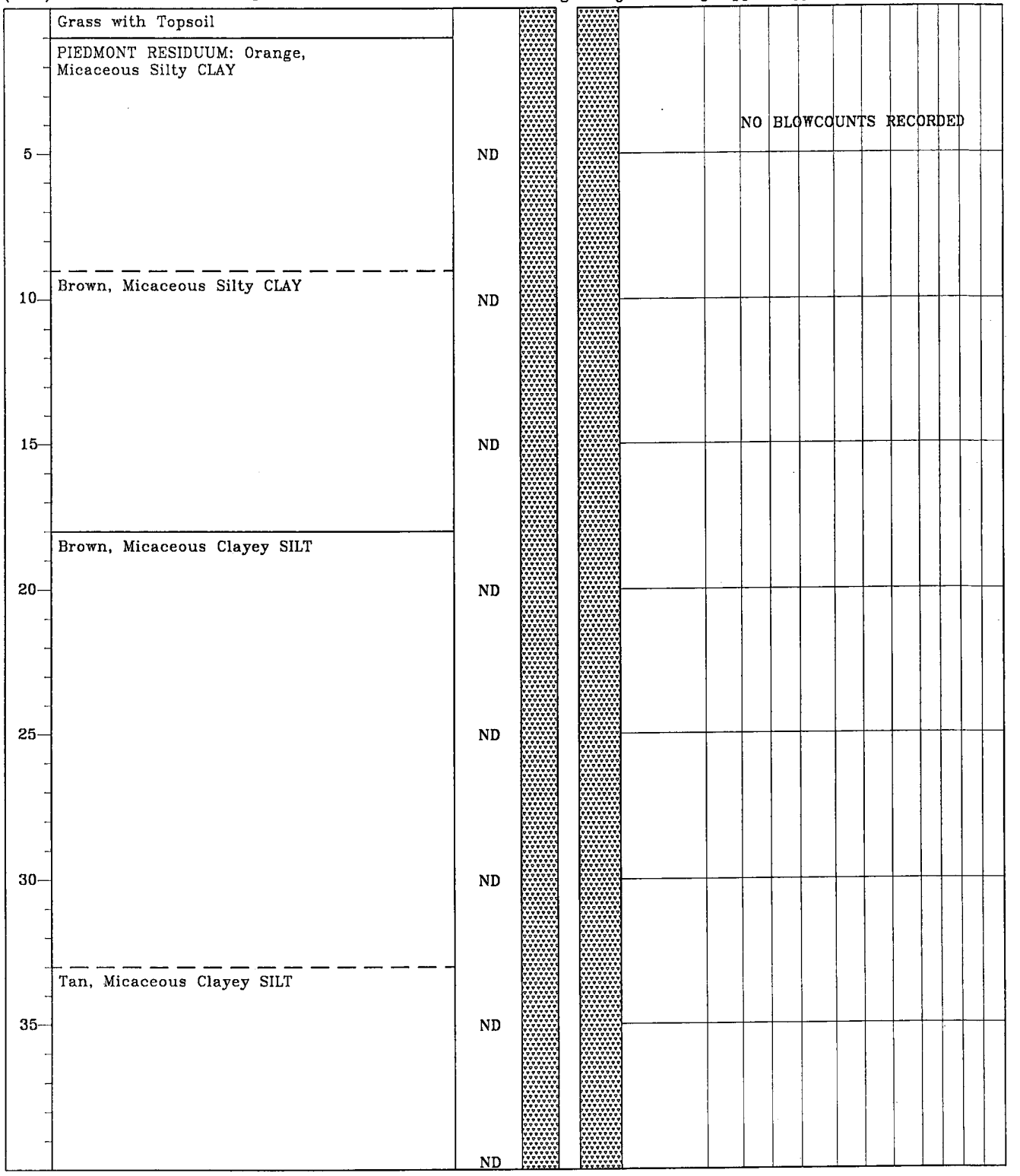
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	MW-11R (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Pobing Services
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	R. Ariail

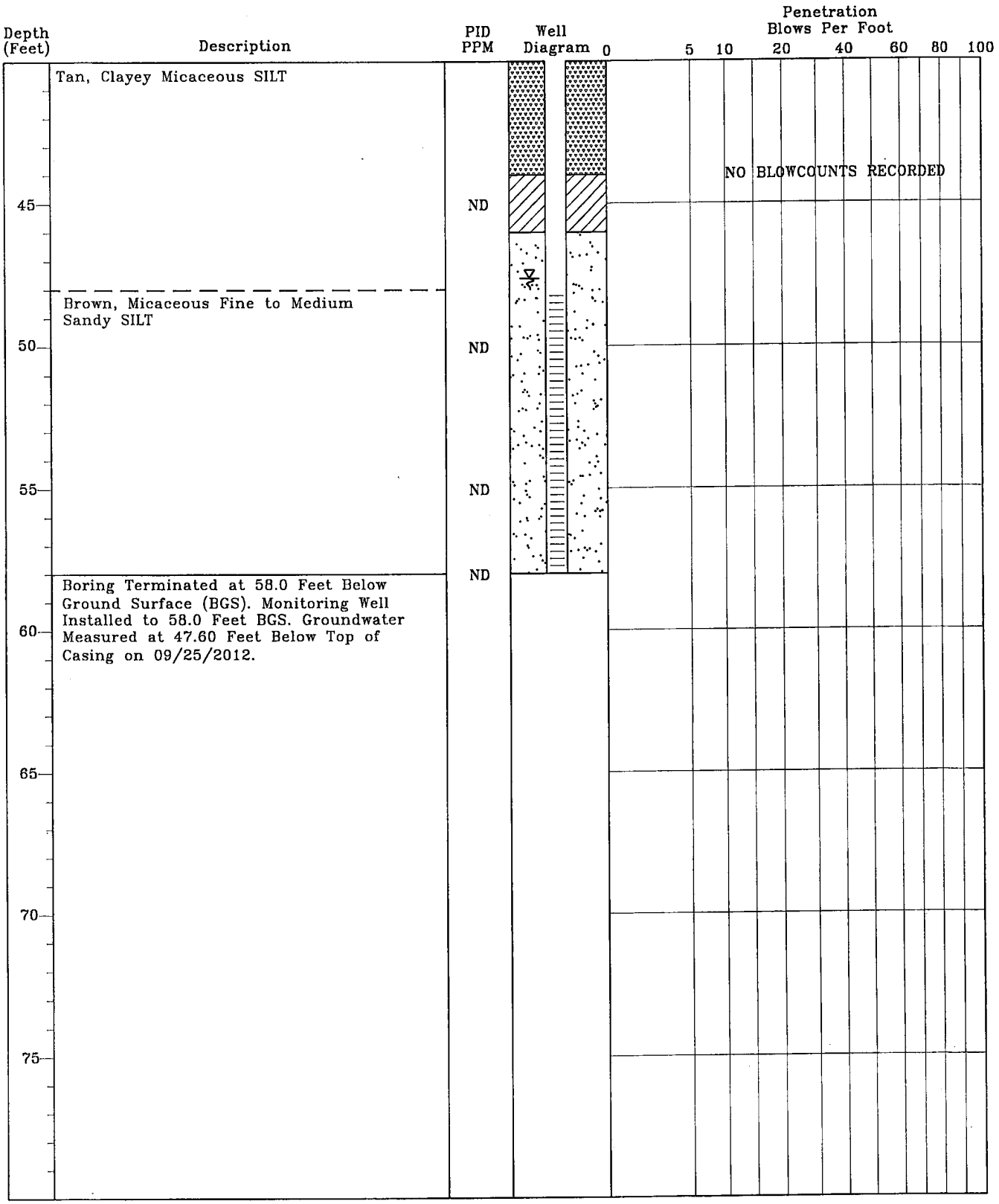
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-14R (09322)
Date Drilled:	08/21/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



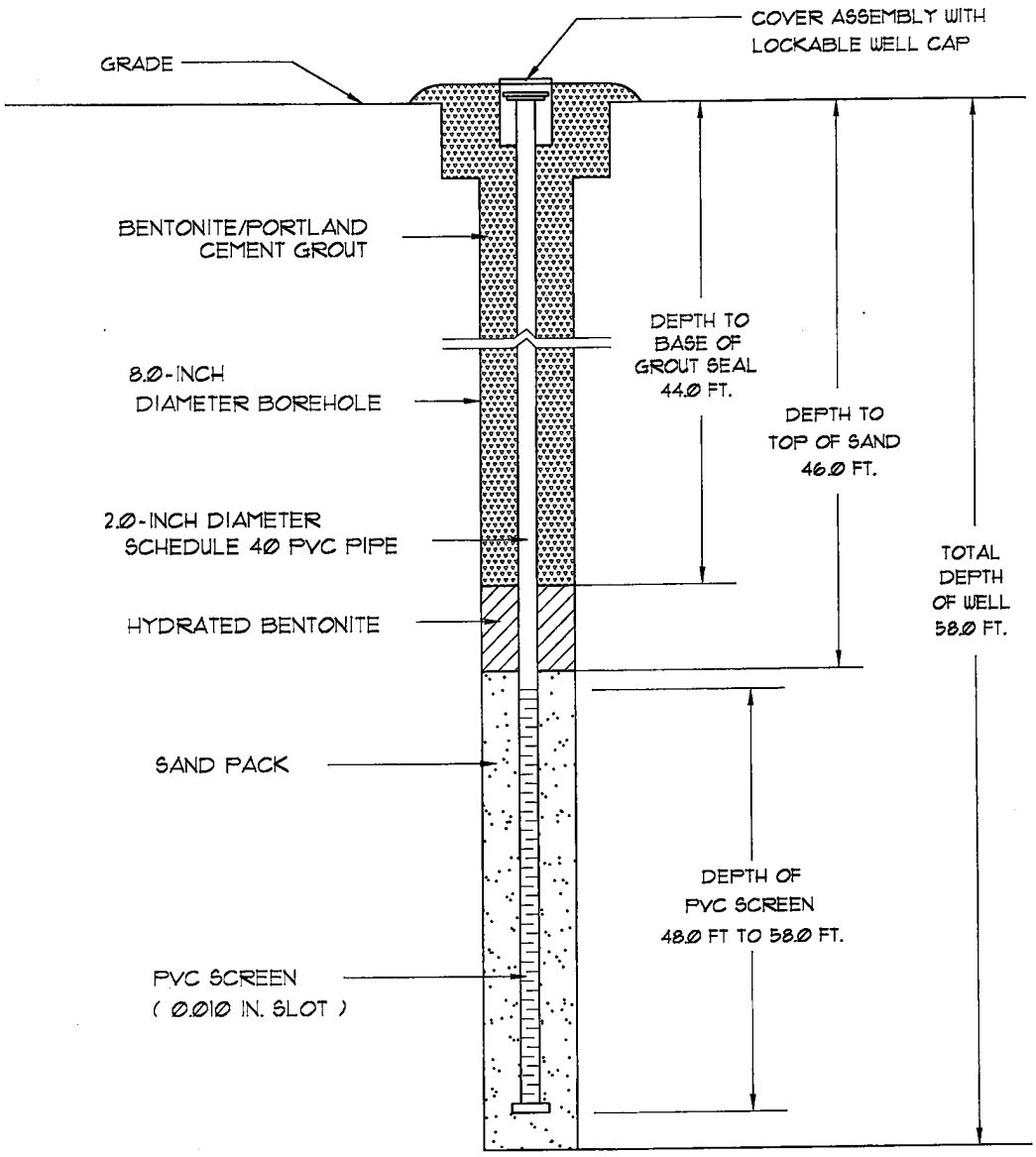
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-14R (09322)
Date Drilled:	08/21/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

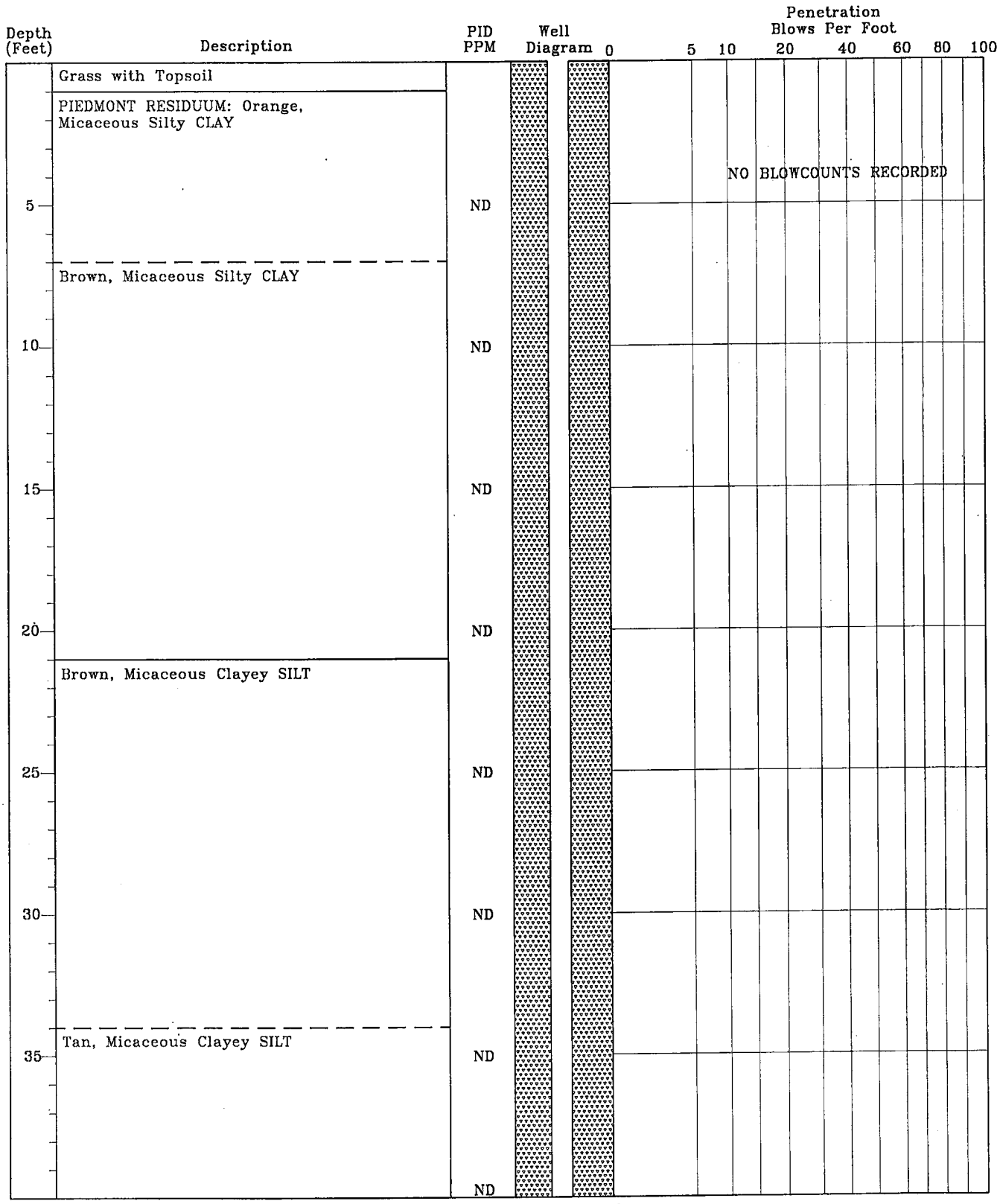
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	MW-14R (09322)
Date Drilled:	08/21/12
Drilled By:	Environmental Drilling & Pobing Services
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	R. Ariail

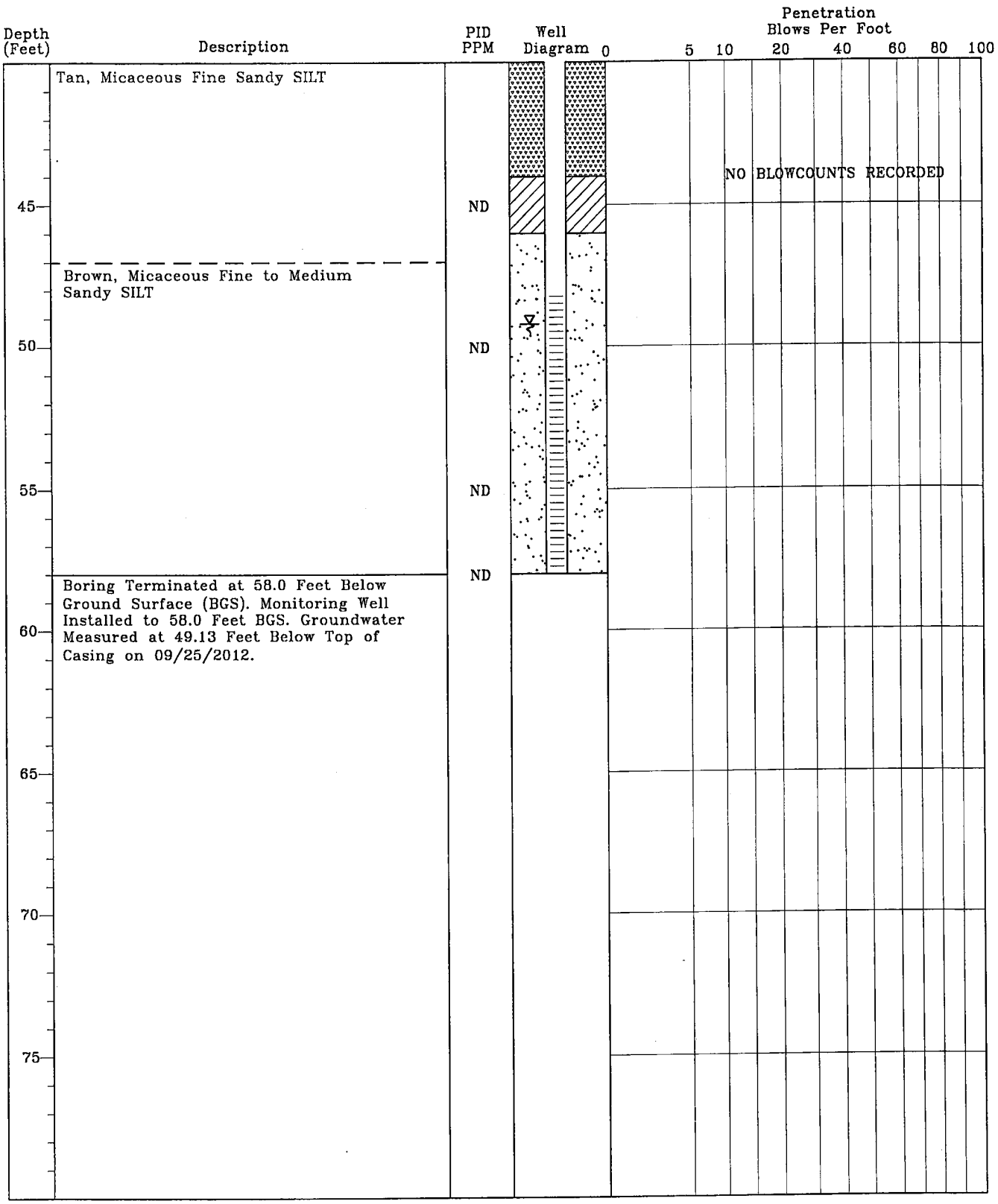
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-15R (09322)
Date Drilled:	08/21/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



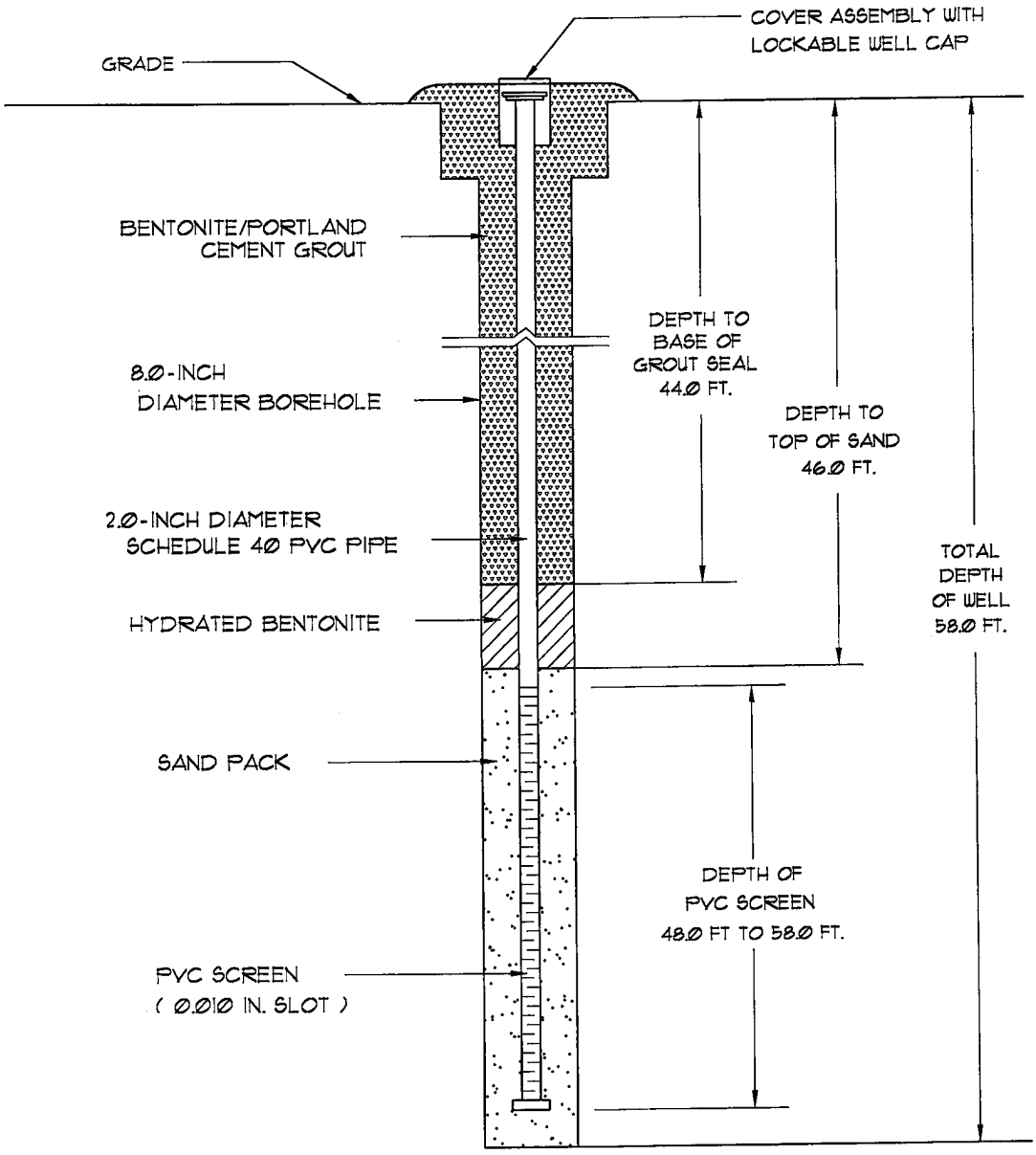
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-15R (09322)
Date Drilled:	08/21/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

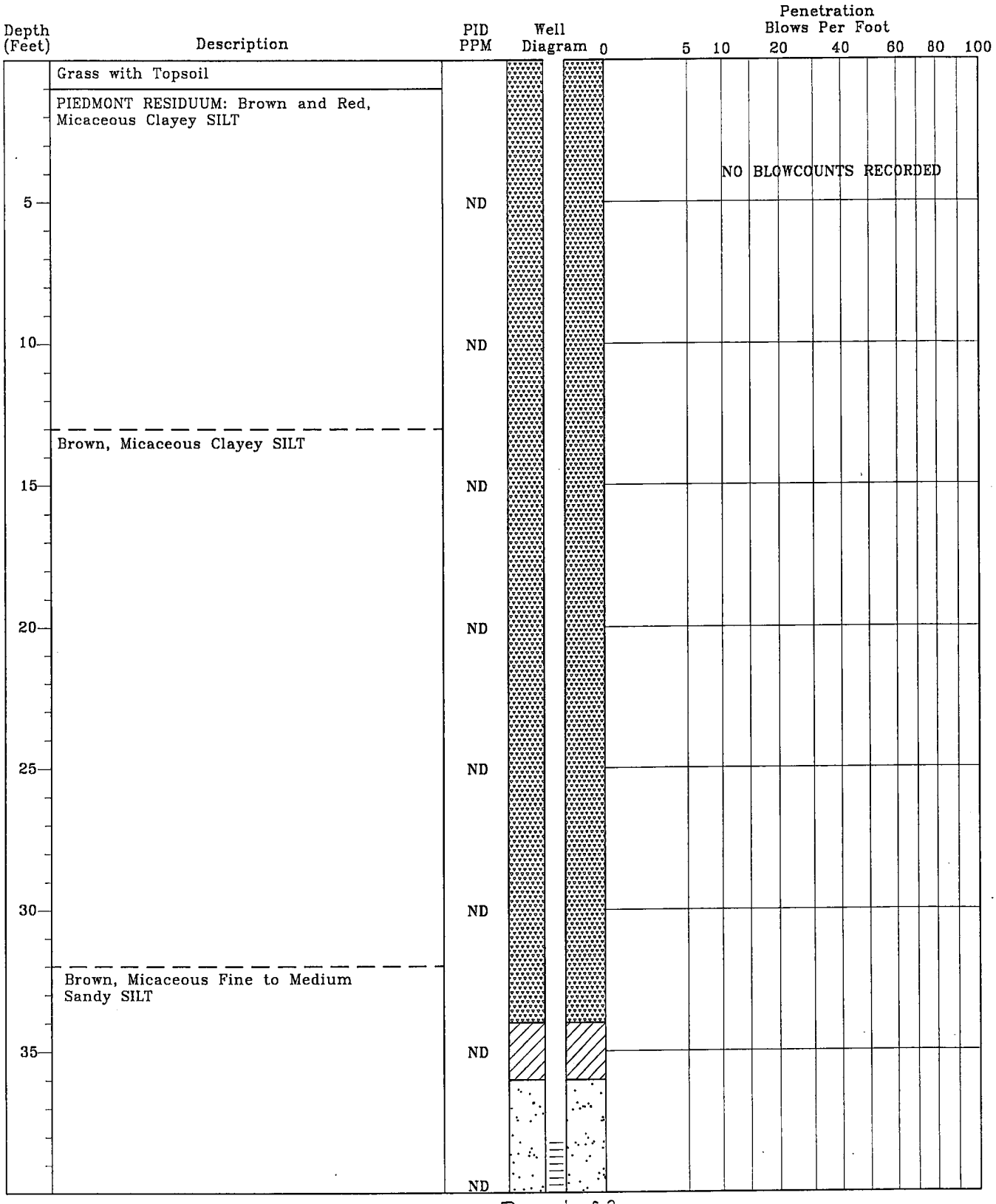
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	MW-15R (09322)
Date Drilled:	08/21/12
Drilled By:	Environmental Drilling & Pobing Services
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-17R (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram	Penetration Blows Per Foot 0 5 10 20 40 60 80 100
45	Tan, Micaceous Fine to Medium Sandy SILT	1.5		NO BLOWCOUNTS RECORDED
		0.2		
50	Boring Terminated at 48.0 Feet Below Ground Surface (BGS). Monitoring Well Installed to 48.0 Feet BGS. Groundwater Measured at 42.24 Feet Below Top of Casing on 09/25/2012.			
55				
60				
65				
70				
75				

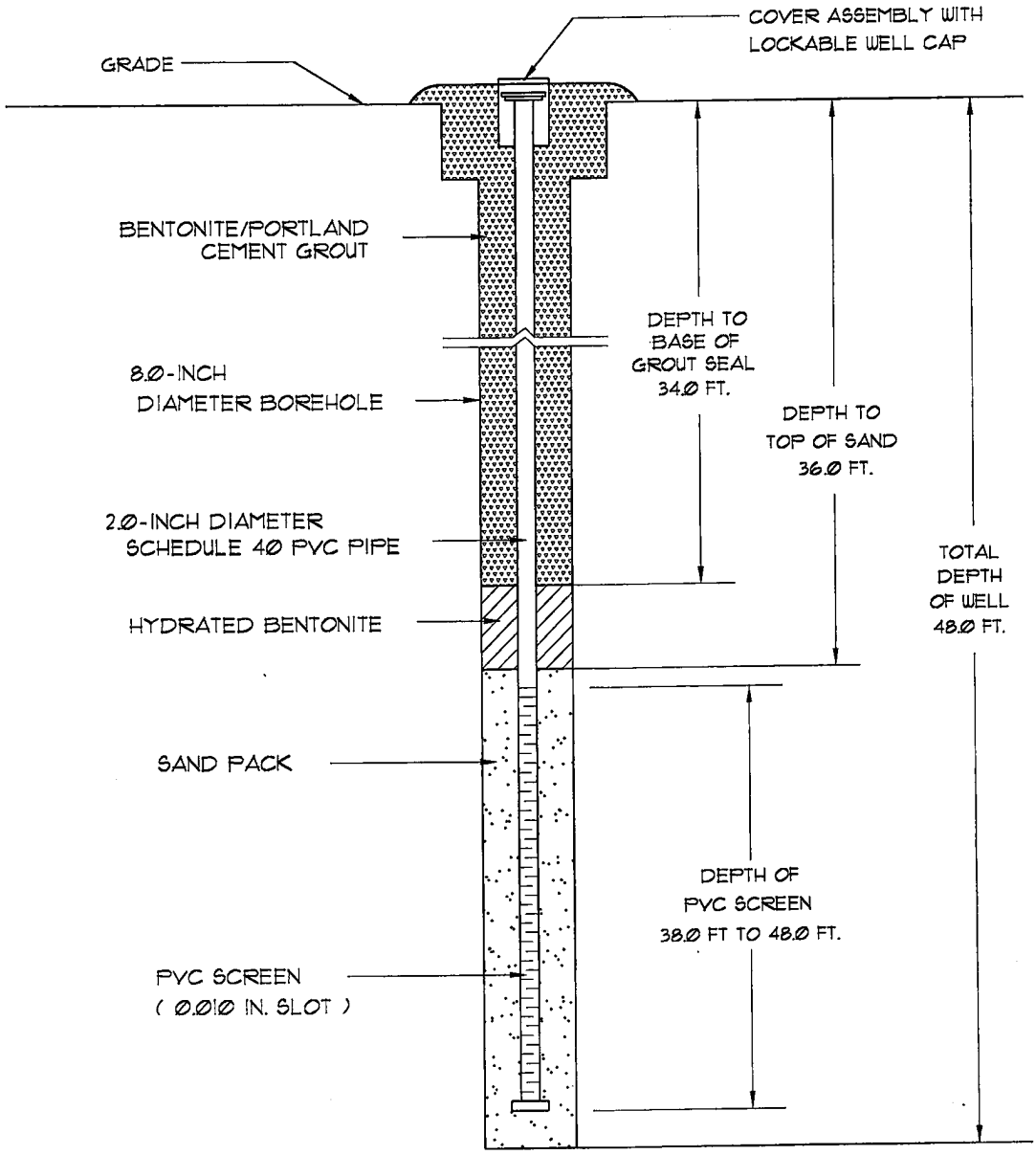
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-17R (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 Fax: 808-2048

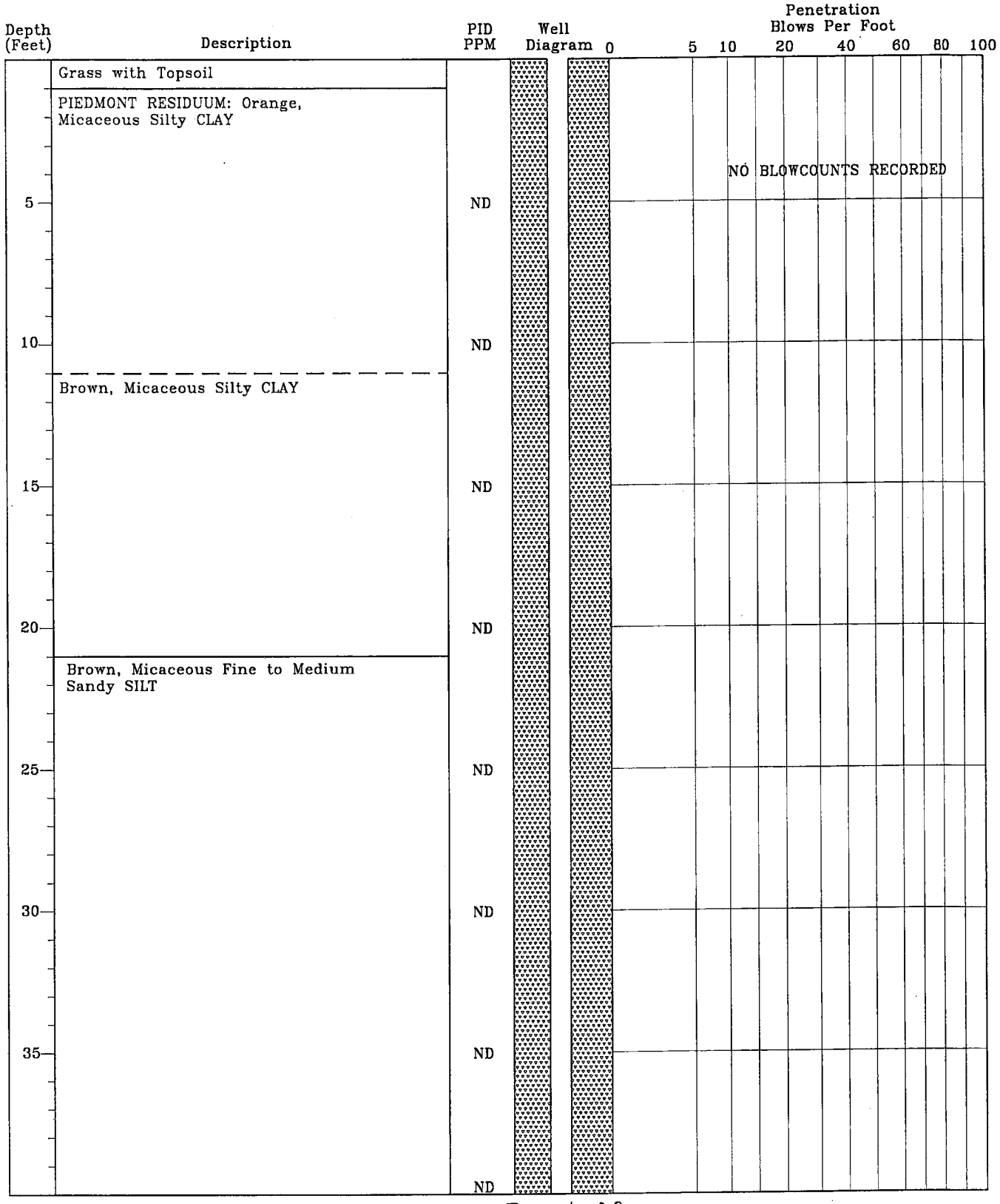
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	MW-17R (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Poboing Services
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-18R (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram	Penetration Blows Per Foot 0 5 10 20 40 60 80 100
45	Brown, Micaceous Fine to Medium Sandy SILT	ND		NO BLOWCOUNTS RECORDED
50		4.4		
55	Boring Terminated at 55.0 Feet Below Ground Surface (BGS). Monitoring Well Installed to 55.0 Feet BGS. Groundwater Measured at 46.15 Feet Below Top of Casing on 09/25/2012.	ND		
60				
65				
70				
75				

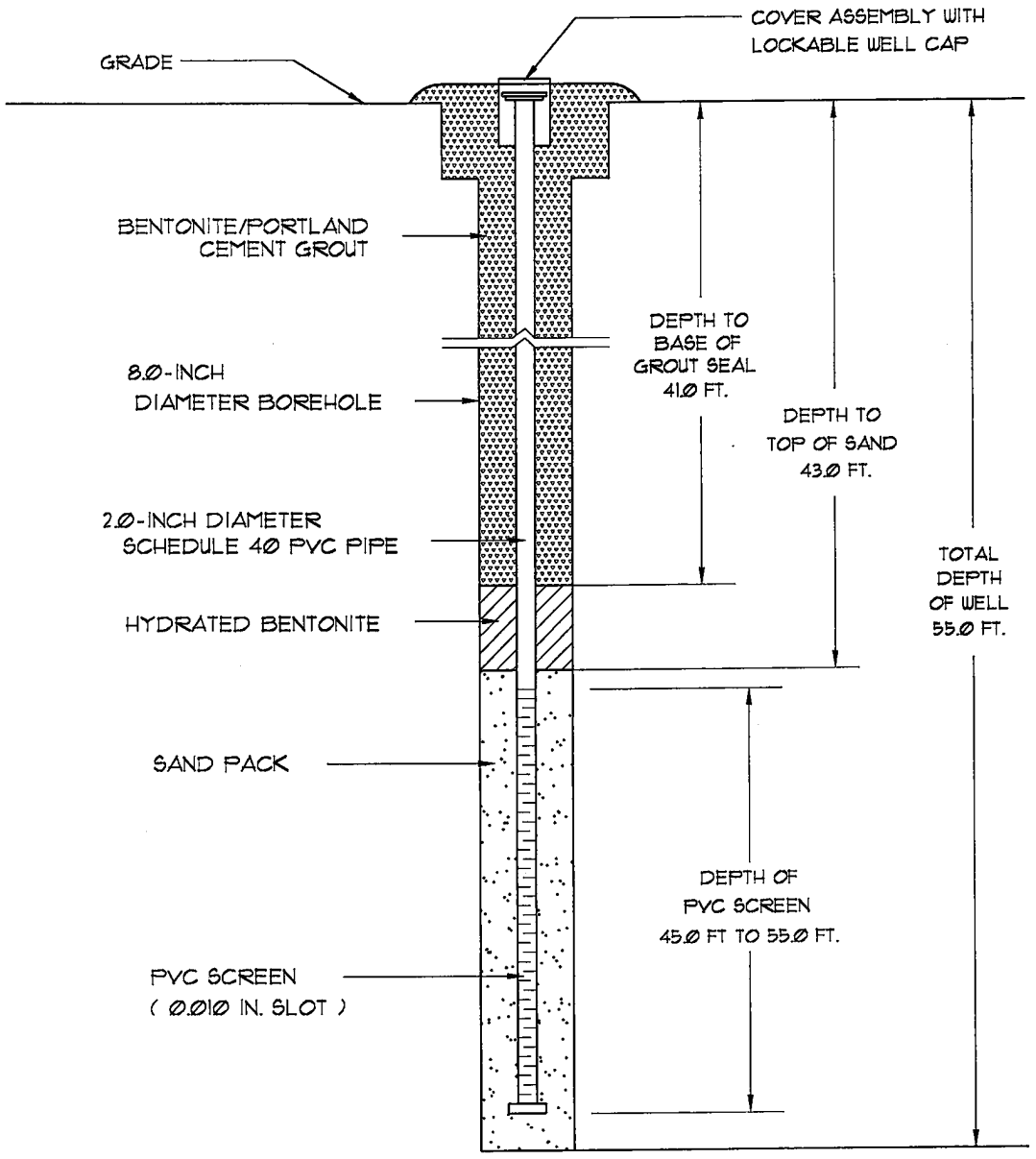
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-18R (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

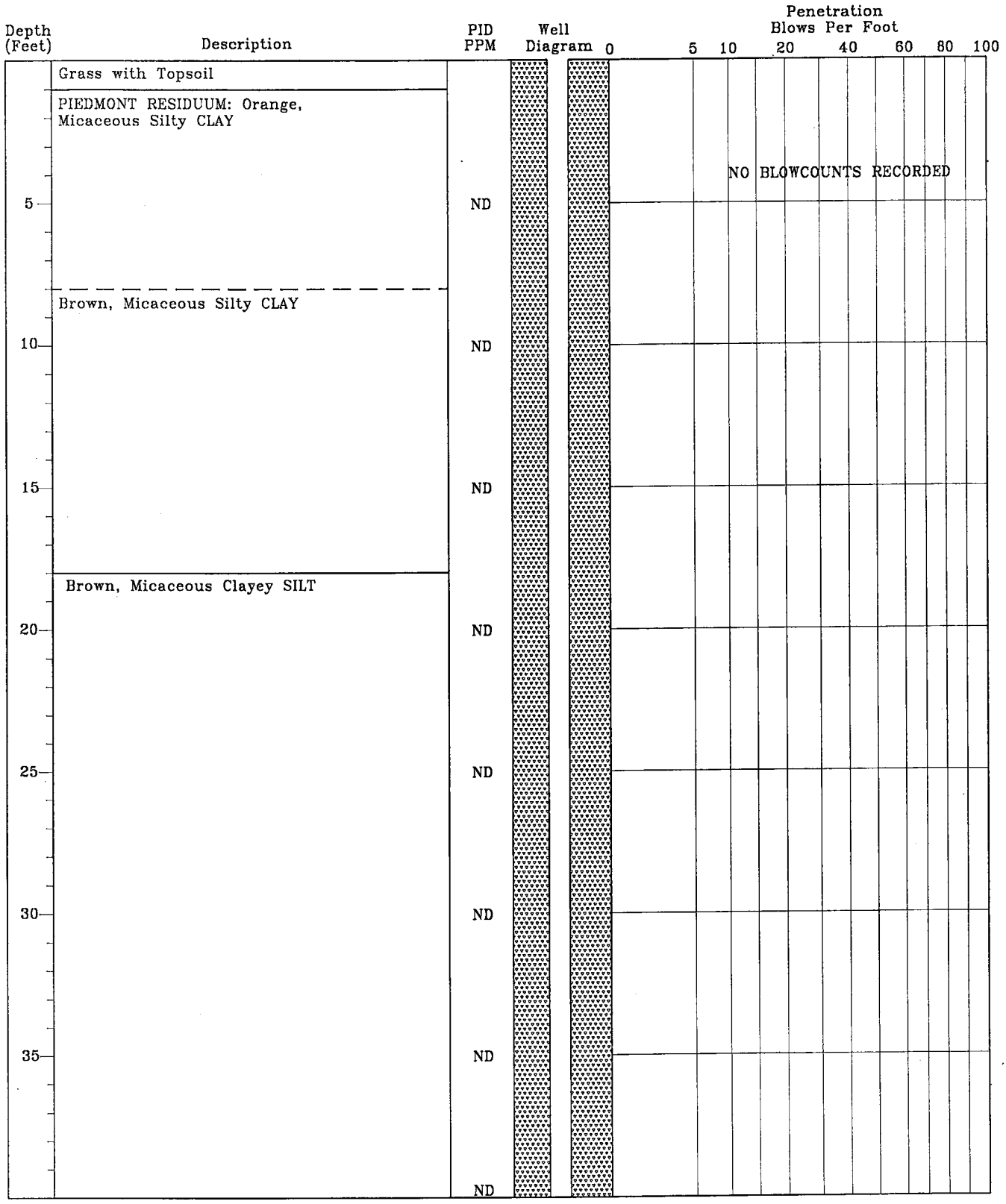
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	MW-18R (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Pobing Services
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	R. Arlail

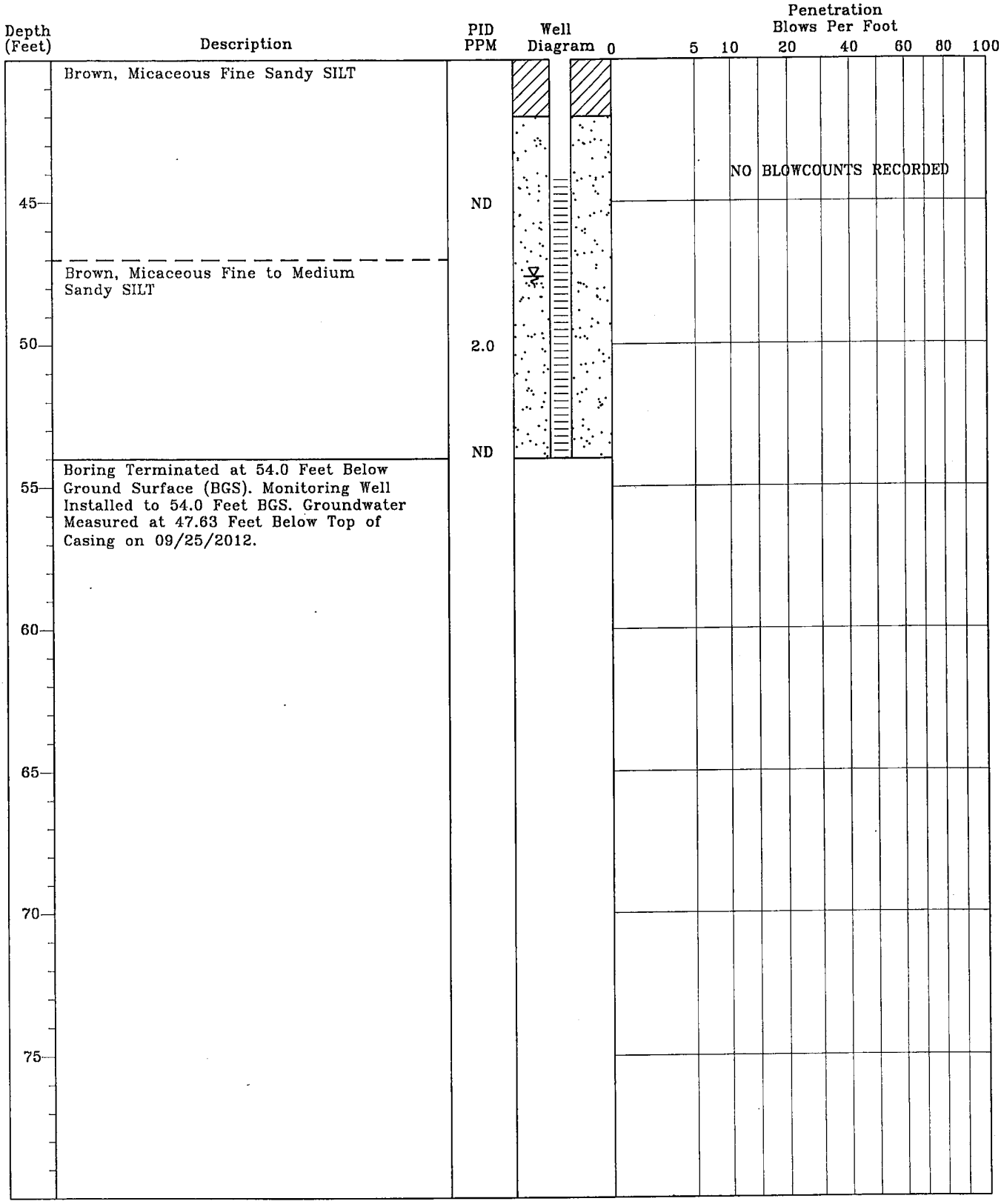
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-21 (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 Fax: 808-2048



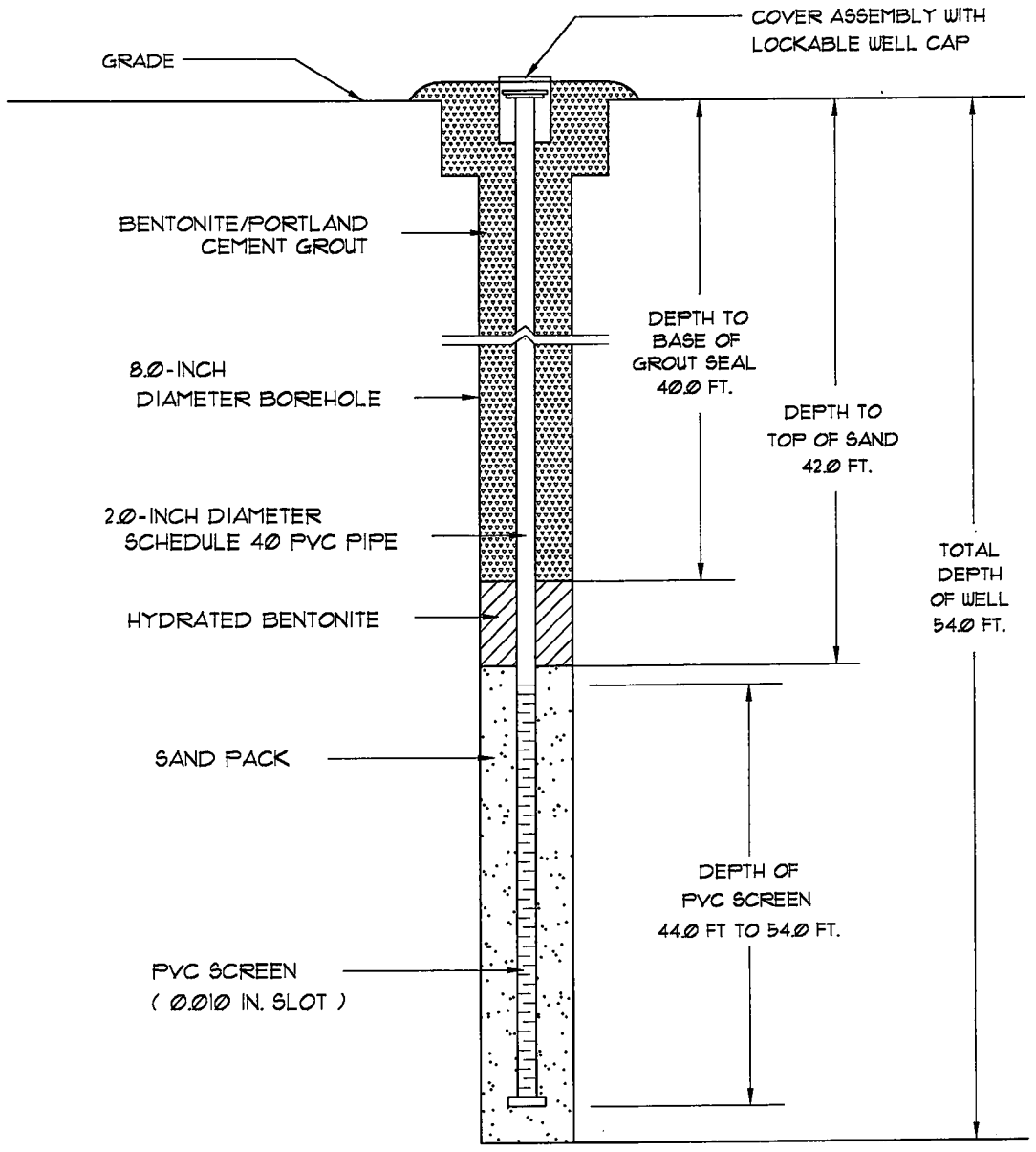
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	MW-21 (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Probing Services
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

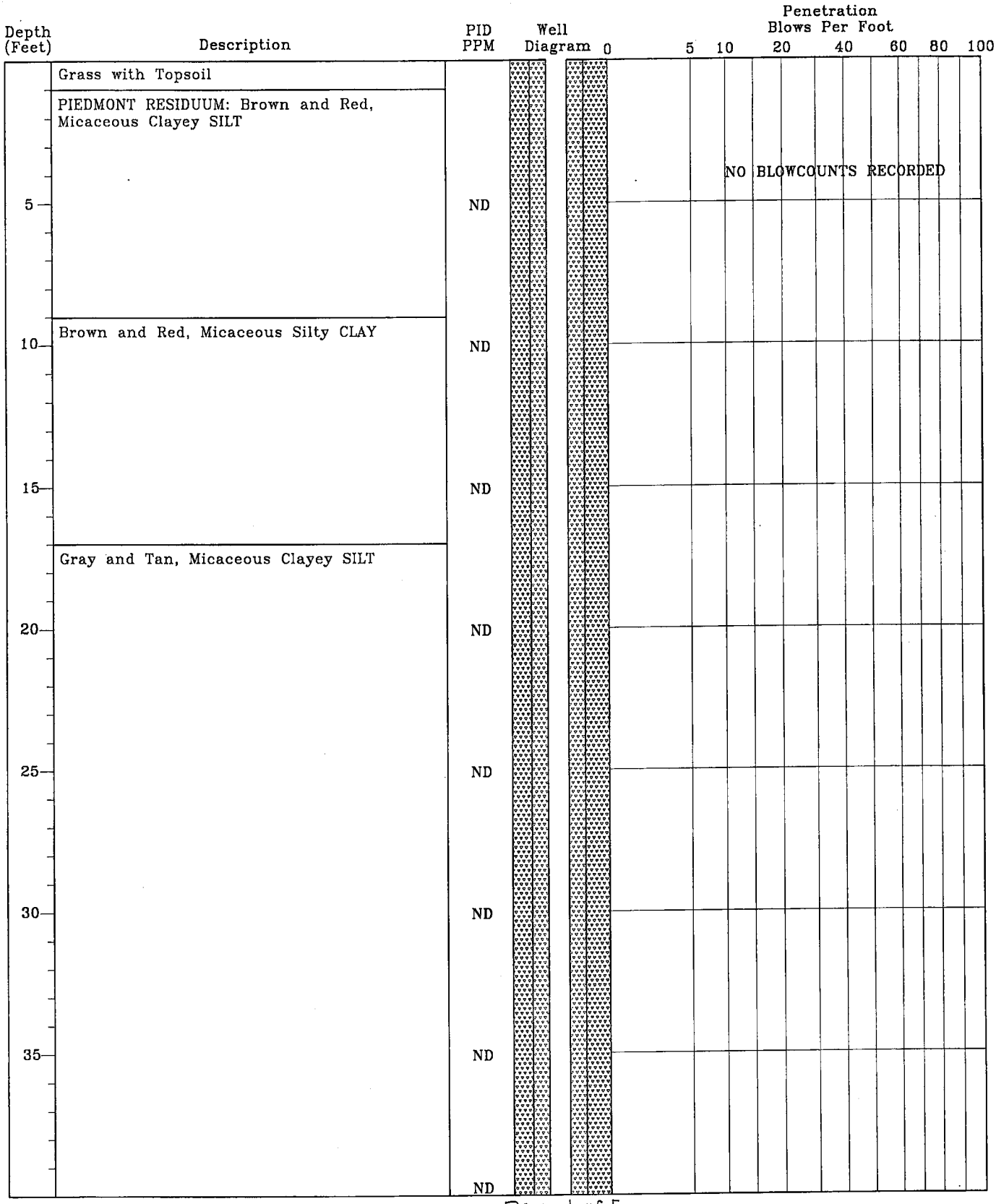
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	MW-21 (09322)
Date Drilled:	08/27/12
Drilled By:	Environmental Drilling & Poboing Services
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	R. Ariail

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-1ABC (09322)
Date Drilled:	09/03/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram
	Gray and Tan, Micaceous Clayey SILT	ND	
45		ND	
50		ND	
55		ND	
60		ND	
65		ND	
70		ND	
75	Partially Weathered Rock Sampled as: Gray, Micaceous SILT	ND	
		ND	

Penetration Blows Per Foot

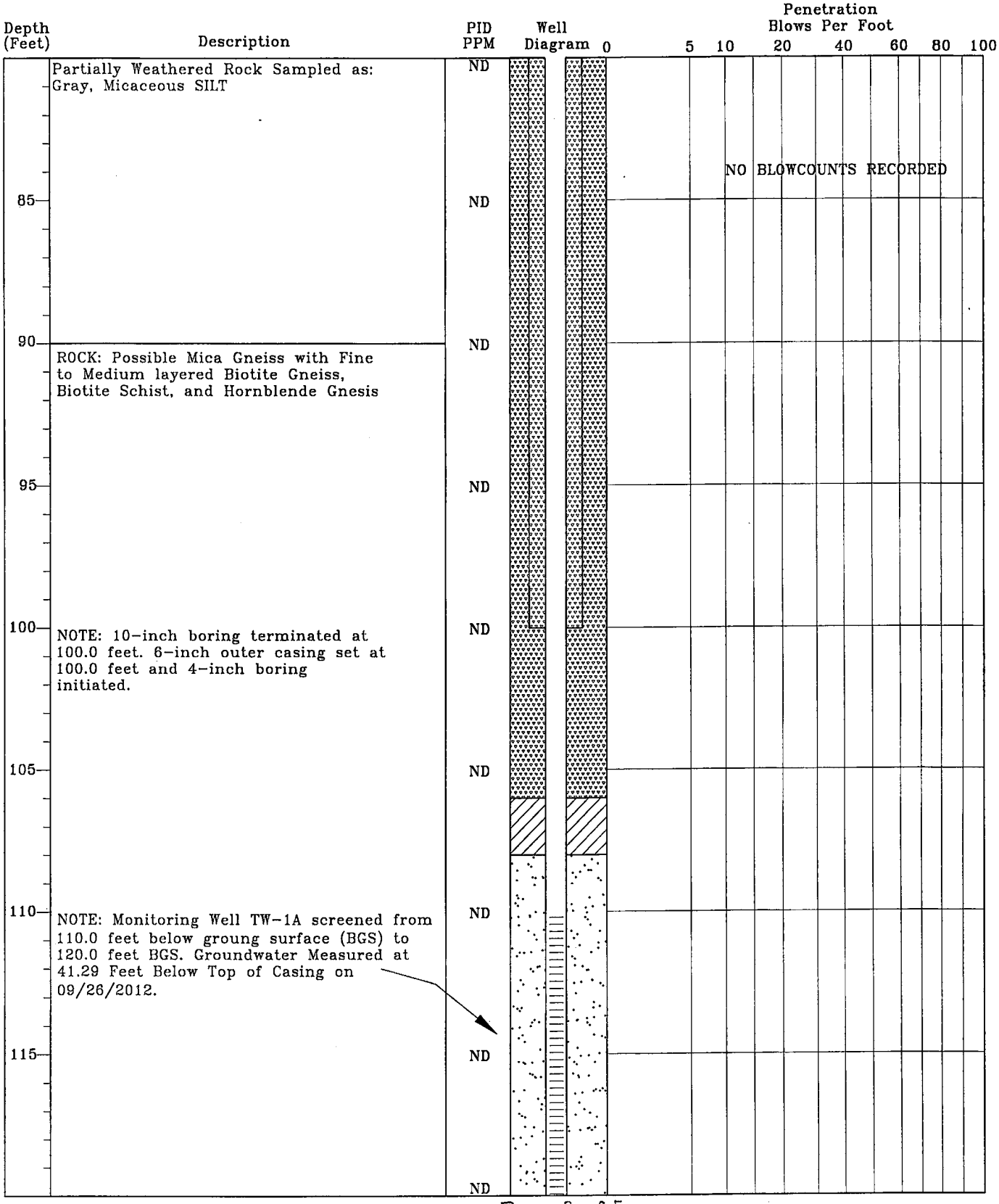
0 5 10 20 40 60 80 100

NO BLOWCOUNTS RECORDED

TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-1ABC (09322)
Date Drilled:	09/03/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-1ABC (09322)
Date Drilled:	09/03/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

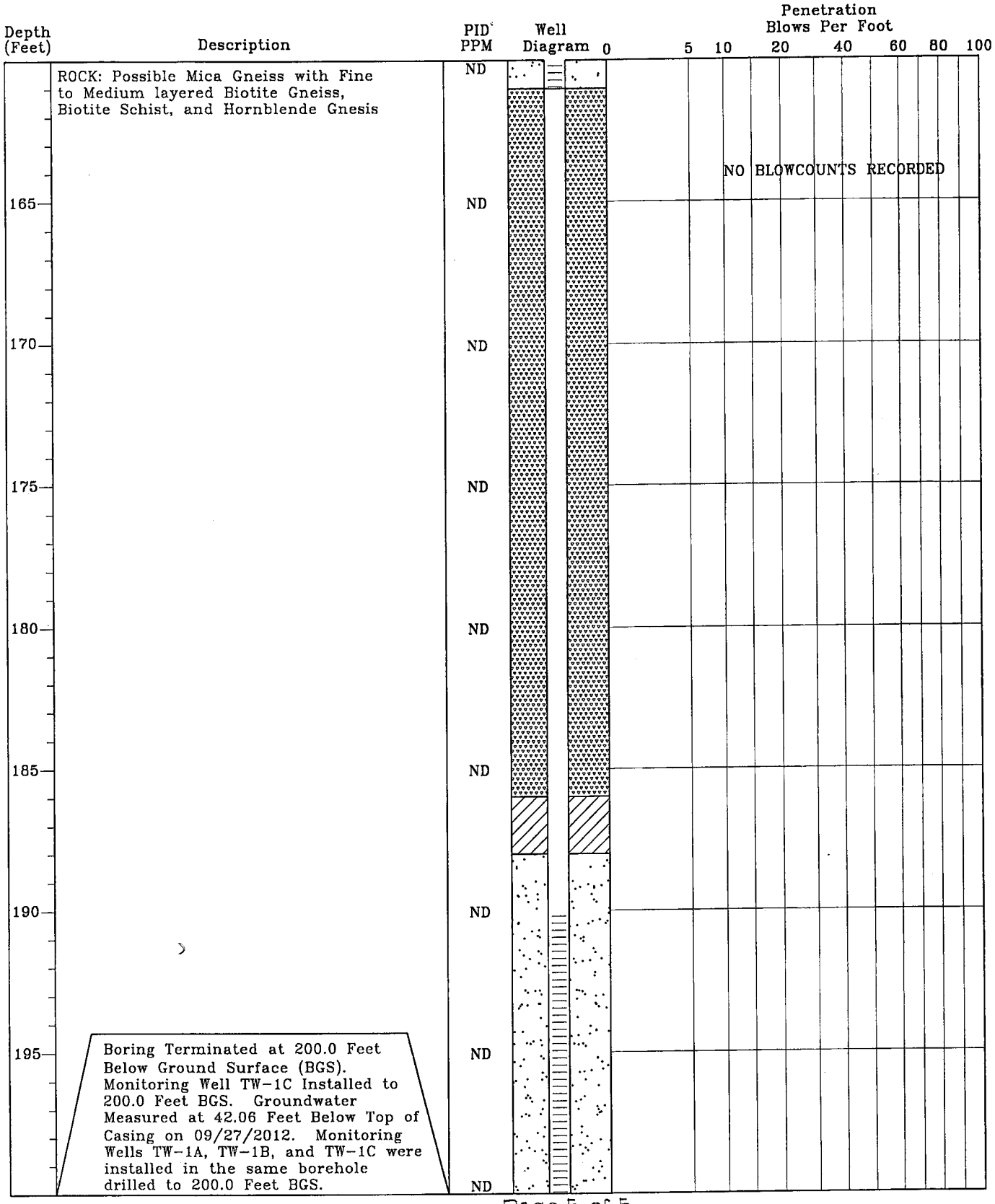
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram	Penetration Blows Per Foot 0 5 10 20 40 60 80 100
	ROCK: Possible Mica Gneiss with Fine to Medium layered Biotite Gneiss, Biotite Schist, and Hornblende Gnesis	ND		NO BLOWCOUNTS RECORDED
125		ND		
130		ND		
135		ND		
140		ND		
145		ND		
150	NOTE: Monitoring Well TW-1B screened from 151.0 feet below groung surface (BGS) to 161.0 feet BGS. Groundwater Measured at 41.00 Feet Below Top of Casing on 09/27/2012.	ND		
155		ND		
		ND		

TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-1ABC (09322)
Date Drilled:	09/03/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



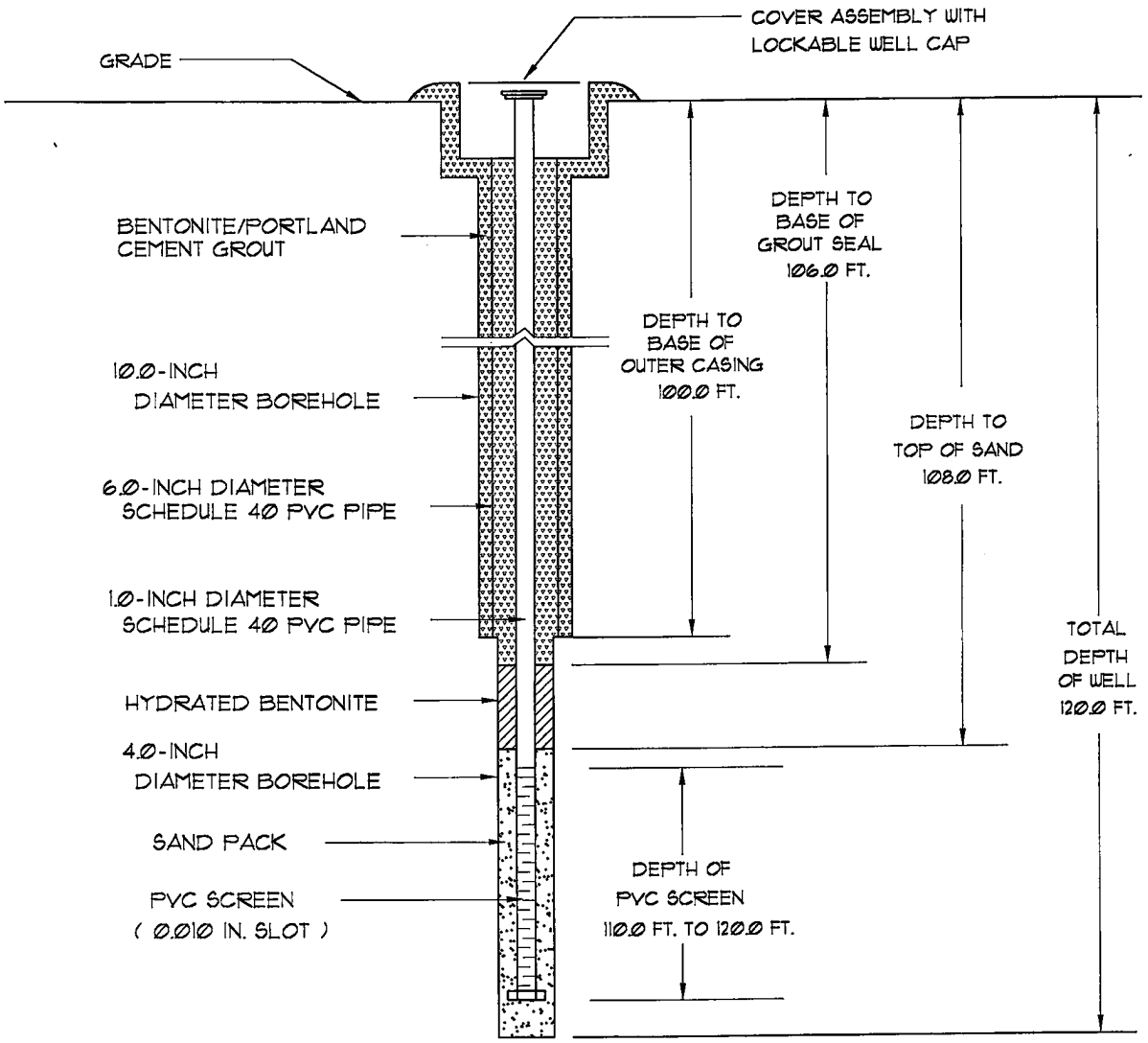
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-1ABC (09322)
Date Drilled:	09/03/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 Fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

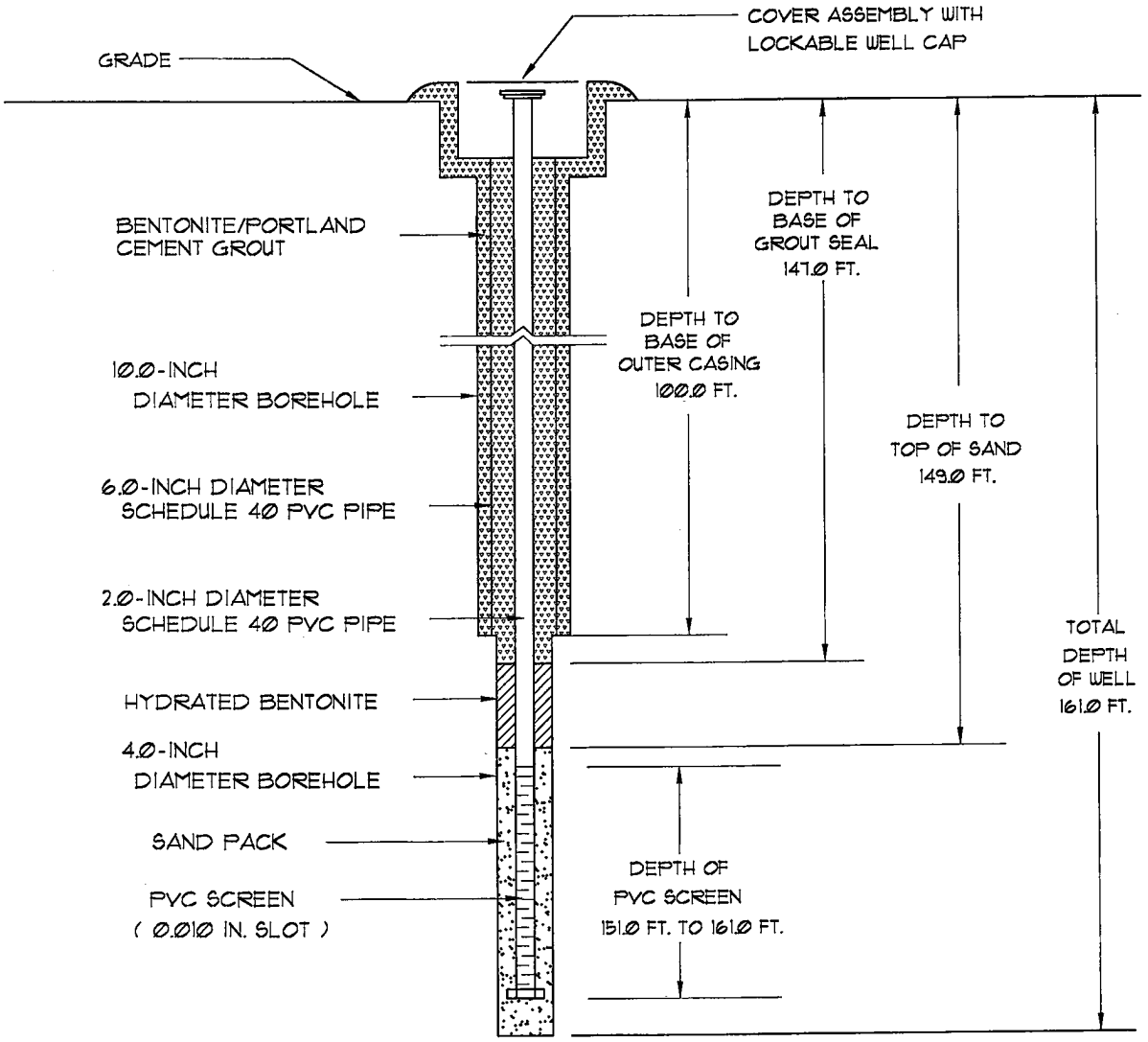


Well Number:	TW-1A (09322)
Date Drilled:	09/03/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

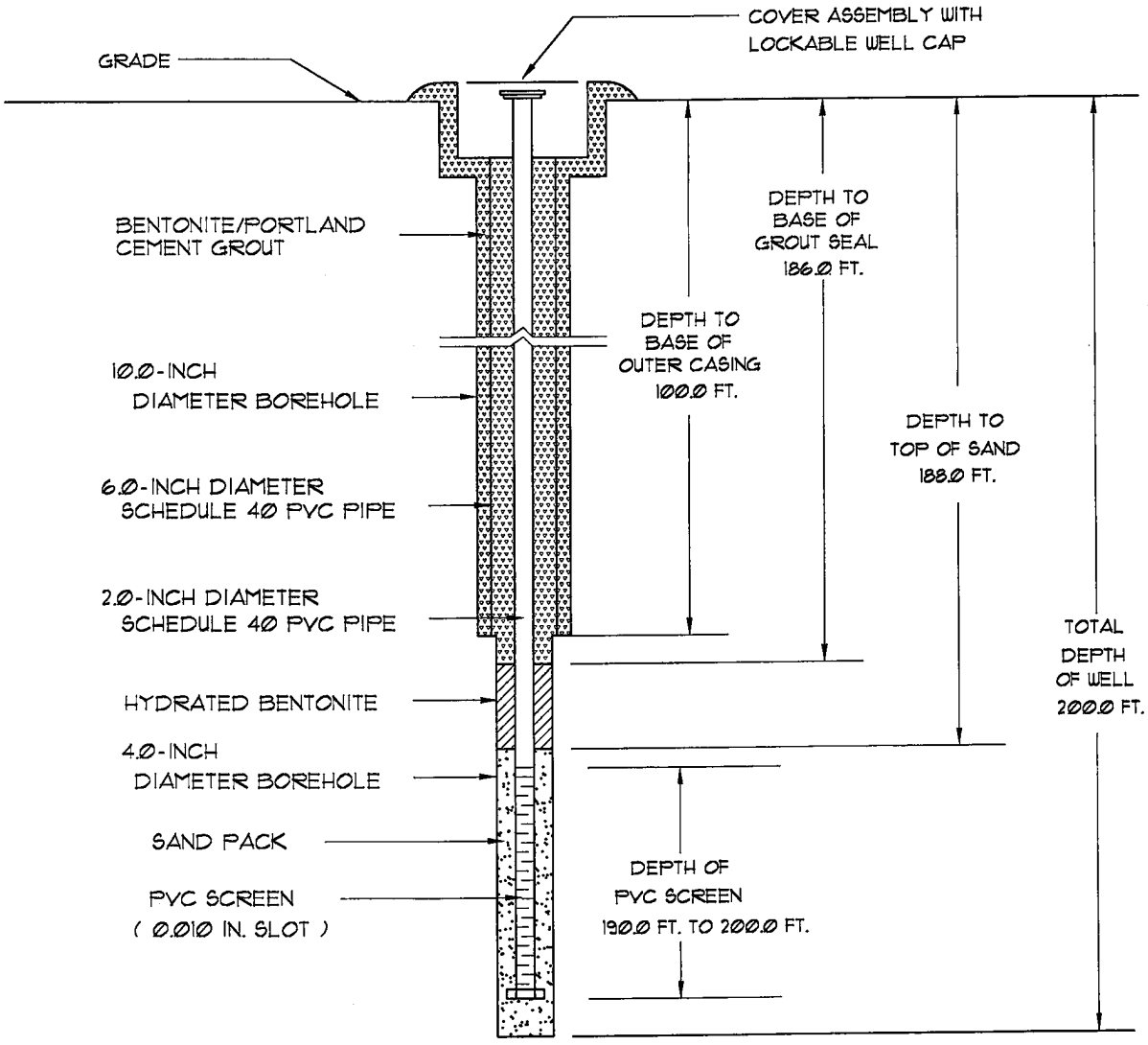


Well Number:	TW-1B (09322)
Date Drilled:	09/03/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

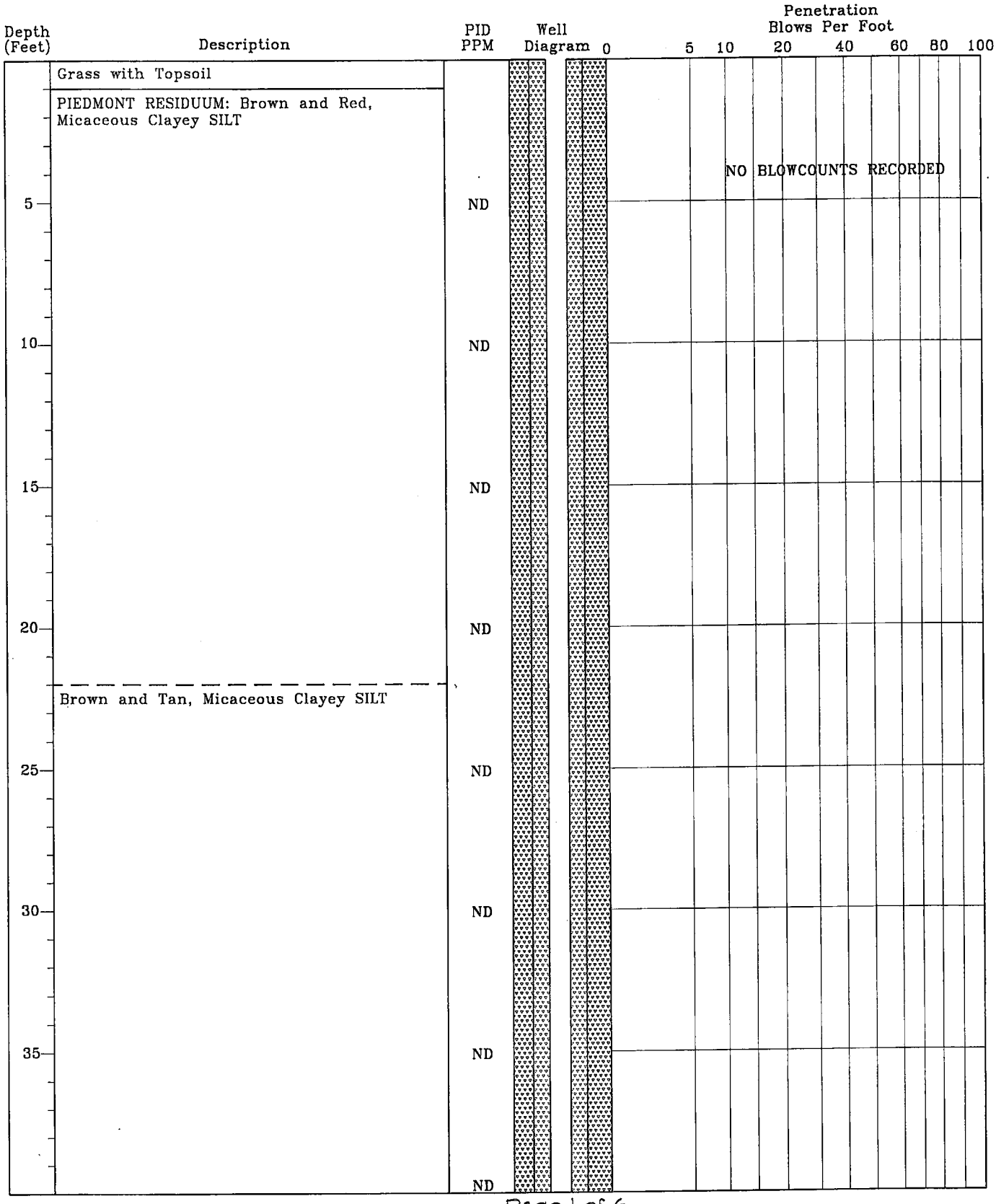
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	TW-1C (09322)
Date Drilled:	09/03/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	J. Bryant

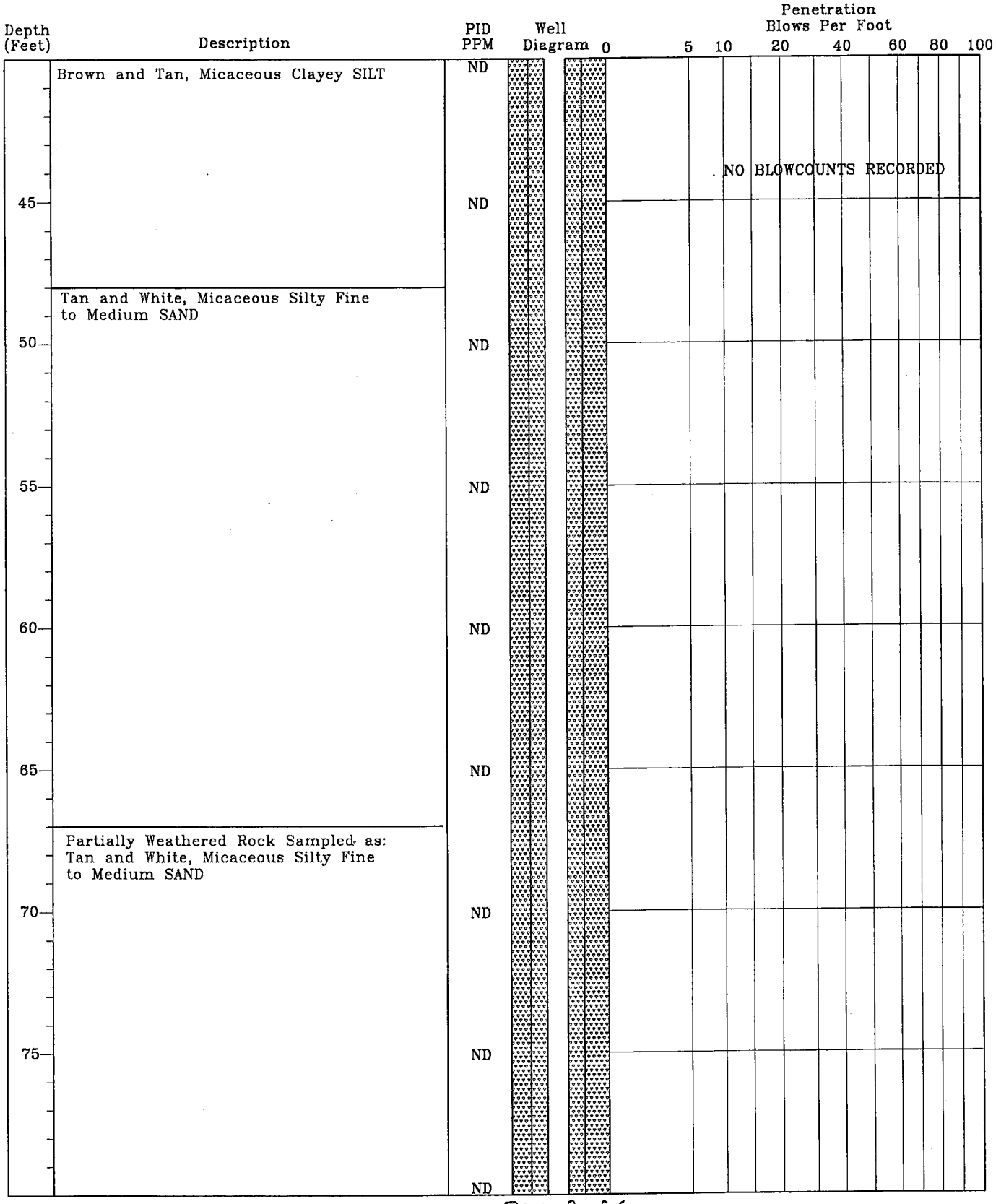
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-2ABC (09322)
Date Drilled:	09/04/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-2ABC (09322)
Date Drilled:	09/04/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

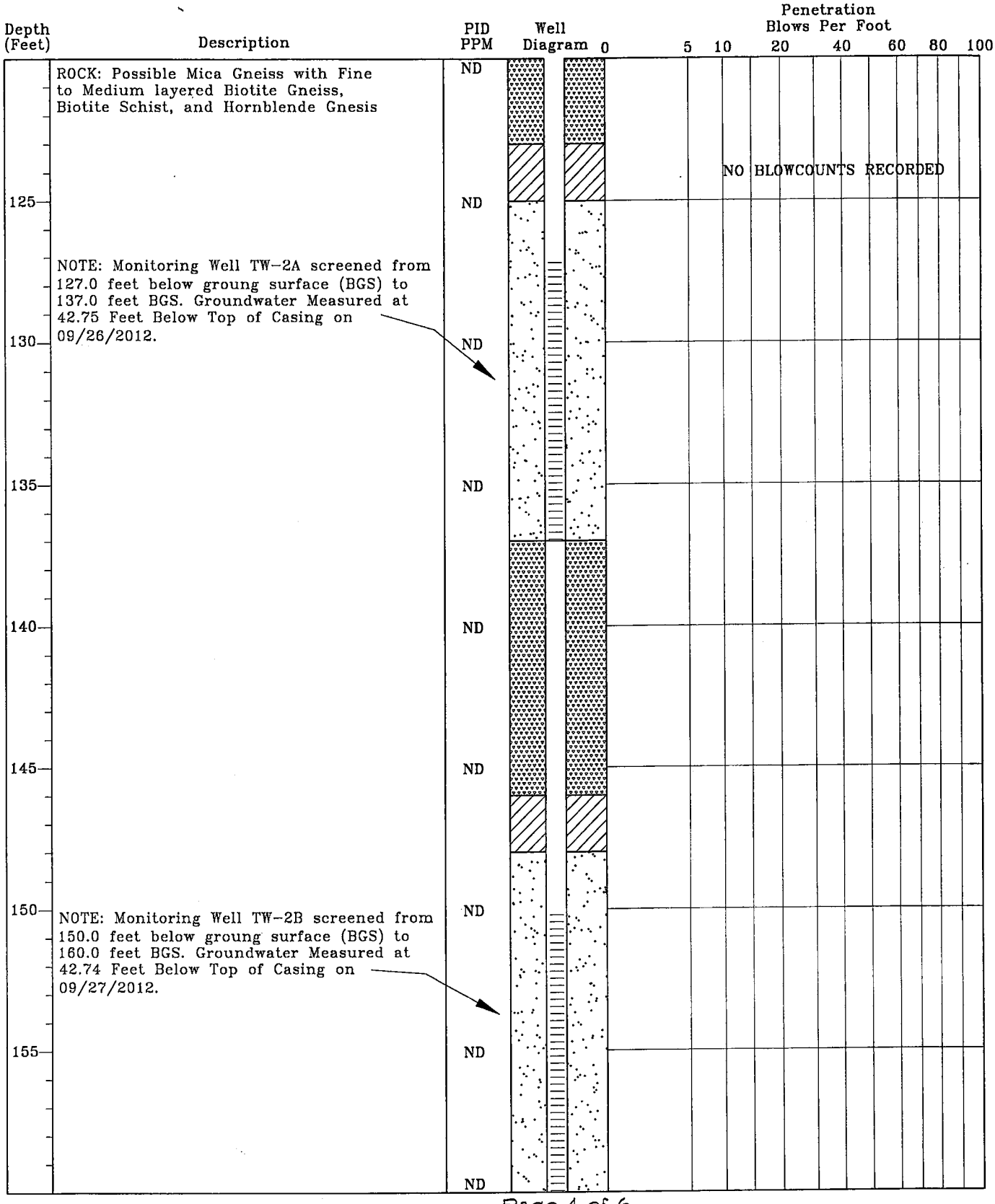
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram	Penetration Blows Per Foot 0 5 10 20 40 60 80 100
	Partially Weathered Rock Sampled as: Tan and White, Micaceous Silty Fine to Medium SAND	ND		NO BLOWCOUNTS RECORDED
85		ND		
90		ND		
95		ND		
	Partially Weathered Rock Sampled as: Gray and Tan, Silty Fine to Medium SAND			
100		ND		
	ROCK: Possible Mica Gneiss with Fine to Medium layered Biotite Gneiss, Biotite Schist, and Hornblende Gnesis			
105		ND		
110		ND		
115		ND		
	NOTE: 10-inch boring terminated at 117.0 feet. 6-inch outer casing set at 117.0 feet and 4-inch boring initiated.	ND		

TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-2ABC (09322)
Date Drilled:	09/04/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

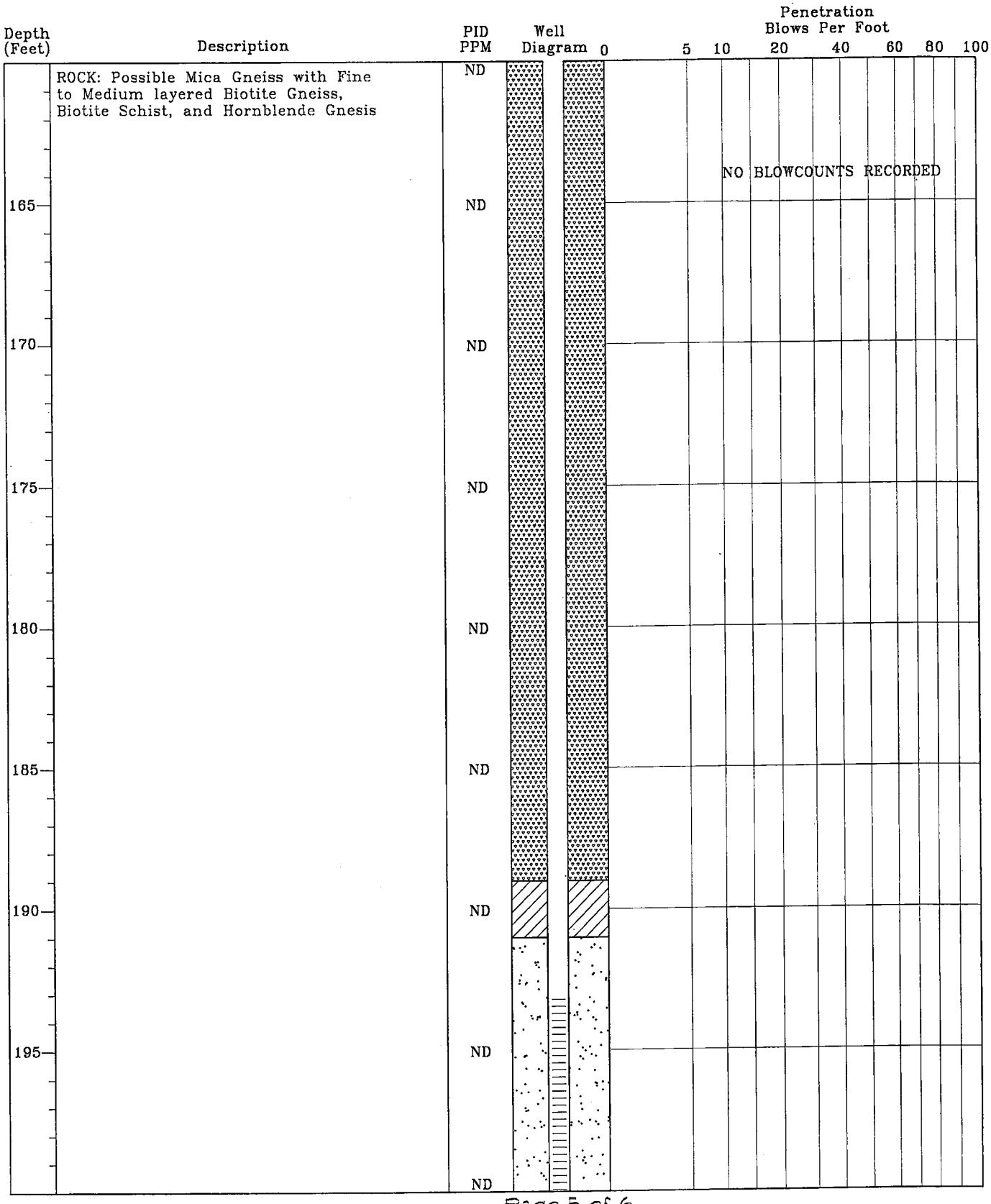
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-2ABC (09322)
Date Drilled:	09/04/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-2ABC (09322)
Date Drilled:	09/04/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 Fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram	Penetration Blows Per Foot 0 5 10 20 40 60 80 100
	ROCK: Possible Mica Gneiss with Fine to Medium layered Biotite Gneiss, Biotite Schist, and Hornblende Gnesis	ND		NO BLOWCOUNTS RECORDED
205	Boring Terminated at 203.0 Feet Below Ground Surface (BGS). Monitoring Well TW-2C Installed to 203.0 Feet BGS. Groundwater Measured at 41.88 Feet Below Top of Casing on 09/27/2012. Monitoring Wells TW-2A, TW-2B, and TW-2C were installed in the same borehole drilled to 203.0 Feet BGS.			
210				
215				
220				
225				
230				
235				

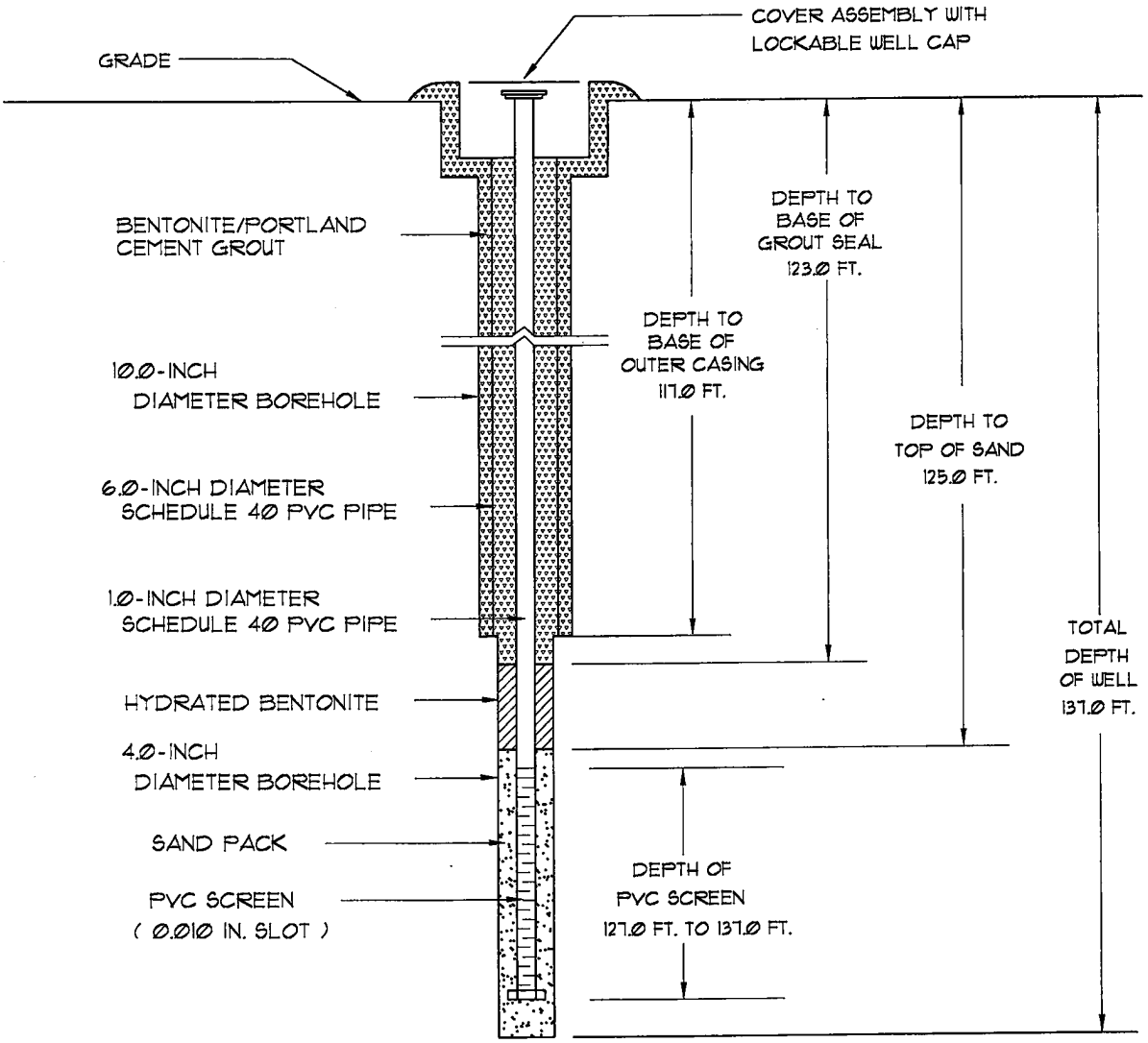
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-2ABC (09322)
Date Drilled:	09/04/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

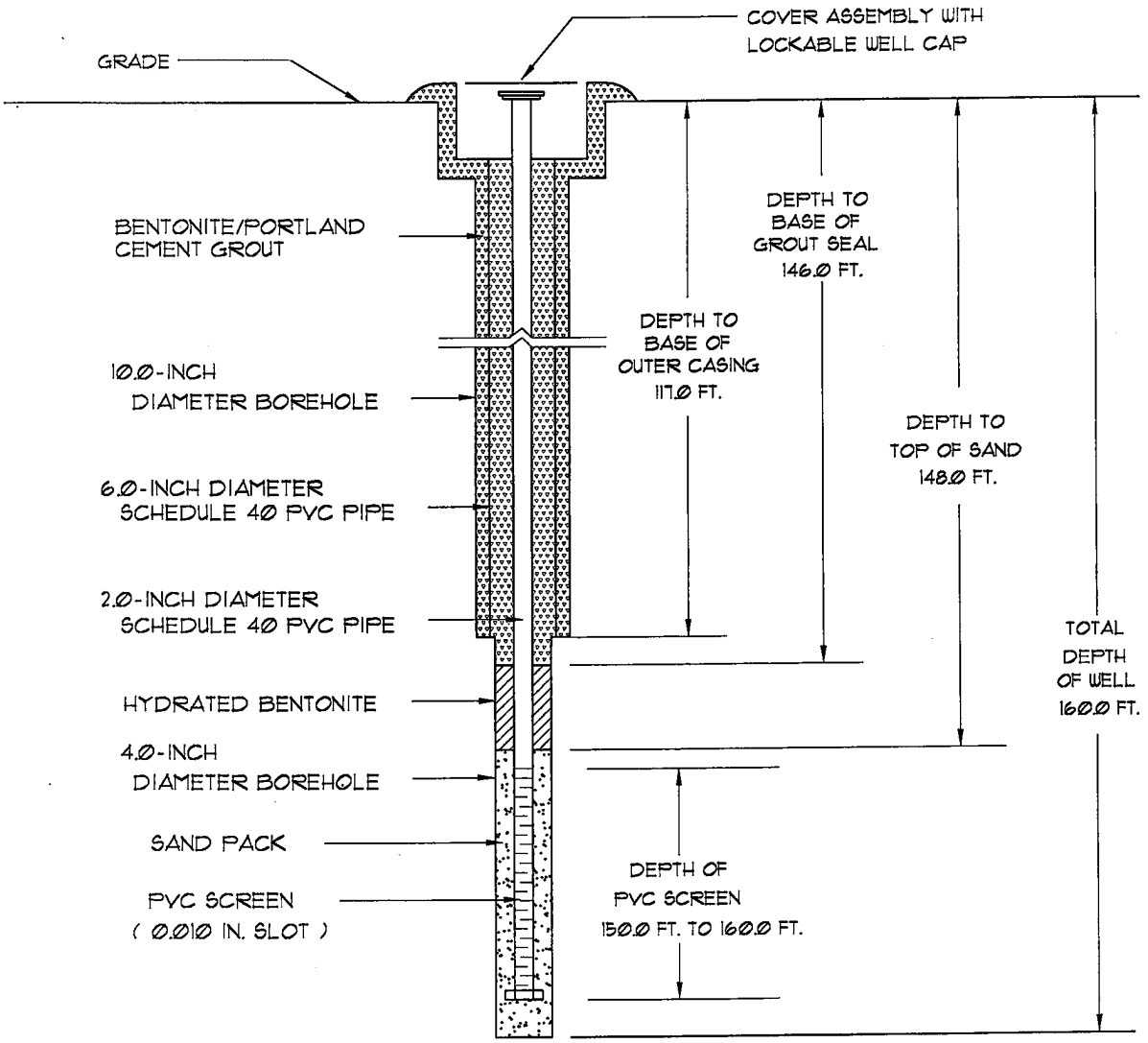


Well Number:	TW-2A (09322)
Date Drilled:	09/04/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

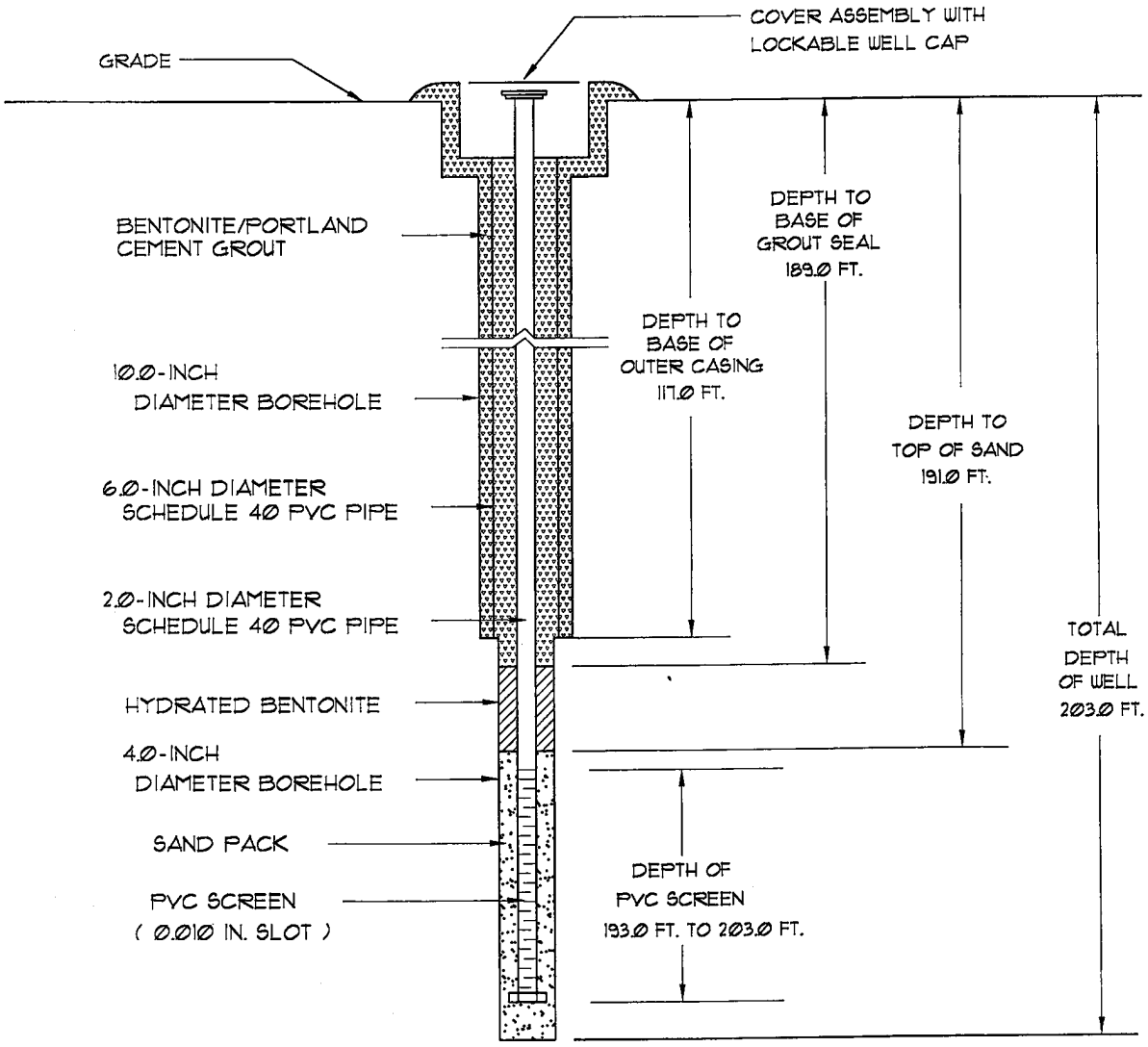


Well Number:	TW-2B (09322)
Date Drilled:	09/04/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #:	B 01846
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

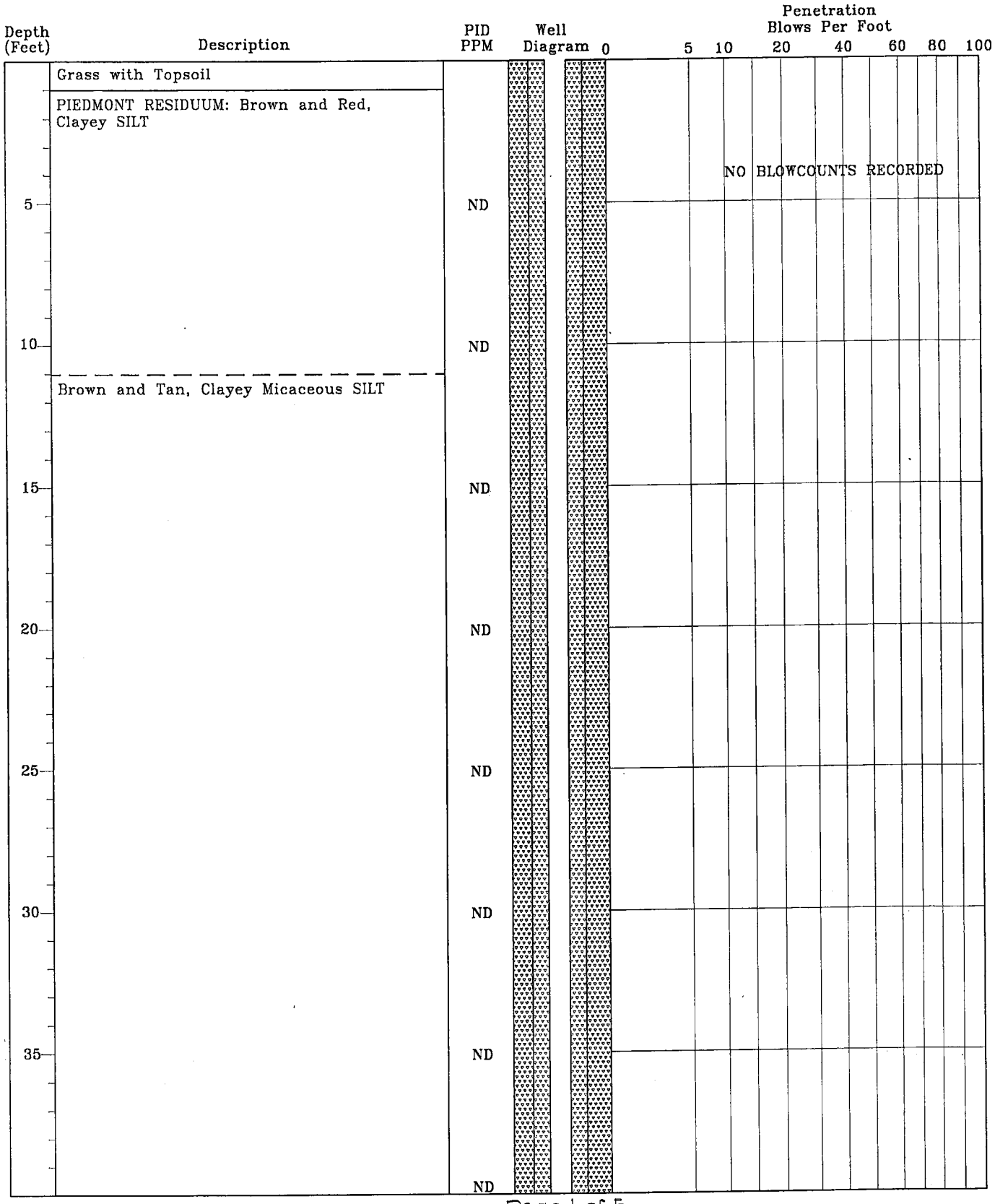
MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	TW-2C (09322)
Date Drilled:	09/04/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #:	B 01846
Logged By:	J. Bryant

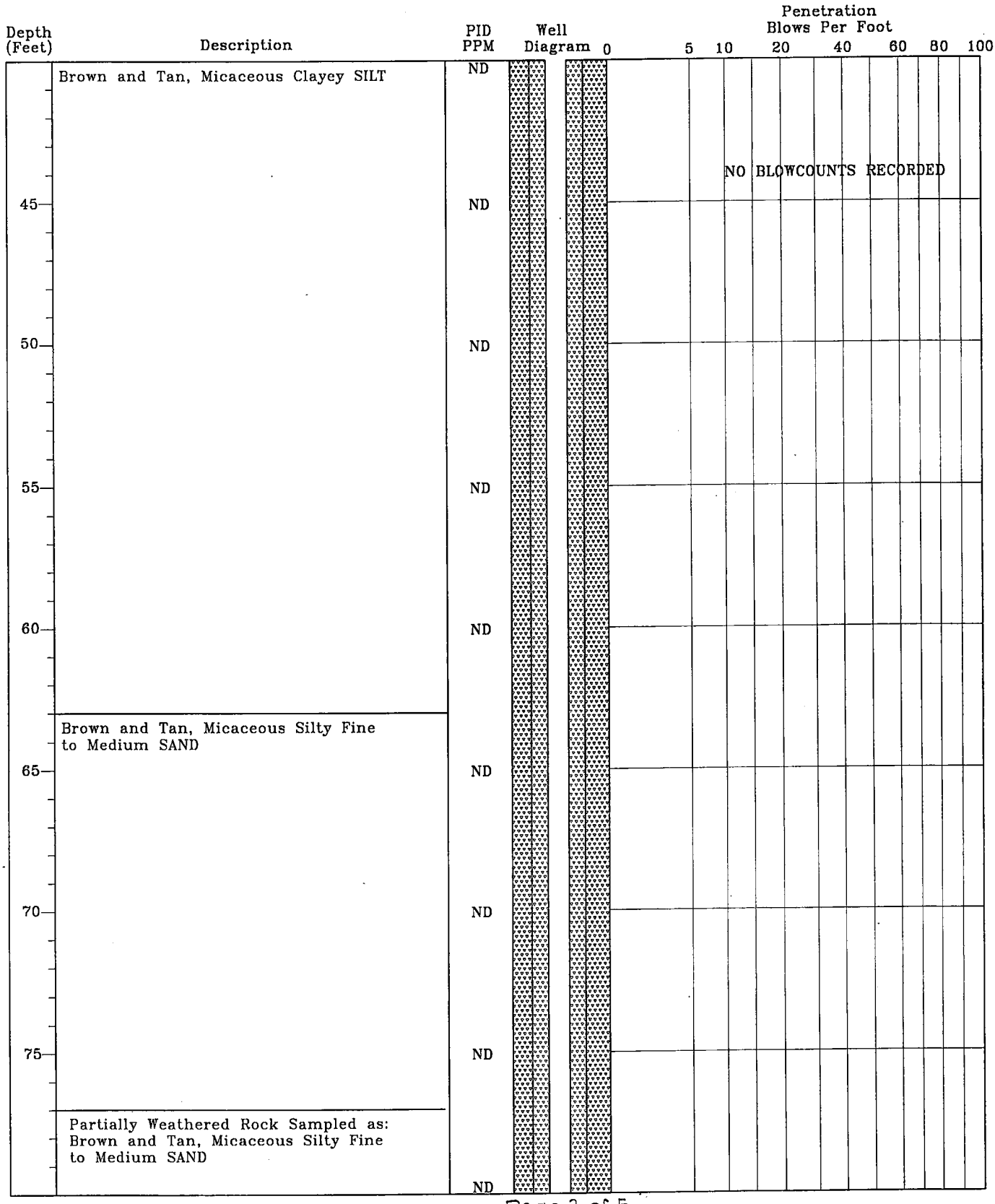
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-3ABC (09322)
Date Drilled:	09/05/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

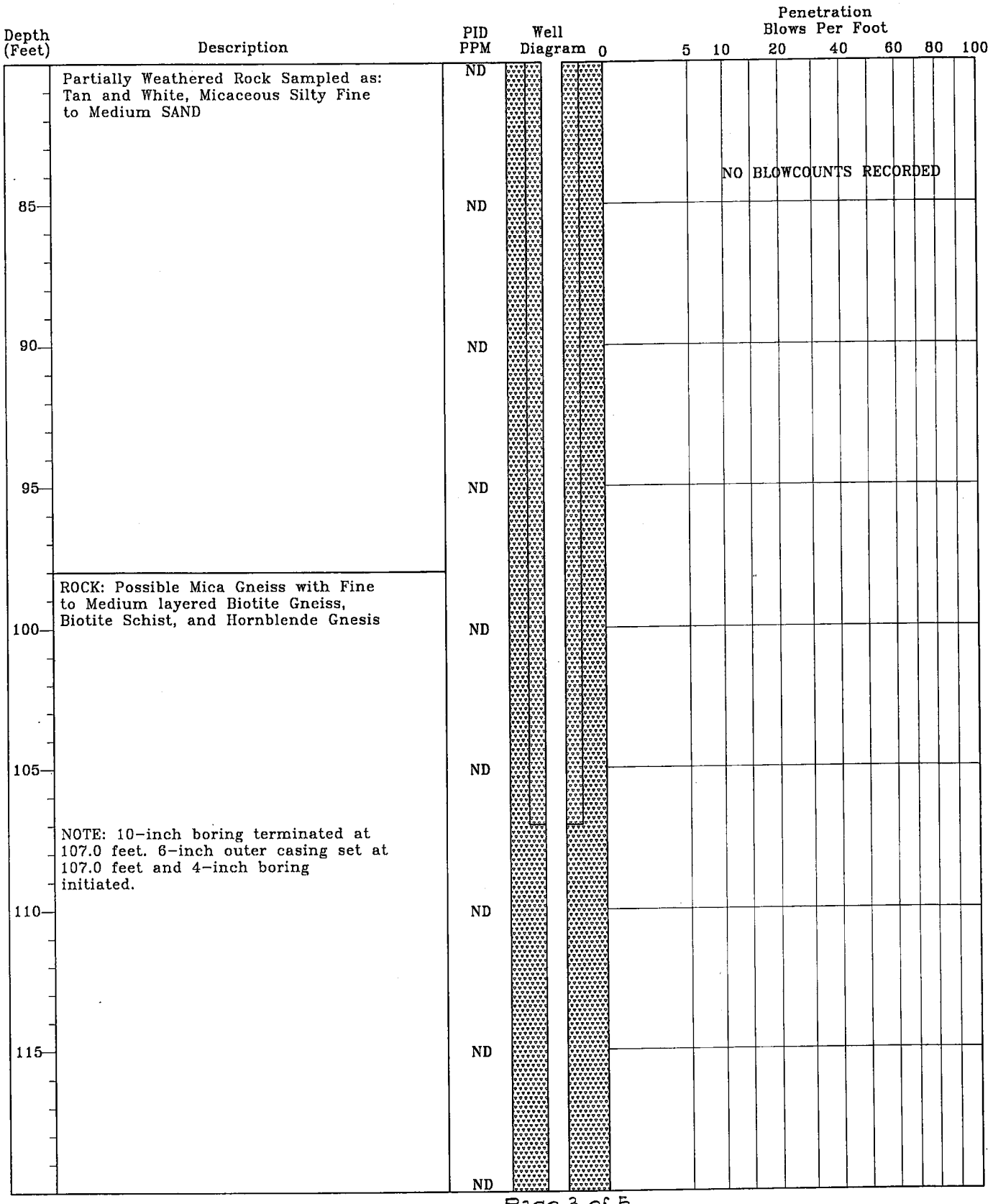
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-3ABC (09322)
Date Drilled:	09/05/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

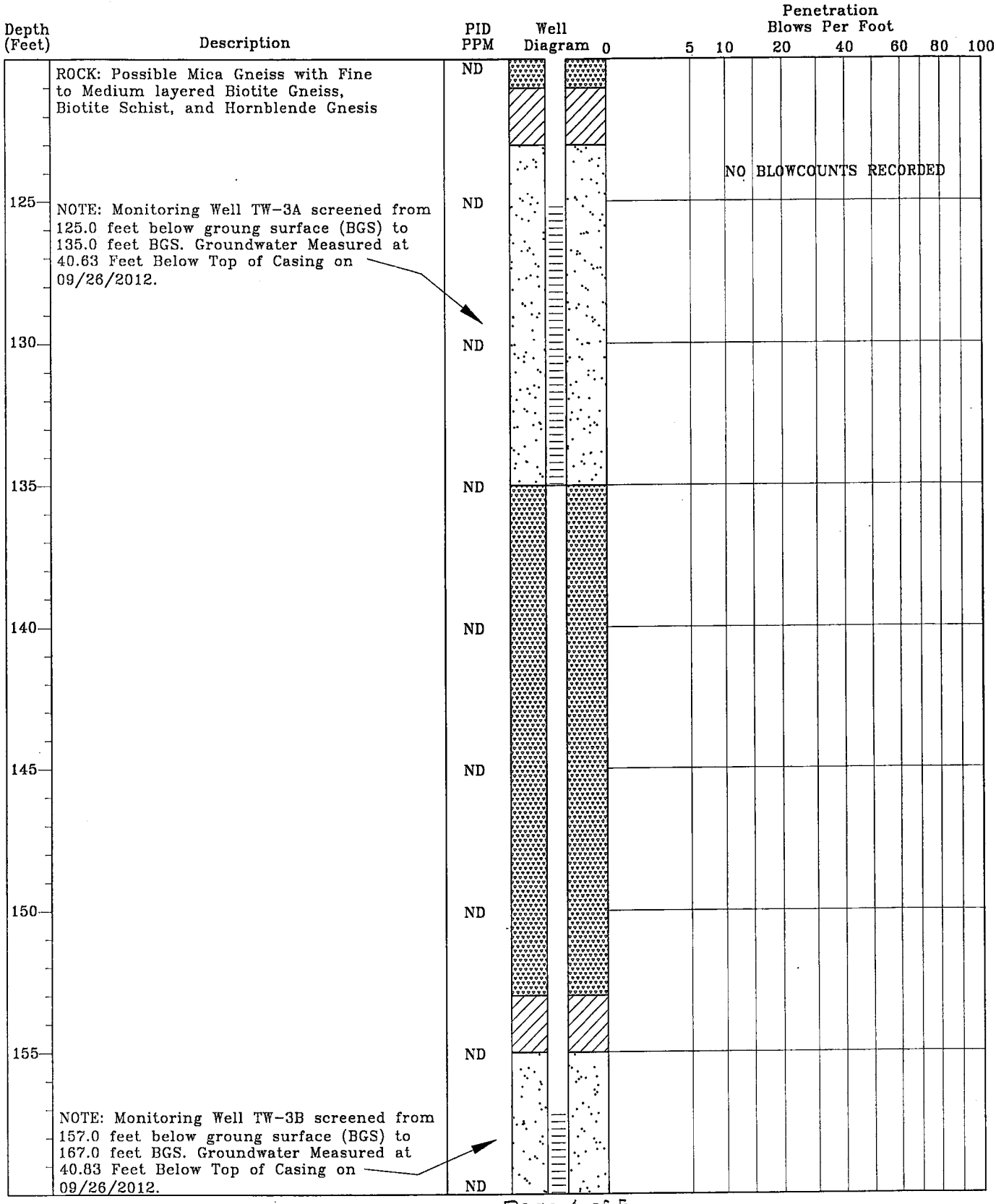
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-3ABC (09322)
Date Drilled:	09/05/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

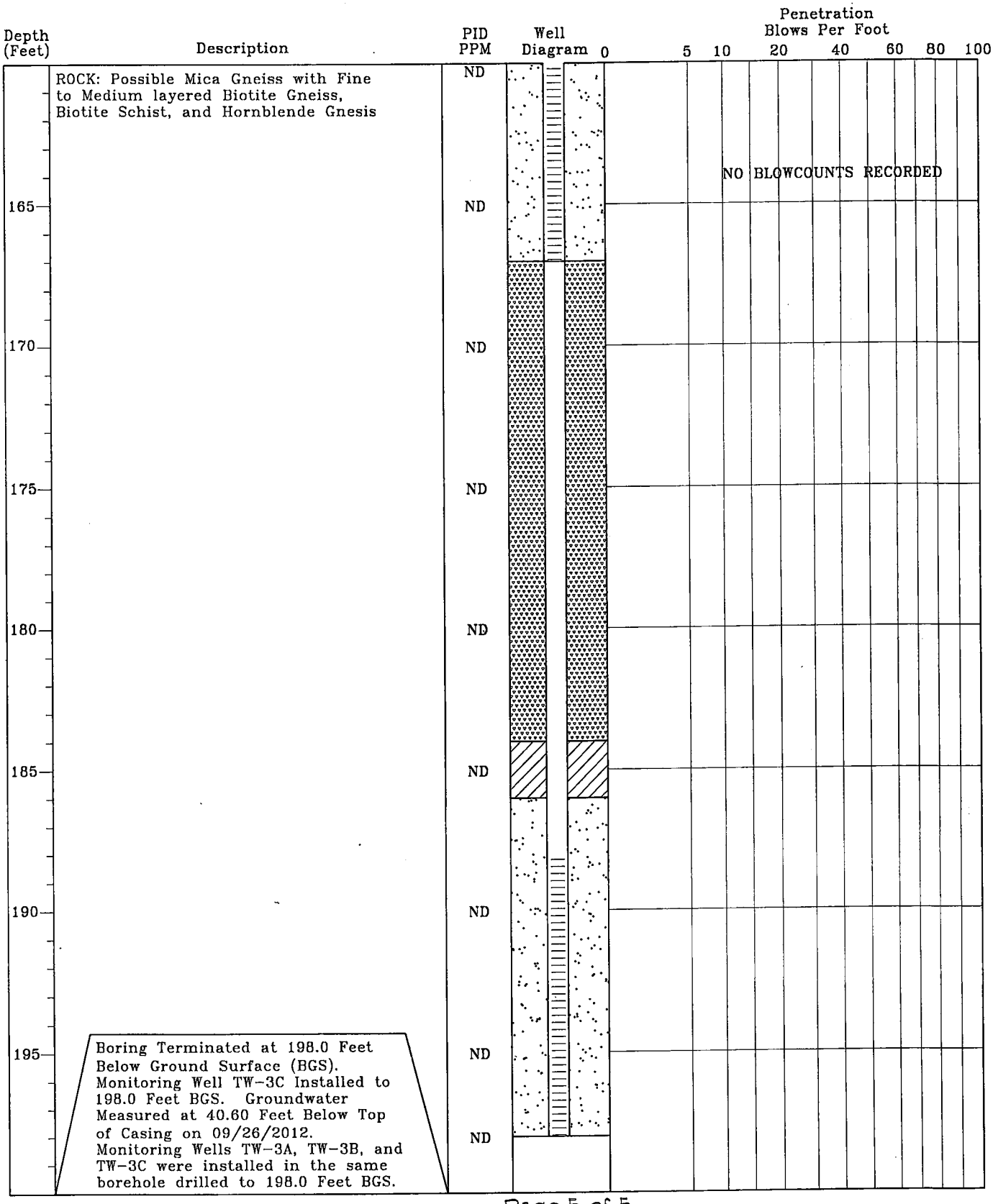
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-3ABC (09322)
Date Drilled:	09/05/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



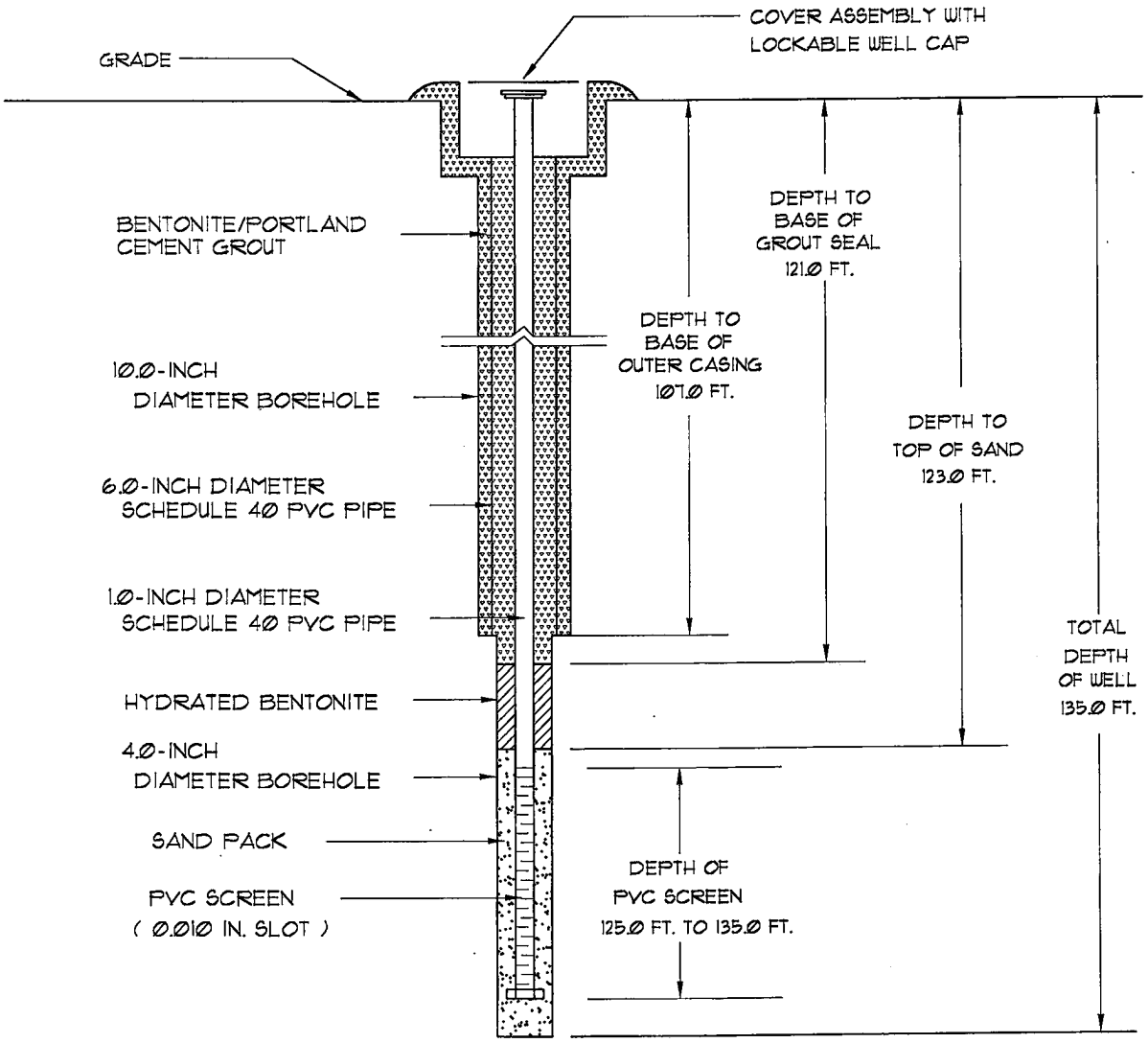
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-3ABC (09322)
Date Drilled:	09/05/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

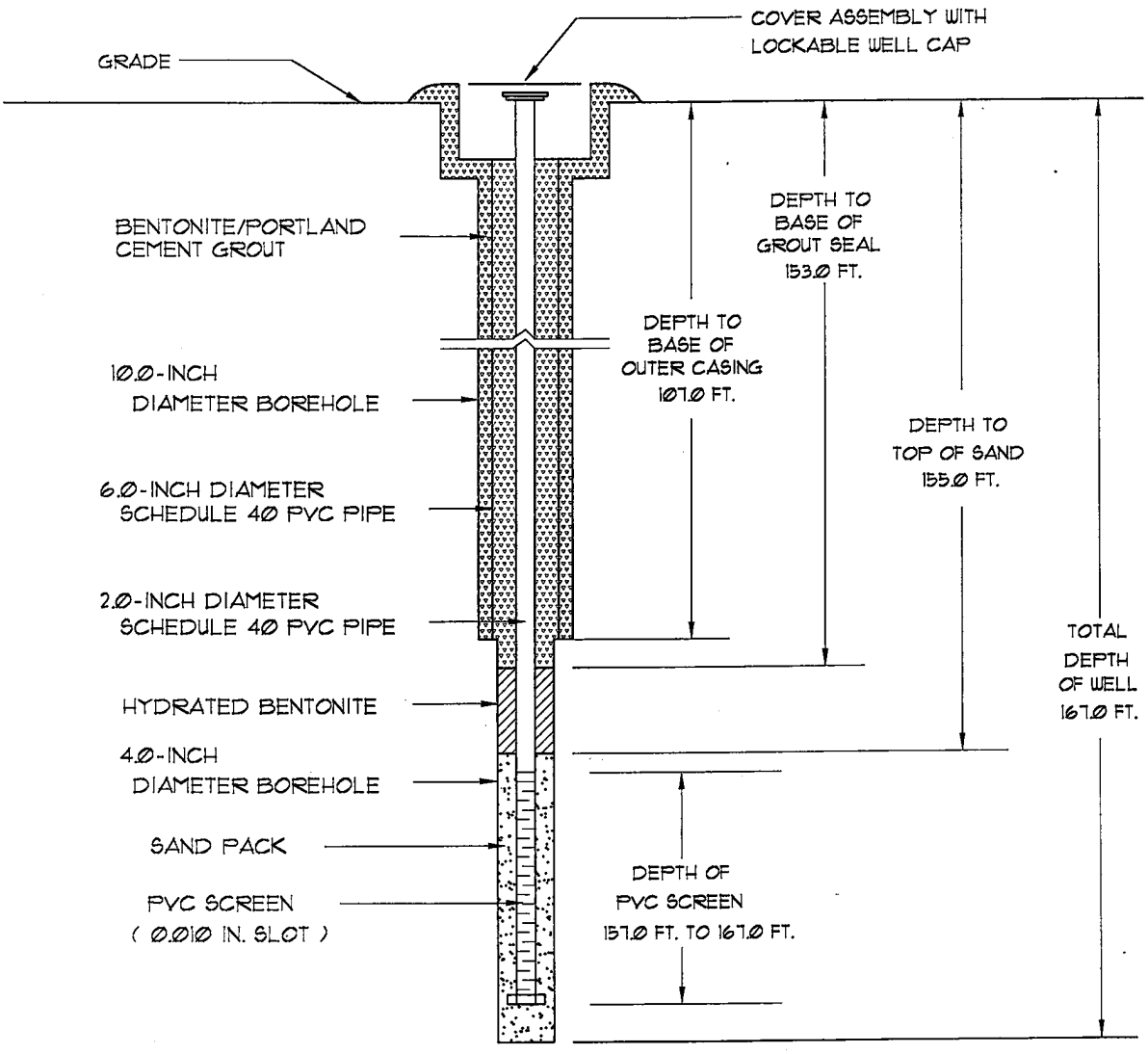


Well Number:	TW-3A (09322)
Date Drilled:	09/05/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

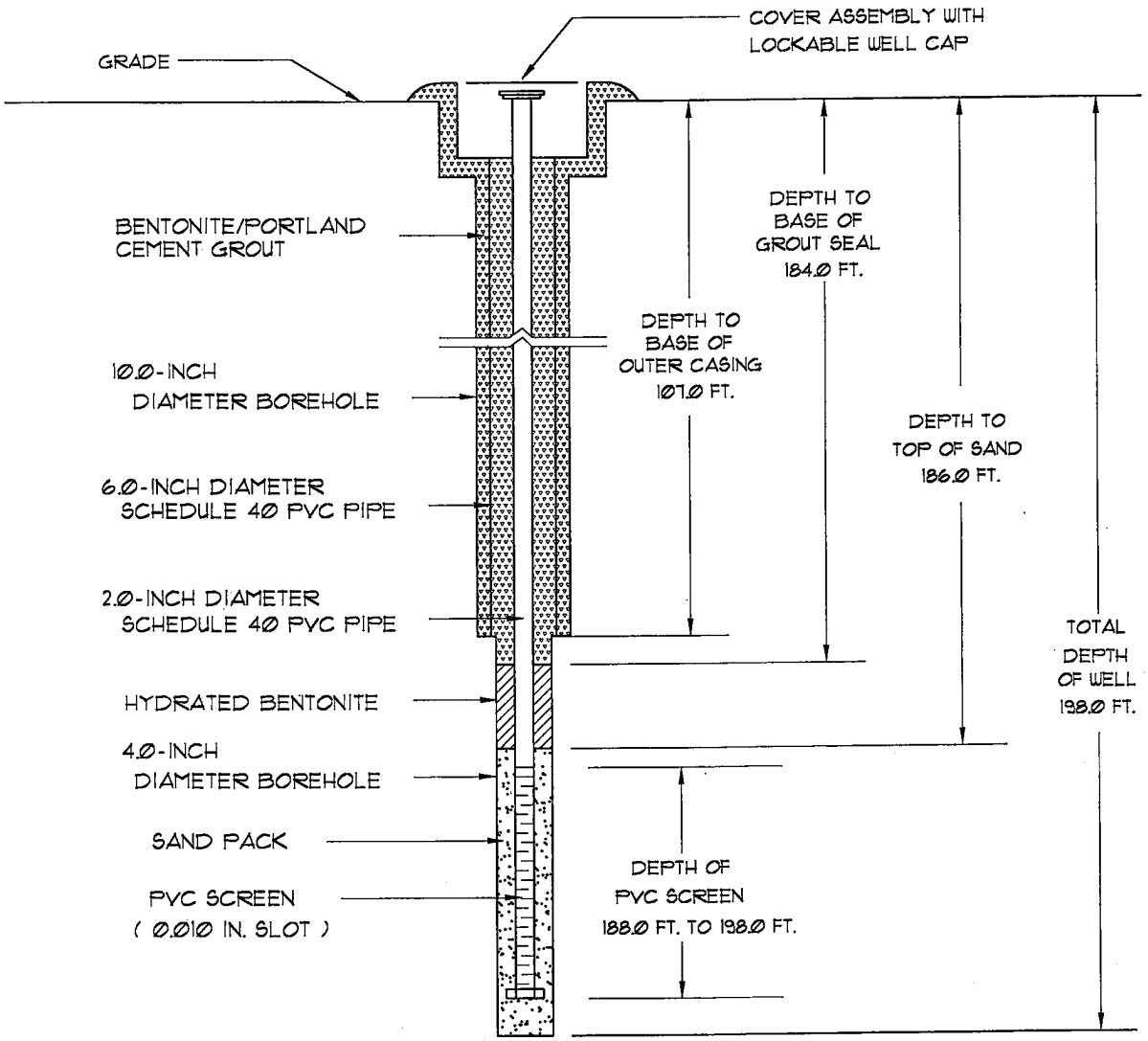


Well Number:	TW-3B (09322)
Date Drilled:	09/05/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #:	B 01846
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MEC! Project Number 12-3850



Well Number:	TW-3C (09322)
Date Drilled:	09/05/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #:	B 01846
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram
	Grass with Topsoil		
	PIEDMONT RESIDUUM: Brown and Red, Micaceous Clayey SILT		
5		ND	
	Brown and Red, Micaceous Silty CLAY		
10		ND	
	Gray and Tan, Micaceous Clayey SILT		
15		ND	
20		ND	
25		ND	
30		ND	
35		ND	
		ND	

Penetration Blows Per Foot

0 5 10 20 40 60 80 100

NO BLOWCOUNTS RECORDED

TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-4ABC (09322)
Date Drilled:	09/06/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

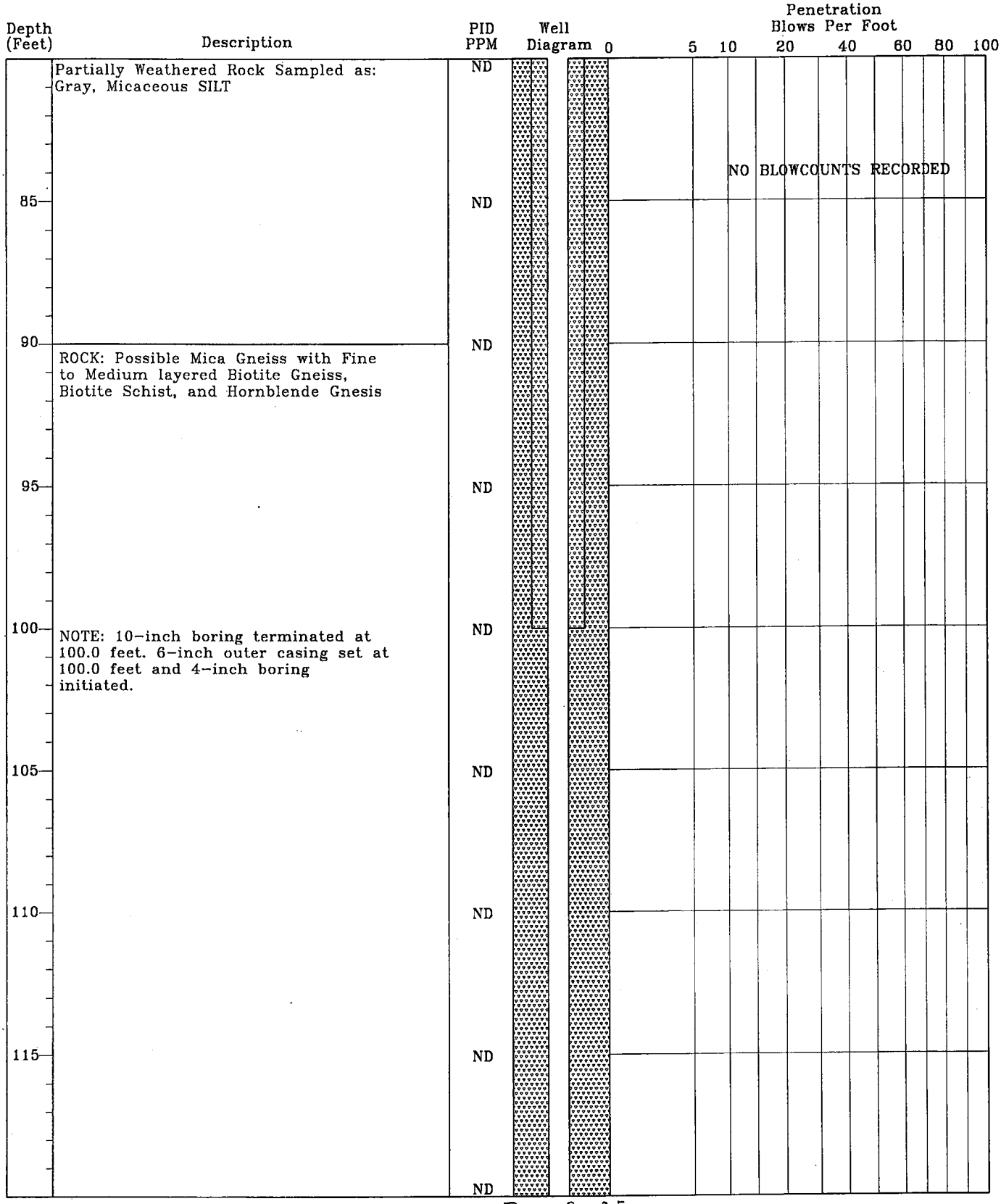
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 Fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram	Penetration Blows Per Foot 0 5 10 20 40 60 80 100
	Gray and Tan, Micaceous Clayey SILT	ND		NO BLOWCOUNTS RECORDED
45		ND		
50		ND		
55		ND		
60		ND		
65		ND		
	Partially Weathered Rock Sampled as: Gray, Micaceous SILT			
70		ND		
75		ND		
		ND		

TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-4ABC (09322)
Date Drilled:	09/06/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

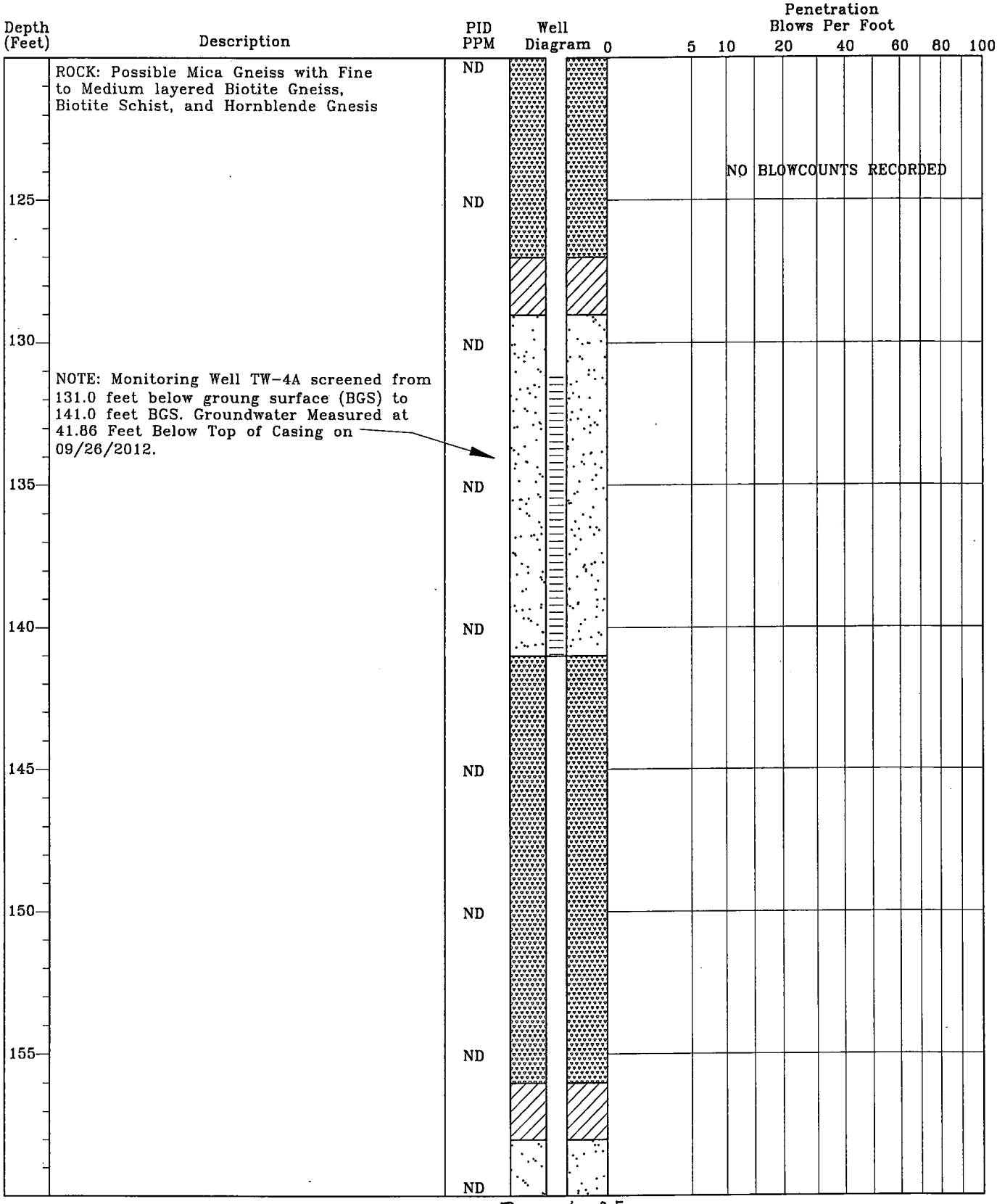
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-4ABC (09322)
Date Drilled:	09/06/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

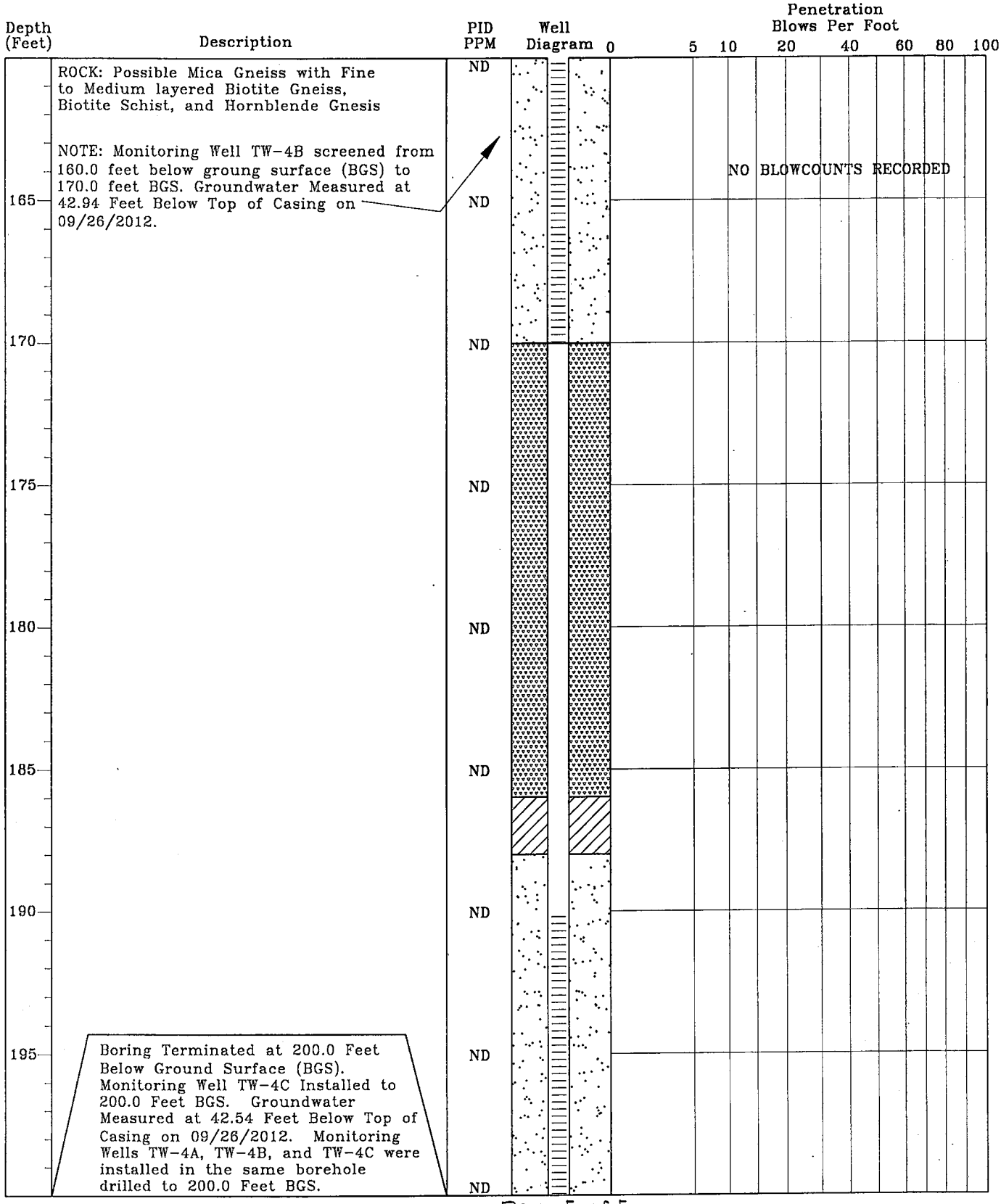
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 Fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-4ABC (09322)
Date Drilled:	09/06/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



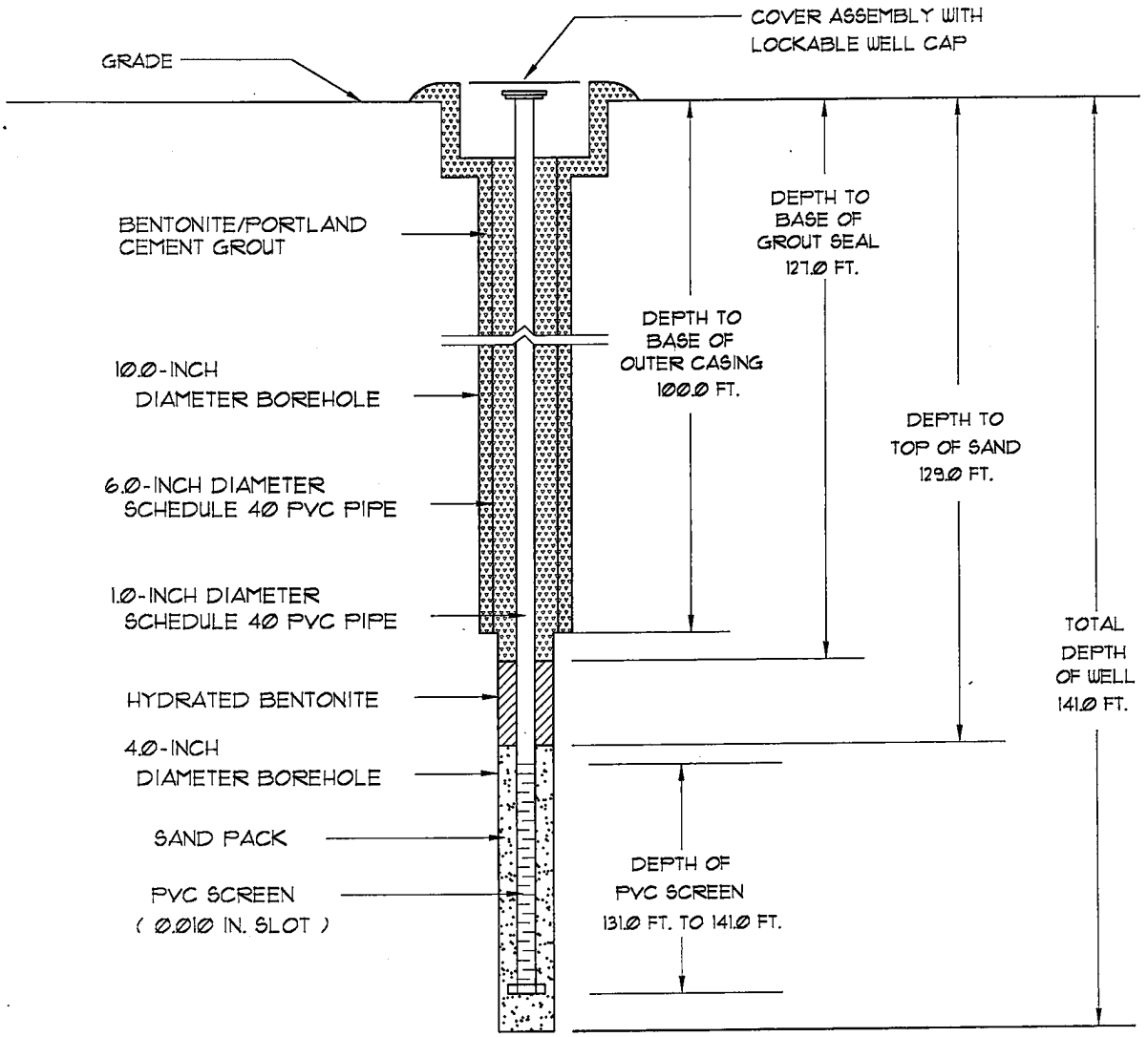
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-4ABC (09322)
Date Drilled:	09/06/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

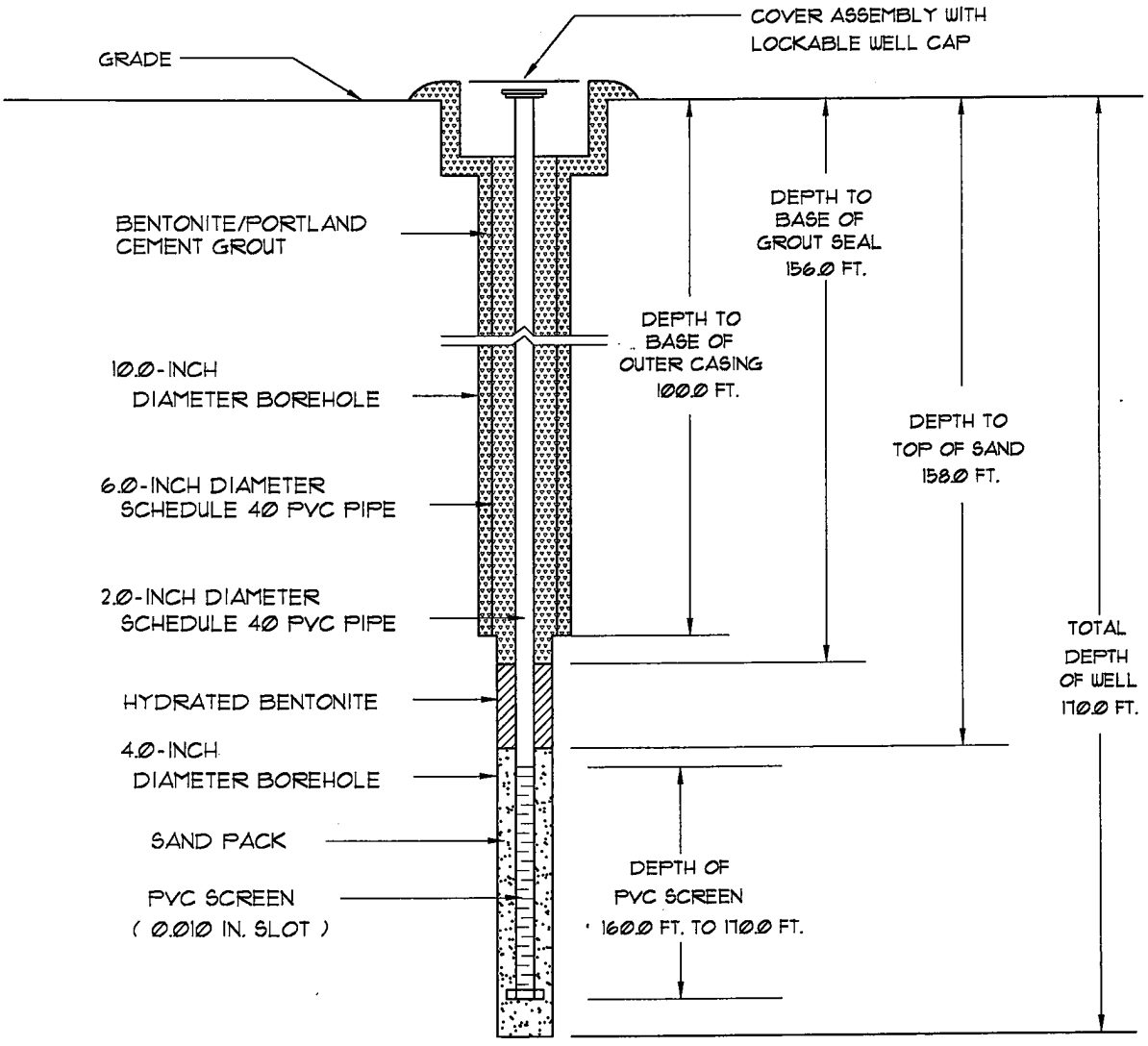


Well Number:	TW-4A (09322)
Date Drilled:	09/06/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

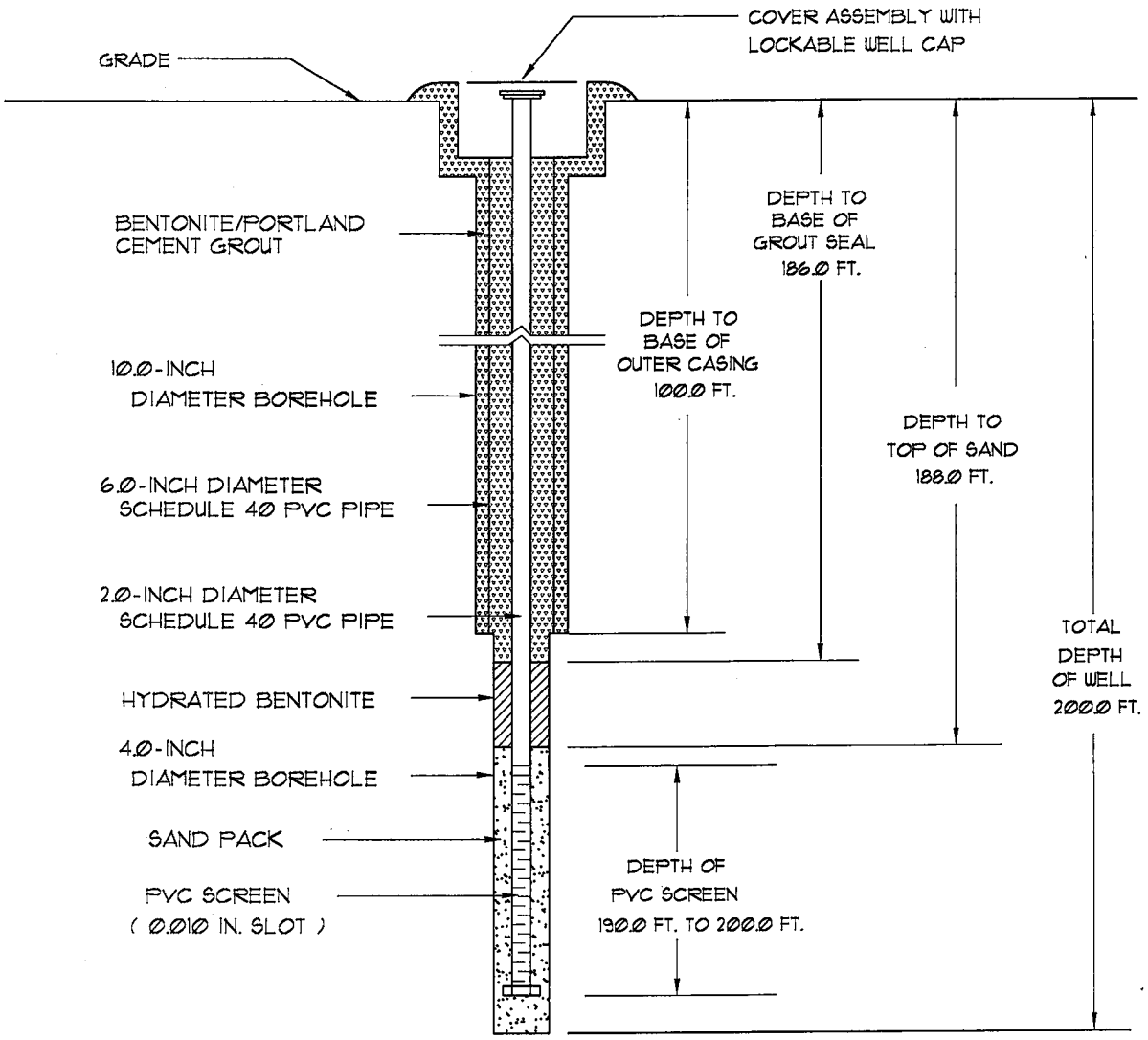


Well Number:	TW-4B (09322)
Date Drilled:	09/06/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #:	B 01846
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 Fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	TW-4C (09322)
Date Drilled:	09/06/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram	Penetration Blows Per Foot 0 5 10 20 40 60 80 100
	Grass with Topsoil			
	PIEDMONT RESIDUUM: Brown and Red, Micaceous Clayey SILT			NO BLOWCOUNTS RECORDED
5	Brown and Red, Micaceous Silty CLAY	ND		
10		ND		
	Gray and Tan, Micaceous Clayey SILT			
15		ND		
20		ND		
25		ND		
30		ND		
35		ND		
		ND		

TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-5ABC (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

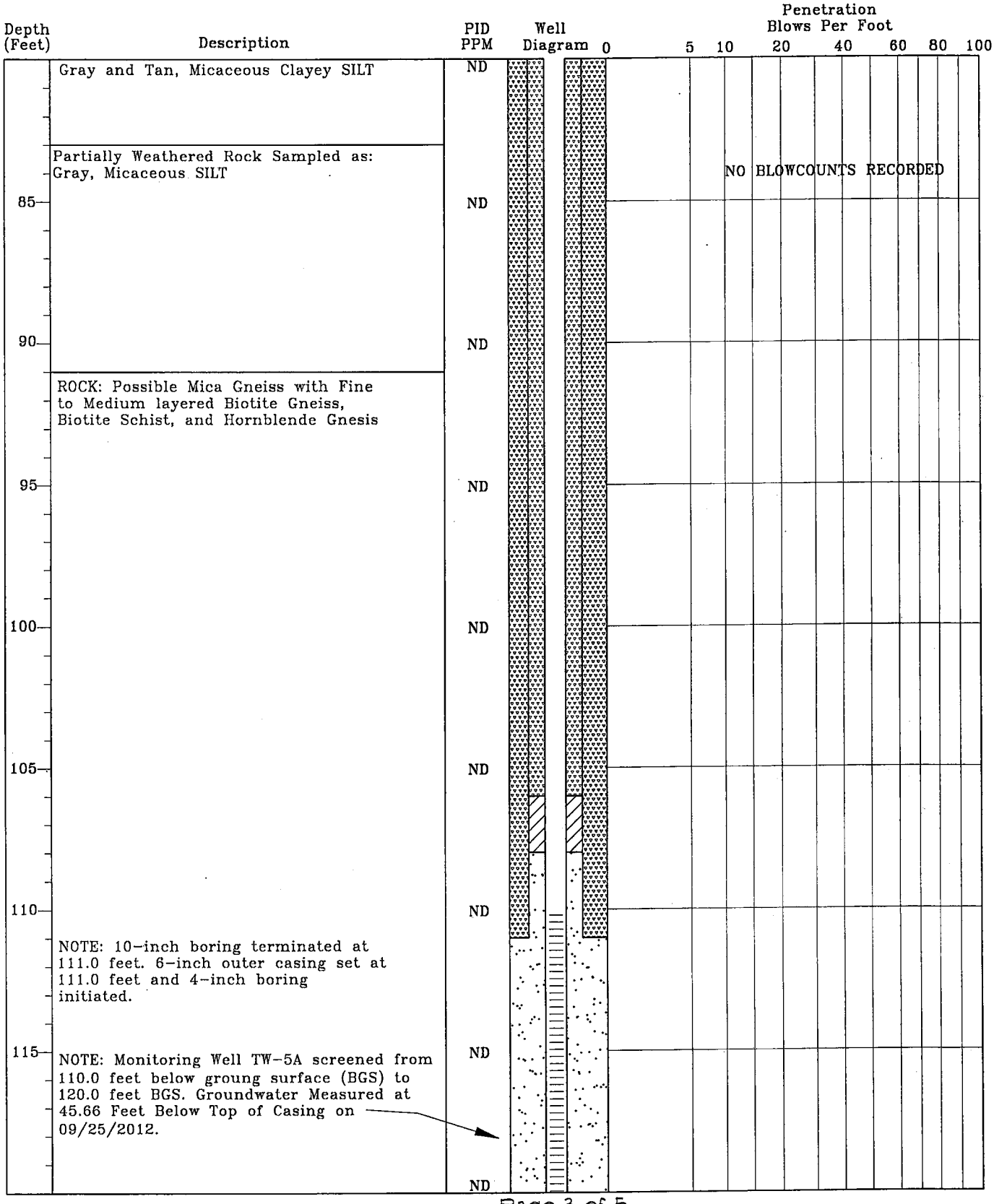
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram	Penetration Blows Per Foot 0 5 10 20 40 60 80 100
	Gray and Tan, Micaceous Clayey SILT	ND		NO BLOWCOUNTS RECORDED
45		ND		
50		ND		
55		ND		
60		ND		
65		ND		
70		ND		
75		ND		
		ND		

TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-5ABC (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-5ABC (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram
	ROCK: Possible Mica Gneiss with Fine to Medium layered Biotite Gneiss, Biotite Schist, and Hornblende Gnesis	ND	
125		ND	
130		ND	
135		ND	
140		ND	
145		ND	
150	NOTE: Monitoring Well TW-5B screened from 147.0 feet below groung surface (BGS) to 157.0 feet BGS. Groundwater Measured at 45.68 Feet Below Top of Casing on 09/25/2012.	ND	
155		ND	
		ND	

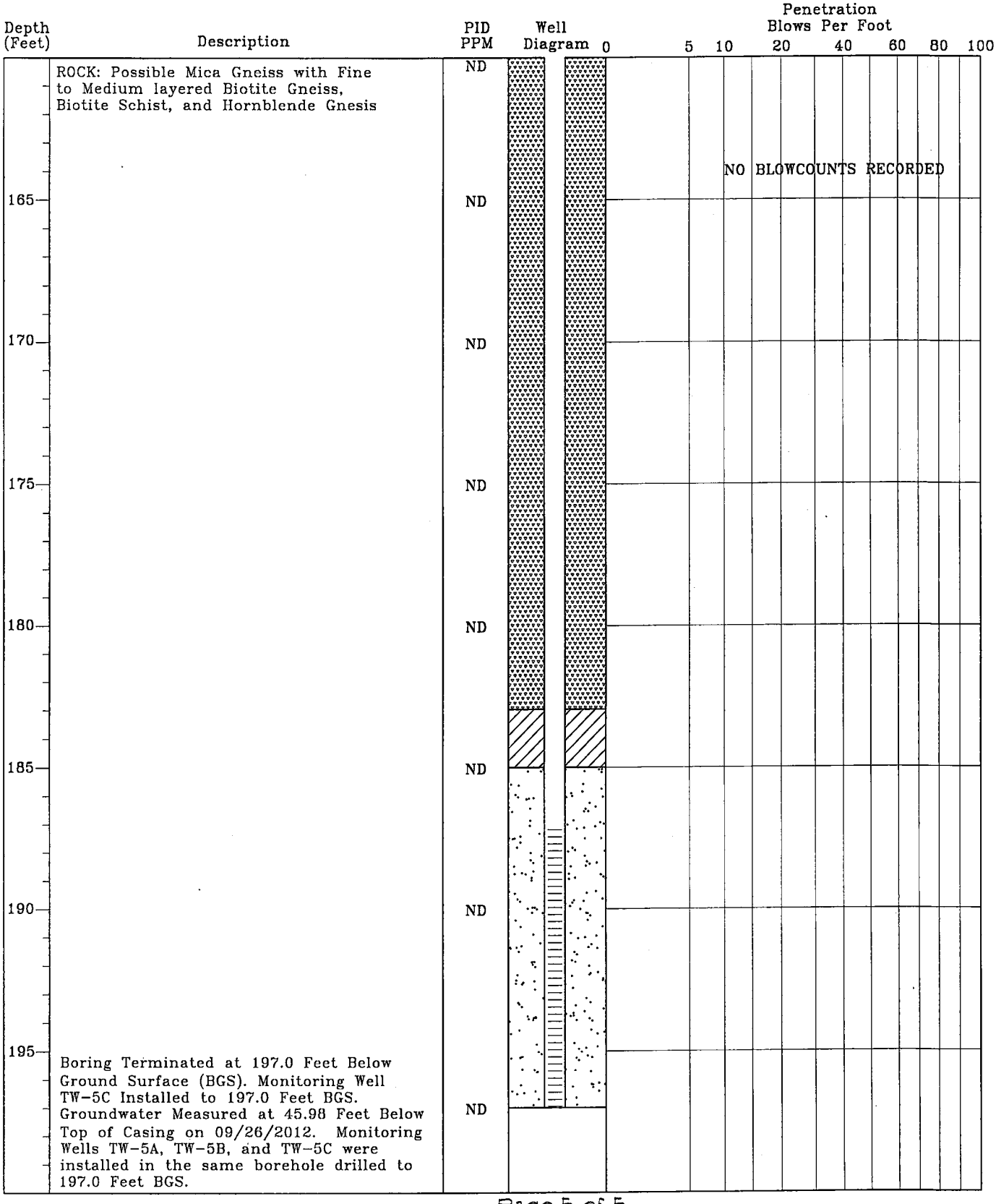
Penetration Blows Per Foot: 0 5 10 20 40 60 80 100

NO BLOWCOUNTS RECORDED

TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-5ABC (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



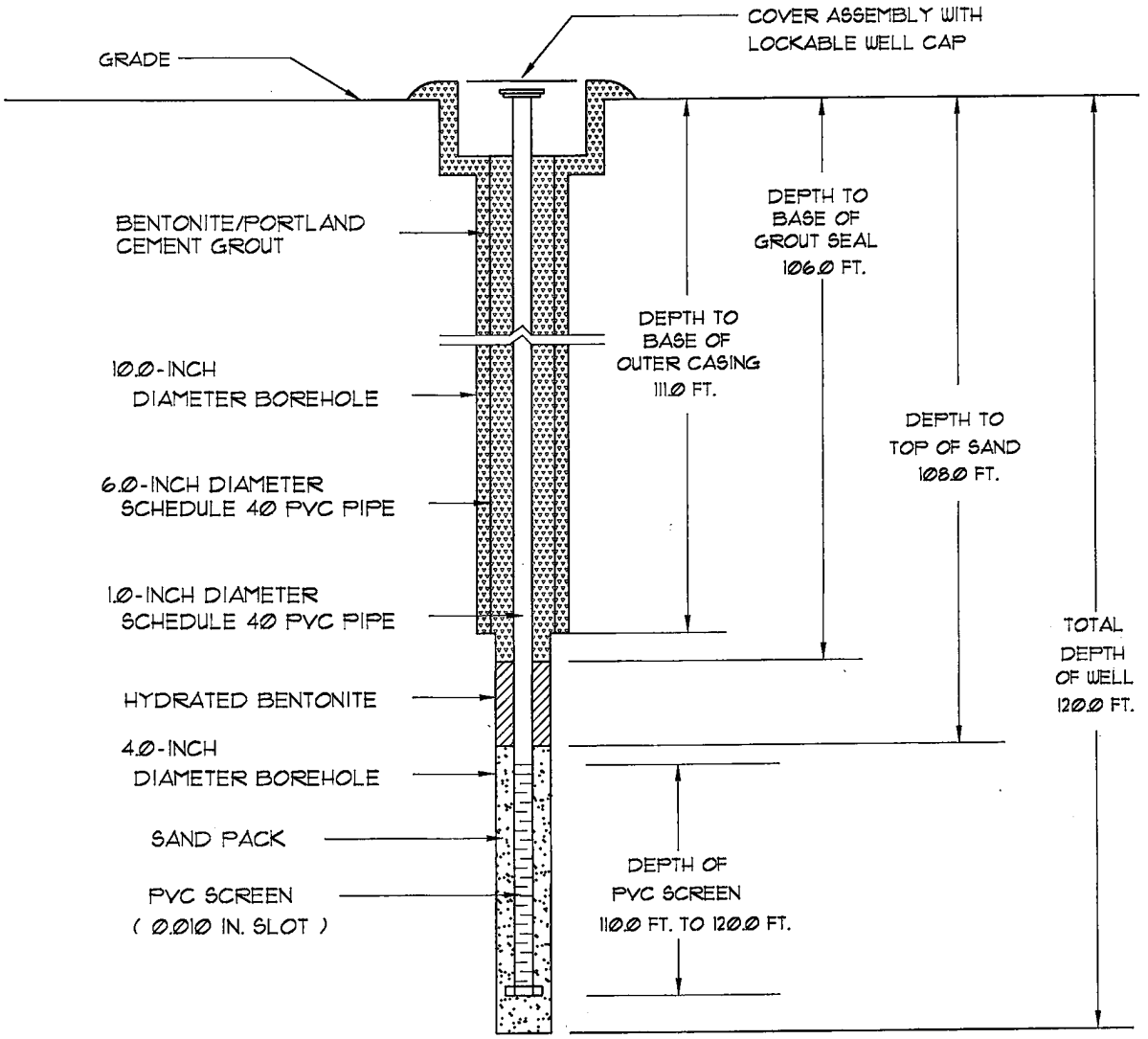
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-5ABC (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

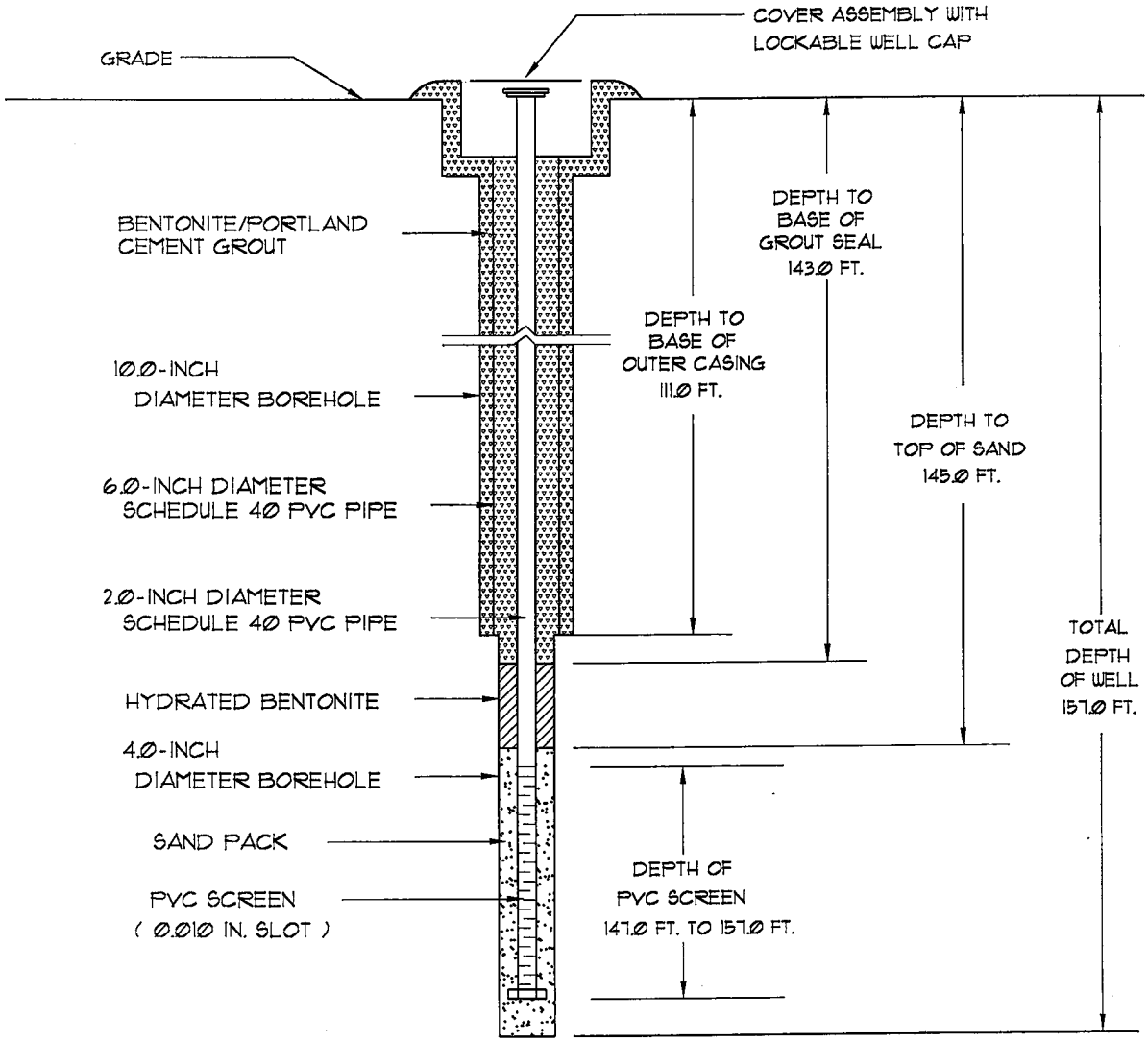


Well Number:	TW-5A (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 Fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

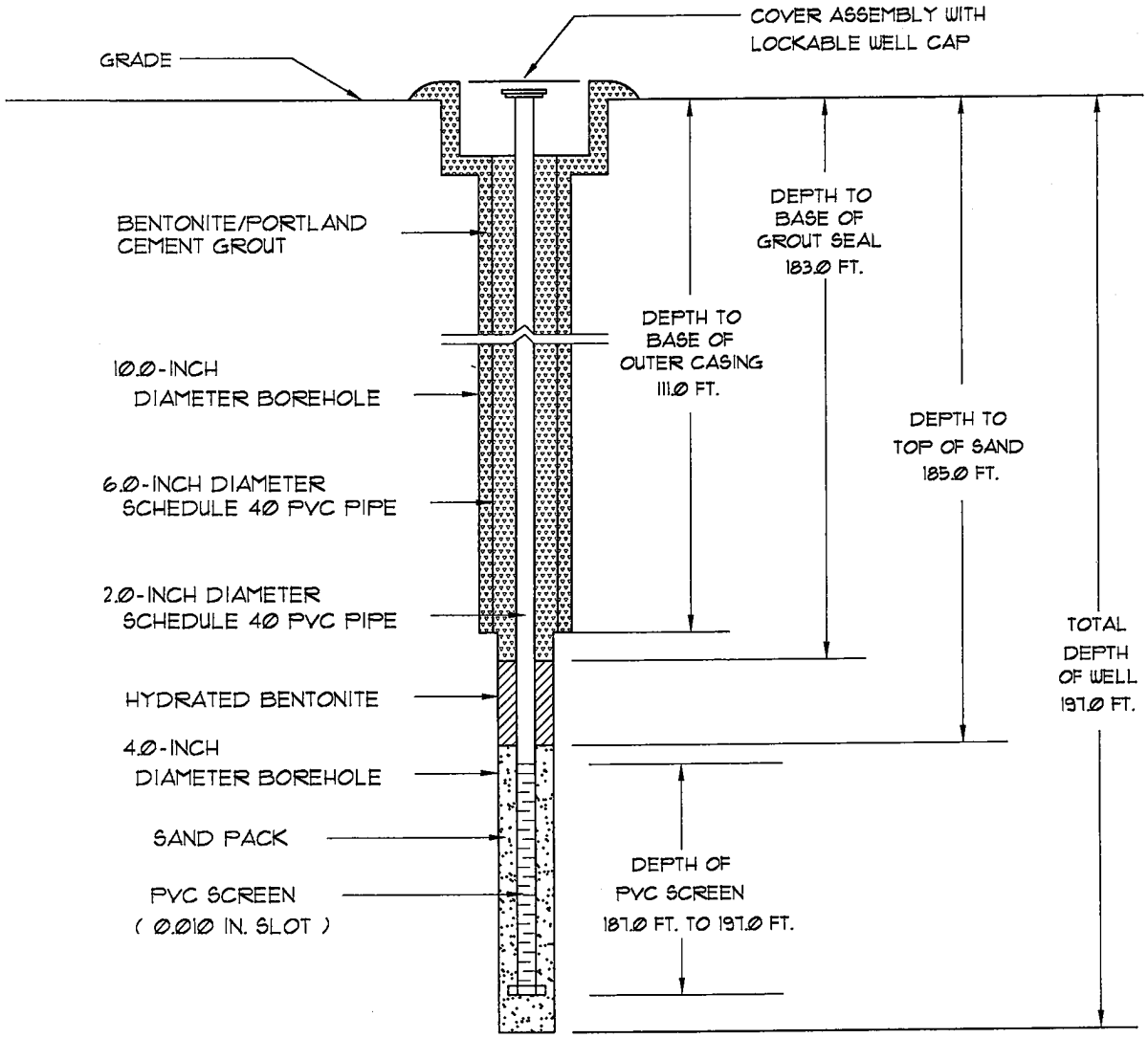


Well Number:	TW-5B (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #:	B 01846
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	TW-5C (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

Depth (Feet)	Description	PID PPM	Well Diagram
	Grass with Topsoil		
	PIEDMONT RESIDUUM: Brown and Red, Micaceous Clayey SILT		
5		ND	
	Brown and Red, Micaceous Silty CLAY		
10		ND	
	Gray and Tan, Micaceous Clayey SILT		
15		ND	
20		ND	
25		ND	
30		ND	
35		ND	
		ND	

Penetration Blows Per Foot

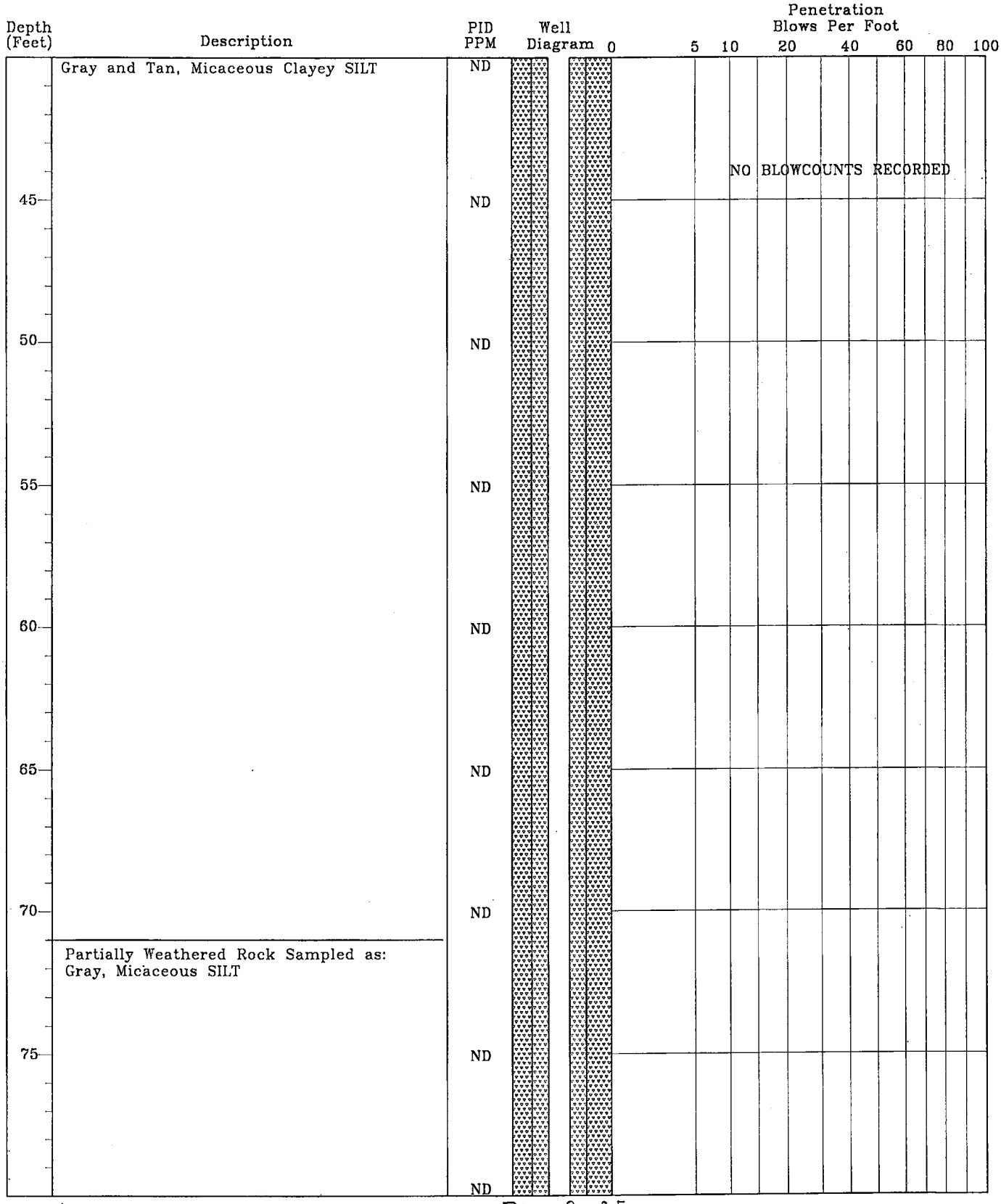
0 5 10 20 40 60 80 100

NO BLOWCOUNTS RECORDED

TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-6ABC (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

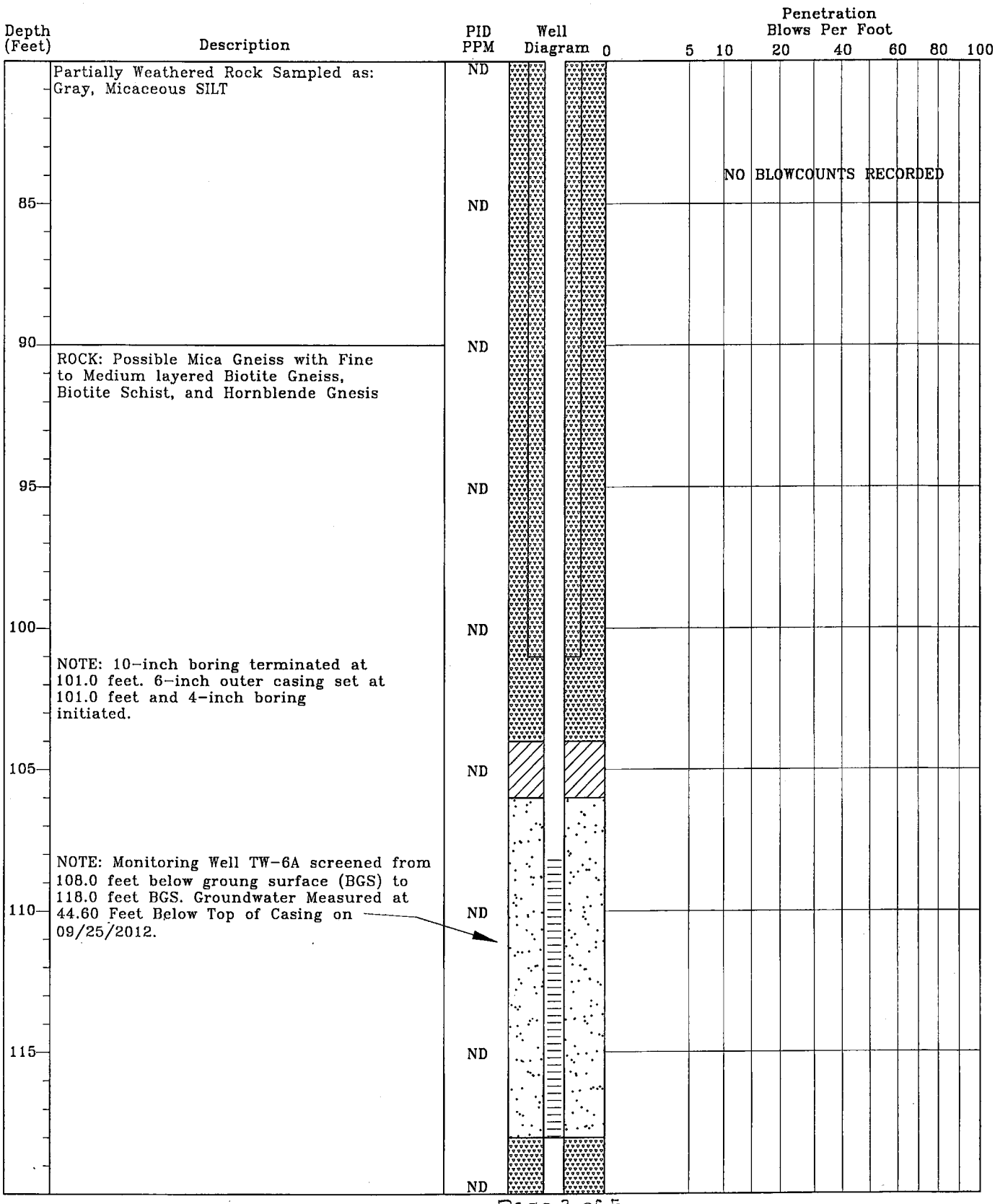
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-6ABC (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

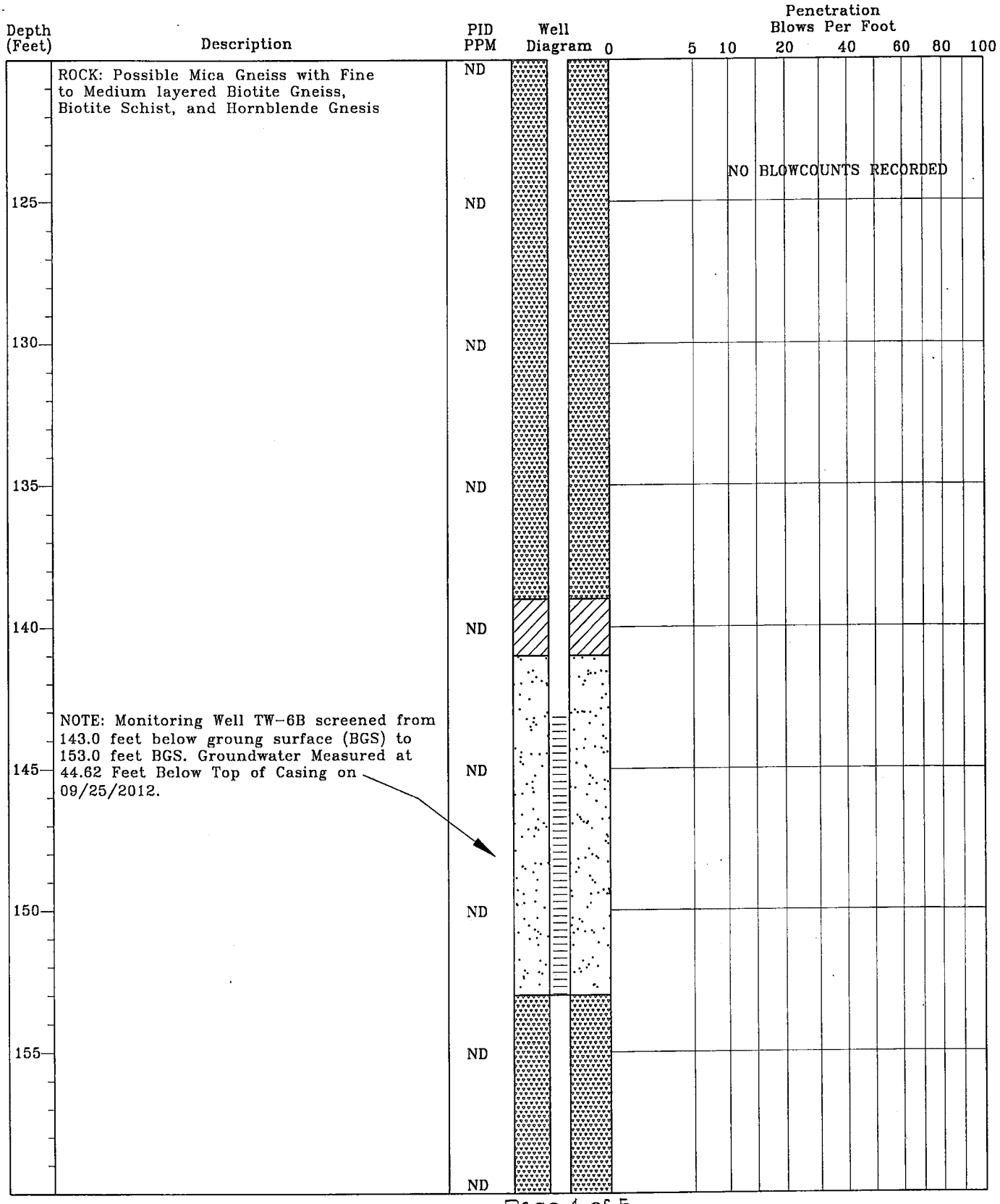
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-6ABC (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

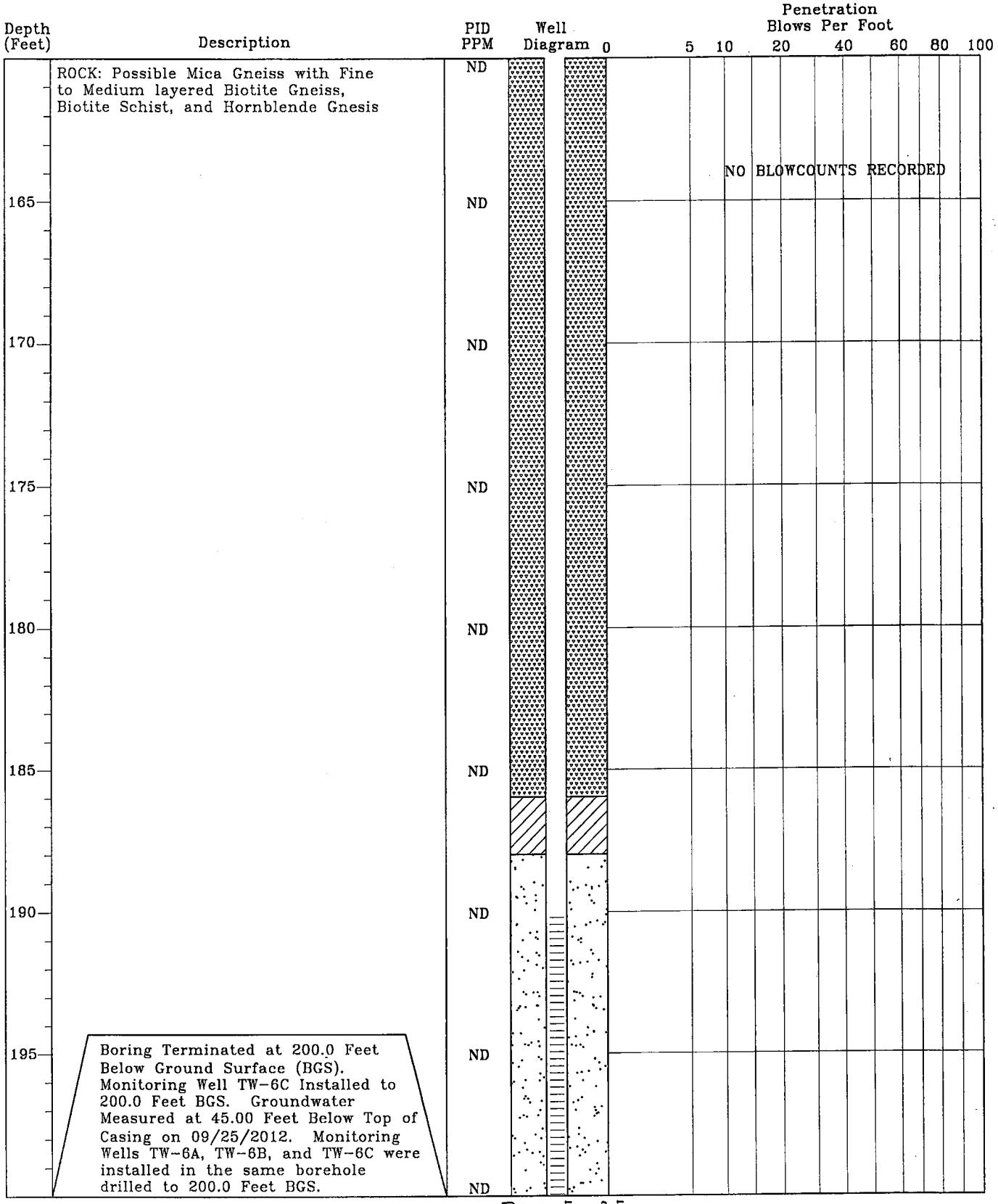
Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-6ABC (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048



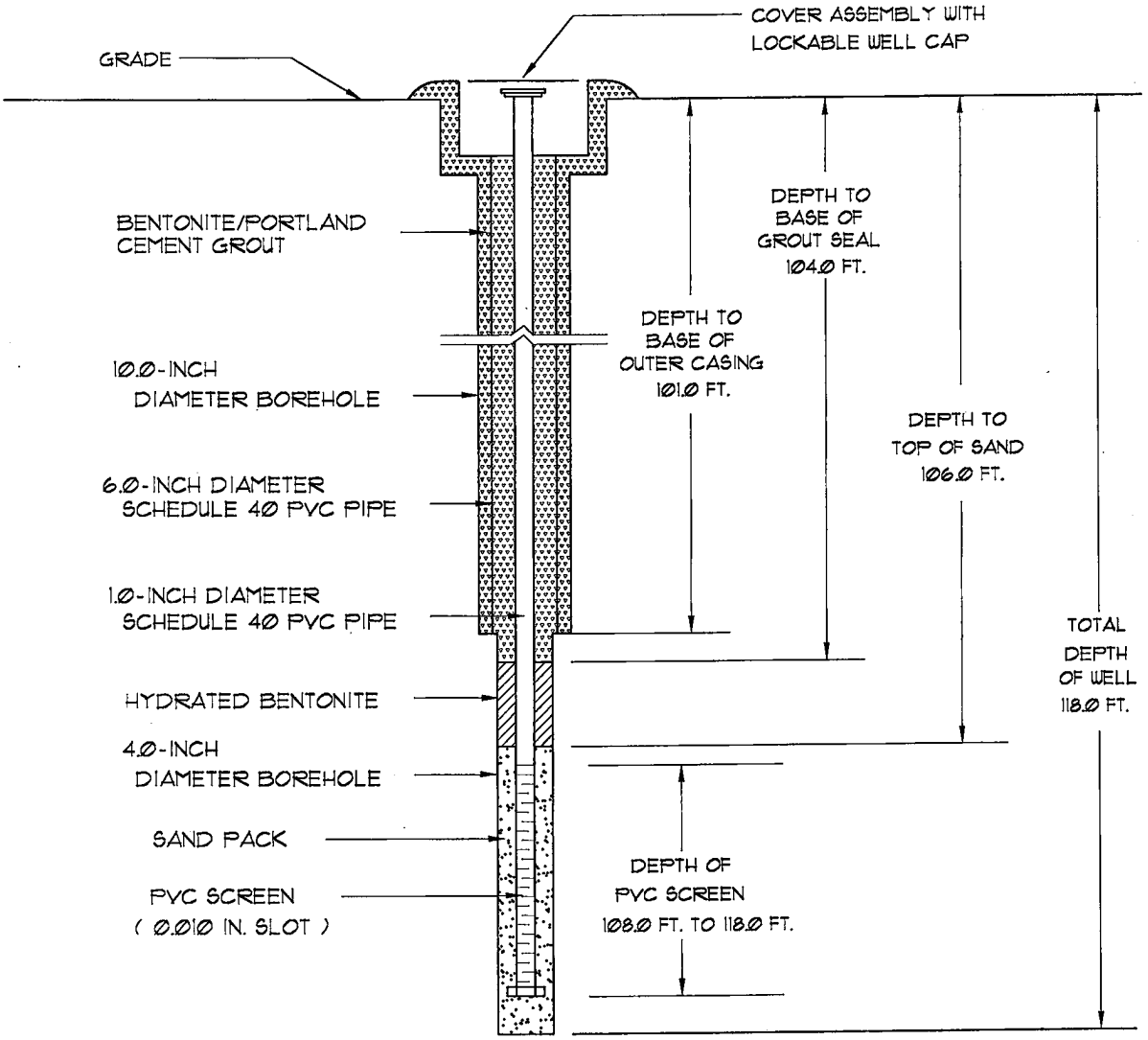
TEST BORING RECORD
Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

Boring Number:	TW-6ABC (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

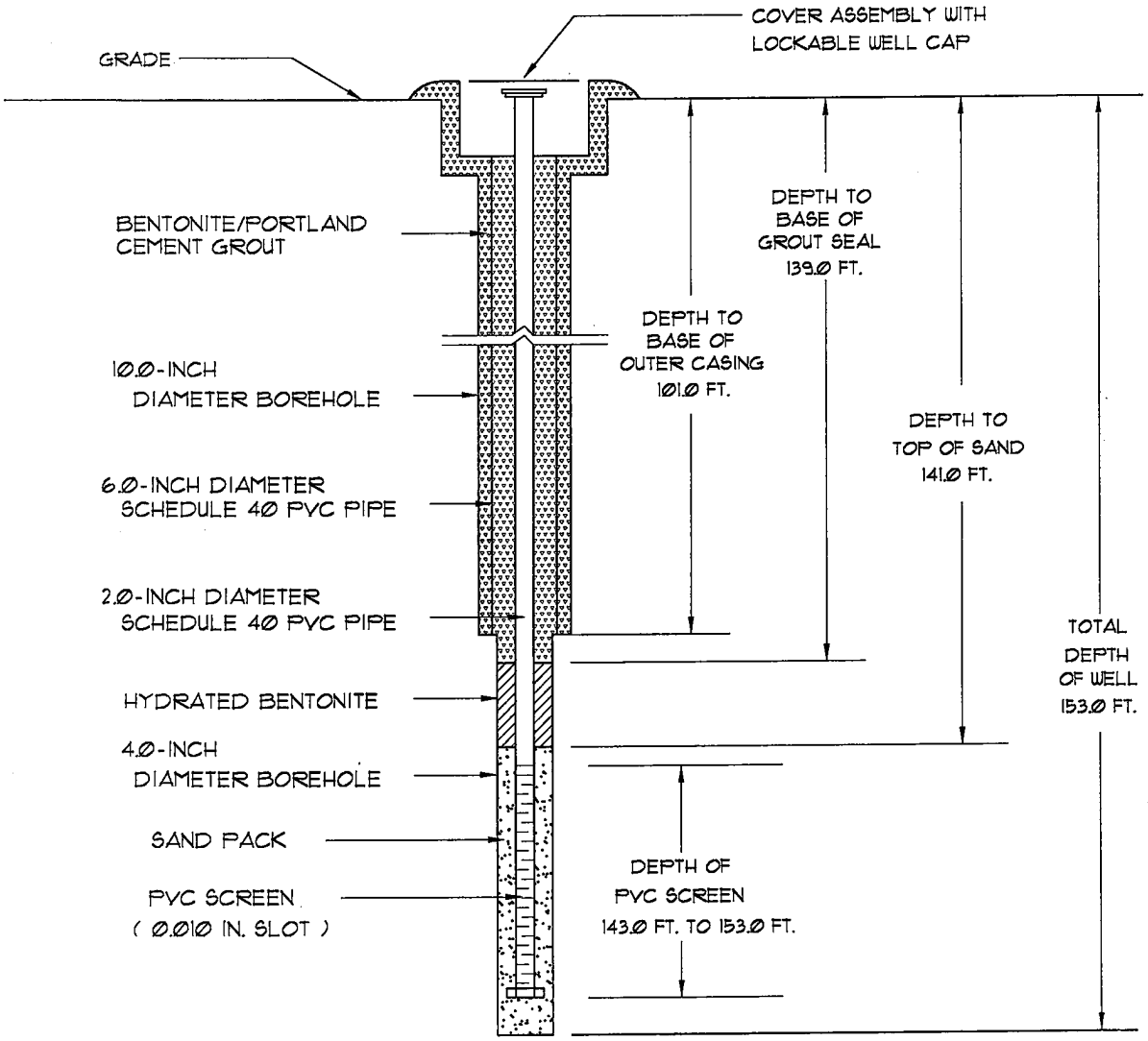


Well Number:	TW-6A (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 Fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850

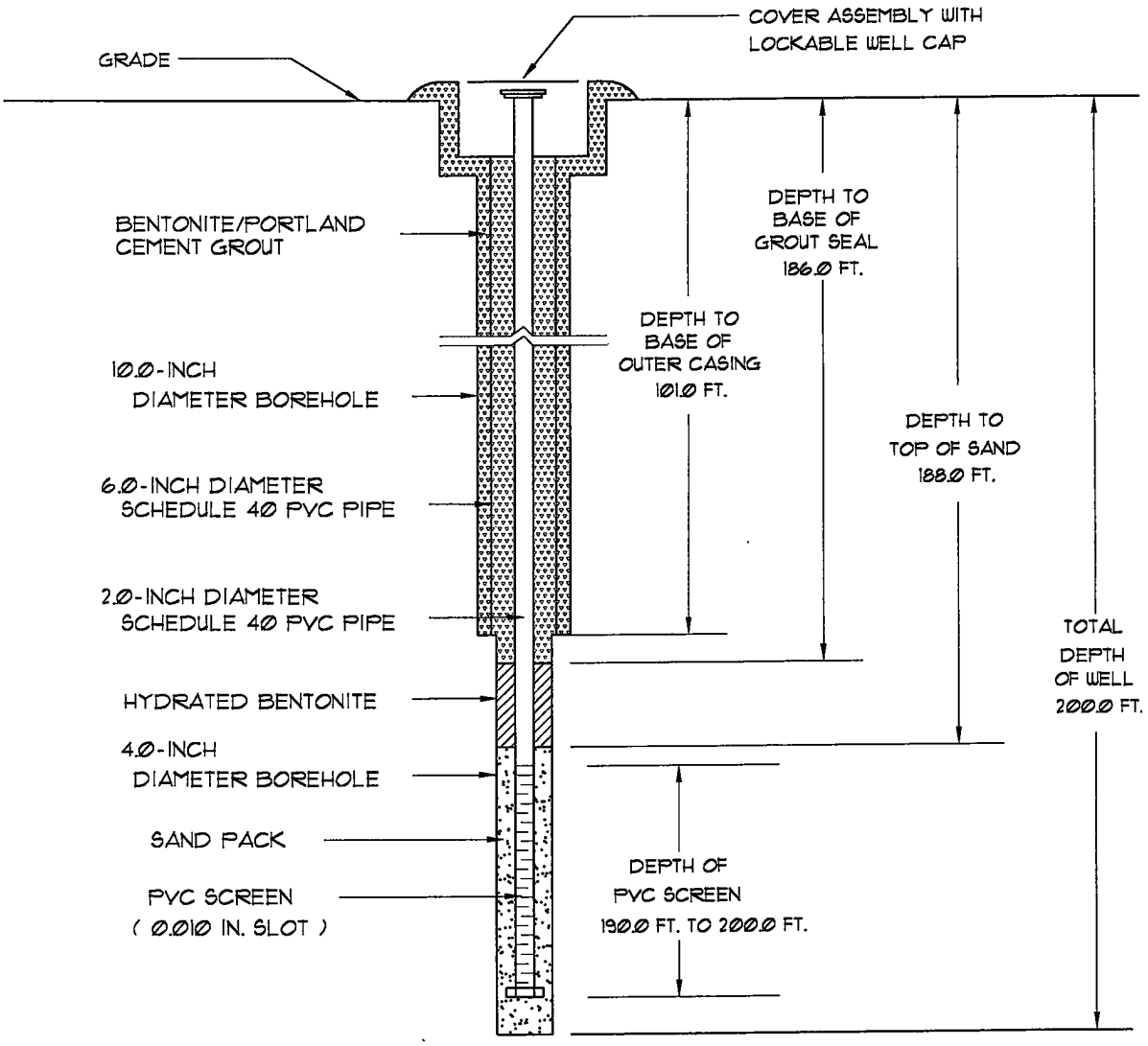


Well Number:	TW-6B (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #: B 01846	
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

MONITORING WELL INSTALLATION RECORD

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322
MECI Project Number 12-3850



Well Number:	TW-6C (09322)
Date Drilled:	09/07/2012
Drilled By:	Environmental Drilling & Probing Services, LLC.
Driller: T. Bolyard S.C. I.D. #:	B 01846
Logged By:	J. Bryant

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
Lexington, South Carolina 29073
(803) 808-2043 fax: 808-2048

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois
(last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-5R

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Grass with Topsoil	0.5	0.5
Brown, Silty CLAY	7.5	8.0
Brown, Clayey SILT	8.0	16.0
Brown, Sandy SILT	24.5	40.5
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-5R

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 40.5 ft. Date Started: 08/27/2012 Date Completed: 08/27/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2.0 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 30.5 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 30.5 ft. and 40.5 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 32.84 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 0.0 ft. to 28.5 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 26.5 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-6R

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Grass with Topsoil	0.5	0.5
Orange, Silty CLAY	7.5	8.0
Brown, Silty CLAY	6.0	14.0
Brown, Clayey SILT	12.0	26.0
Tan, Sandy SILT	18.0	44.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-6R

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 44.0 ft. Date Started: 08/28/2012 Date Completed: 08/28/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2.0 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 34.0 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 34.0 ft. and 44.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 38.15 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 0.0 ft. to 32.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 30.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-7R

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Grass with Topsoil	0.5	0.5
Orange, Silty CLAY	8.5	9.0
Brown, Silty CLAY	9.0	18.0
Brown, Clayey SILT	14.0	32.0
Tan, Sandy SILT	12.0	44.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-7R

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 44.0 ft. Date Started: 08/30/2012 Date Completed: 08/30/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2.0 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 34.0 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 34.0 ft. and 44.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 37.32 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 0.0 ft. to 32.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 30.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-10R

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Asphalt with Stone Base	0.5	0.5
Red, Silty CLAY	6.5	7.0
Brown, Sandy SILT	27.0	32.0
Tan, Sandy SILT	18.5	50.5
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-10R

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 08/28/2012
50.5 f t. Date Completed: 08/28/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2.0 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 40.5 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 40.5 ft. and 50.5 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 43.26 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 0.0 ft. to 38.5 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 36.5 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/08/2012
Well Driller
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-11R

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Grass with Topsoil	0.5	0.5
Brown, Clayey SILT	12.5	13.0
Tan, Clayey SILT	14.0	27.0
Brown, Clayey SILT	17.0	44.0
Tan, Sandy SILT	10.0	54.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-11R

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 54.0 ft. Date Started: 08/27/2012 Date Completed: 08/27/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2.0 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 44.0 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 44.0 ft. and 54.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 45.05 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 0.0 ft. to 42.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 40.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/08/2012
Well Driller
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-14R

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Grass with Topsoil	0.5	0.5
Orange, Silty CLAY	8.5	9.0
Brown, Clayey SILT	10.0	19.0
Tan, Clayey SILT	15.0	34.0
Tan, Sandy SILT	24.0	58.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-14R

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 58.0 ft. Date Started: 08/21/2012 Date Completed: 08/21/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2.0 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 48.0 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 48.0 ft. and 58.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 47.60 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 0.0 ft. to 46.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 44.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-15R

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Grass with Topsoil	0.5	0.5
Orange, Silty CLAY	6.5	7.0
Brown, Silty CLAY	13.0	20.0
Brown, Clayey SILT	14.0	34.0
Brown and Tan, Sandy SILT	24.0	58.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-15R

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 58.0 ft. Date Started: 08/21/2012 Date Completed: 08/21/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2.0 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 48.0 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 48.0 ft. and 58.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 49.13 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 0.0 ft. to 46.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 44.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003)

COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-17R

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Grass with Topsoil	0.5	0.5
Brown, Clayey SILT	15.5	16.0
Brown, Sandy SILT	24.0	40.0
Tan, Sandy SILT	8.0	48.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-17R

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 48.0 ft. Date Started: 08/27/2012 Date Completed: 08/27/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2.0 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 38.0 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 38.0 ft. and 48.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 42.24 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 0.0 ft. to 36.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 34.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/08/2012
Well Driller
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-18R

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Grass with Topsoil	0.5	0.5
Orange, Silty CLAY	11.5	12.0
Brown, Silty CLAY	10.0	22.0
Brown, Sandy SILT	33.0	55.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-18R

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 55.0 ft. Date Started: 08/27/2012 Date Completed: 08/27/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2.0 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 45.0 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 45.0 ft. and 55.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 46.15 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 0.0 ft. to 43.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 41.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-21

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Grass with Topsoil	0.5	0.5
Orange, Silty CLAY	7.5	8.0
Brown, Silty CLAY	10.0	18.0
Brown, Clayey SILT	26.0	44.0
Brown, Sandy SILT	10.0	54.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS: MW-21		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 54.0 ft. Date Started: 08/27/2012 Date Completed: 08/27/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2.0 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2.0 in. to 44.0 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 44.0 ft. and 54.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 47.63 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 0.0 ft. to 42.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 40.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/08/2012
Well Driller
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-1A

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	8.5	9.0
Brown & Red, Silty CLAY	8.0	17.0
Gray & Tan, Clayey SILT	58.0	75.0
Partially Weathered Rock: SILT	15.0	90.0
ROCK: Mica Gneiss	30.0	120.0
Note: Monitoring Wells TW-1A,		
TW-1B, and TW-1C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
TW-1A

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 120.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 1 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 100.0 ft. depth
1.0 in. to 110.0 ft. depth
Height: Above /Below Surface 0.0 ft
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 1 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 110.0 ft. and 120.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 41.29 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 108.0 ft. to 120.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 106.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-1B

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	8.5	9.0
Brown & Red, Silty CLAY	8.0	17.0
Gray & Tan, Clayey SILT	58.0	75.0
Partially Weathered Rock: SILT	15.0	90.0
ROCK: Mica Gneiss	71.0	161.0
Note: Monitoring Wells TW-1A,		
TW-1B, and TW-1C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
TW-1B

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 161.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 2 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 100.0 ft. depth
2.0 in. to 151.0 ft. depth
Height: Above /Below
Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 151.0 ft. and 161.0 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 41.00 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 149.0 ft. to 161.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 147.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/08/2012
Well Driller
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-1C

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	8.5	9.0
Brown & Red, Silty CLAY	8.0	17.0
Gray & Tan, Clayey SILT	58.0	75.0
Partially Weathered Rock: SILT	15.0	90.0
ROCK: Mica Gneiss	110.0	200.0
Note: Monitoring Wells TW-1A,		
TW-1B, and TW-1C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS: TW-1C		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 200.0 f t. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 2 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 100.0 ft. depth
2.0 in. to 190.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 190.0 ft. and 200.0 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 42.06 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 188.0 ft. to 200.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 186.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Well Driller Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-2A

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	7.5	8.0
Brown & Tan, Silty CLAY	29.0	37.0
Tan & White, Silty SAND	30.0	67.0
Partially Weathered Rock: SAND	36.0	103.0
ROCK: Mica Gneiss	34.0	137.0
Note: Monitoring Wells TW-2A,		
TW-2B, and TW-2C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-2A

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 137.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 1 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 117.0 ft. depth
1.0 in. to 127.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 1 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 127.0 ft. and 137.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 42.75 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 125.0 ft. to 137.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 123.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Well Driller Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-2B

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	7.5	8.0
Brown & Tan, Silty CLAY	29.0	37.0
Tan & White, Silty SAND	30.0	67.0
Partially Weathered Rock: SAND	36.0	103.0
ROCK: Mica Gneiss	57.0	160.0
Note: Monitoring Wells TW-2A,		
TW-2B, and TW-2C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-2B

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 160.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 2 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 117.0 ft. depth
2.0 in. to 150.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 150.0 ft. and 160.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 42.74 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 148.0 ft. to 160.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 146.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Well Driller Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-2C

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	7.5	8.0
Brown & Tan, Silty CLAY	29.0	37.0
Tan & White, Silty SAND	30.0	67.0
Partially Weathered Rock: SAND	36.0	103.0
ROCK: Mica Gneiss	100.0	203.0
Note: Monitoring Wells TW-2A,		
TW-2B, and TW-2C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-2C

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 203.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 2 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 117.0 ft. depth
2.0 in. to 193.0 ft. depth
Height: Above /Below
Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 193.0 ft. and 203.0 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 41.88 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 191.0 ft. to 203.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 189.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-3A

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	10.5	11.0
Brown & Tan, Clayey SILT	52.0	63.0
Brown & Tan, Silty SAND	14.0	77.0
Partially Weathered Rock: SAND	20.0	97.0
ROCK: Mica Gneiss	38.0	135.0
Note: Monitoring Wells TW-3A,		
TW-3B, and TW-3C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
TW-3A

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 135.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 1 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 107.0 ft. depth
1.0 in. to 125.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 1 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 125.0 ft. and 135.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 40.63 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 123.0 ft. to 135.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 121.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-3B

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	10.5	11.0
Brown & Tan, Clayey SILT	52.0	63.0
Brown & Tan, Silty SAND	14.0	77.0
Partially Weathered Rock: SAND	20.0	97.0
ROCK: Mica Gneiss	70.0	167.0
Note: Monitoring Wells TW-3A,		
TW-3B, and TW-3C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
TW-3B

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 167.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 2 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 107.0 ft. depth
2.0 in. to 157.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 157.0 ft. and 167.0 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 40.83 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 155.0 ft. to 167.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 153.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/08/2012
Well Driller
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-3C

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	10.5	11.0
Brown & Tan, Clayey SILT	52.0	63.0
Brown & Tan, Silty SAND	14.0	77.0
Partially Weathered Rock: SAND	20.0	97.0
ROCK: Mica Gneiss	101.0	198.0
Note: Monitoring Wells TW-3A,		
TW-3B, and TW-3C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS: TW-3C		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 198.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 2 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 107.0 ft. depth
2.0 in. to 188.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 188.0 ft. and 198.0 ft. NOTE: MULTIPLE SCREENS
_____ ft. and _____ ft. USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 40.60 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 186.0 ft. to 198.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 184.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-4A

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	7.5	8.0
Brown & Red, Silty CLAY	6.0	14.0
Gray & Tan, Clayey SILT	53.0	67.0
Partially Weathered Rock: SILT	23.0	90.0
ROCK: Mica Gneiss	51.0	141.0
Note: Monitoring Wells TW-4A,		
TW-4B, and TW-4C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
TW-4A

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 141.0 f t. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 1 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 100.0 ft. depth
1.0 in. to 131.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 1 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 131.0 ft. and 141.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 41.86 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 129.0 ft. to 141.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 127.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/08/2012
Well Driller
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-4B

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	7.5	8.0
Brown & Red, Silty CLAY	6.0	14.0
Gray & Tan, Clayey SILT	53.0	67.0
Partially Weathered Rock: SILT	23.0	90.0
ROCK: Mica Gneiss	80.0	170.0
Note: Monitoring Wells TW-4A,		
TW-4B, and TW-4C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-4B

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 170.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 2 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 100.0 ft. depth
2.0 in. to 160.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 160.0 ft. and 170.0 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 42.94 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 158.0 ft. to 170.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 156.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Well Driller Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-4C

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	7.5	8.0
Brown & Red, Silty CLAY	6.0	14.0
Gray & Tan, Clayey SILT	53.0	67.0
Partially Weathered Rock: SILT	23.0	90.0
ROCK: Mica Gneiss	110.0	200.0
Note: Monitoring Wells TW-4A,		
TW-4B, and TW-4C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-4C

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 200.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 2 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 100.0 ft. depth
2.0 in. to 190.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 190.0 ft. and 200.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 42.54 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 188.0 ft. to 200.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 186.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-5A

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	3.5	4.0
Brown & Red, Silty CLAY	7.0	11.0
Gray & Tan, Clayey SILT	72.0	83.0
Partially Weathered Rock: SILT	8.0	91.0
ROCK: Mica Gneiss	29.0	120.0
Note: Monitoring Wells TW-5A,		
TW-5B, and TW-5C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-5A

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 120.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 1 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 111.0 ft. depth
1.0 in. to 110.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 1 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 110.0 ft. and 120.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 45.66 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 108.0 ft. to 120.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 106.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Well Driller Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-5B

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	3.5	4.0
Brown & Red, Silty CLAY	7.0	11.0
Gray & Tan, Clayey SILT	72.0	83.0
Partially Weathered Rock: SILT	8.0	91.0
ROCK: Mica Gneiss	66.0	157.0
Note: Monitoring Wells TW-5A,		
TW-5B, and TW-5C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
TW-5B

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 157.0 f t. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 2 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 111.0 ft. depth
2.0 in. to 147.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 147.0 ft. and 157.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 45.68 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 145.0 ft. to 157.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 143.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-5C

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	3.5	4.0
Brown & Red, Silty CLAY	7.0	11.0
Gray & Tan, Clayey SILT	72.0	83.0
Partially Weathered Rock: SILT	8.0	91.0
ROCK: Mica Gneiss	106.0	197.0
Note: Monitoring Wells TW-5A,		
TW-5B, and TW-5C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
TW-5C

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE:
☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 197.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 2 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 111.0 ft. depth
2.0 in. to 187.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 187.0 ft. and 197.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 45.98 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 185.0 ft. to 197.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 183.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-6A

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	5.5	6.0
Brown & Red, Silty CLAY	7.0	13.0
Gray & Tan, Clayey SILT	58.0	71.0
Partially Weathered Rock: SILT	19.0	90.0
ROCK: Mica Gneiss	28.0	118.0
Note: Monitoring Wells TW-6A,		
TW-6B, and TW-6C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-6A

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 118.0 f t. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 1 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 101.0 ft. depth
1.0 in. to 108.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 1 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 108.0 ft. and 118.0 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 44.60 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 106.0 ft. to 118.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 104.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 10/08/2012
Well Driller
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-6B

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	5.5	6.0
Brown & Red, Silty CLAY	7.0	13.0
Gray & Tan, Clayey SILT	58.0	71.0
Partially Weathered Rock: SILT	19.0	90.0
ROCK: Mica Gneiss	63.0	153.0
Note: Monitoring Wells TW-6A,		
TW-6B, and TW-6C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-6B

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 153.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 2 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 101.0 ft. depth
2.0 in. to 143.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 143.0 ft. and 153.0 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 44.62 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 141.0 ft. to 153.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 138.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** TW-6C

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Topsoil	0.5	0.5
Brown & Red, Clayey SILT	5.5	6.0
Brown & Red, Silty CLAY	7.0	13.0
Gray & Tan, Clayey SILT	58.0	71.0
Partially Weathered Rock: SILT	19.0	90.0
ROCK: Mica Gneiss	110.0	200.0
Note: Monitoring Wells TW-6A,		
TW-6B, and TW-6C were installed		
in one borehole.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-6C

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UMW-24493

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 200.0 ft. Date Started: 09/03/2012 Date Completed: 09/07/2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 Inch & 2 Inch
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6.0 in. to 101.0 ft. depth
2.0 in. to 190.0 ft. depth
Height: Above /Below Surface 0.0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Schedule 40 PVC Diam.: 2 Inch
Slot/Gauge: 0.010 Length: 10.0 Feet
Set Between: 190.0 ft. and 200.0 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 45.00 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 188.0 ft. to 200.0 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 186.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A (B) C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 10/08/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-5

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 30.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Well Abandoned by		
Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Approximately 5.0		
Gallons of Portlant-Bentonite		
Cement Slurry.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-5

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 09322

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 30.0 ft. Date Started: 08/27/12 Date Completed: 08/27/12

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 30.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/18/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-6

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 37.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Well Abandoned by		
Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Approximately 6.16		
Gallons of Portlant-Bentonite		
Cement Slurry.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-6

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 09322

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 37.0 ft. Date Started: 08/28/12 Date Completed: 08/28/12

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 37.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/18/2012

If D Level Driller, provide supervising driller's name:

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-7

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 36.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Well Abandoned by		
Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Approximately 6.0		
Gallons of Portlant-Bentonite		
Cement Slurry.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-7

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 09322

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 36.0 ft. Date Started: 08/30/12 Date Completed: 08/30/12

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 36.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P.____ Volts____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ Date: 10/18/2012
Well Driller
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-10

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 44.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Well Abandoned by		
Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Approximately 7.33		
Gallons of Portlant-Bentonite		
Cement Slurry.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-10

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 09322

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 44.0 ft. Date Started: 08/28/12 Date Completed: 08/28/12

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 44.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/18/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-11

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 44.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Well Abandoned by		
Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Approximately 7.33		
Gallons of Portlant-Bentonite		
Cement Slurry.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-11

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 09322

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 44.0 ft. Date Started: 08/27/12 Date Completed: 08/27/12

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft. **NOTE: MULTIPLE SCREENS**
____ ft. and ____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 44.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/18/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois
(last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-14

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 46.50 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Well Abandoned by		
Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Approximately 7.75		
Gallons of Portlant-Bentonite		
Cement Slurry.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-14

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 09322

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 46.50 ft. Date Started: 08/21/12 Date Completed: 08/21/12

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 46.50 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/18/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-15

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 47.60 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Well Abandoned by		
Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Approximately 7.93		
Gallons of Portlant-Bentonite		
Cement Slurry.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-15

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 09322

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 47.60 ft. Date Started: 08/21/12 Date Completed: 08/21/12

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 47.60 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/18/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-17

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 40.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Well Abandoned by		
Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Approximately 6.66		
Gallons of Portlant-Bentonite		
Cement Slurry.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-17

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 09322

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 40.0 ft. Date Started: 08/27/12 Date Completed: 08/27/12

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft. **NOTE: MULTIPLE SCREENS**
____ ft. and ____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 40.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/18/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** MW-18

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 46.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Well Abandoned by		
Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Approximately 7.66		
Gallons of Portlant-Bentonite		
Cement Slurry.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-18

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 09322

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 46.0 ft. Date Started: 08/27/12 Date Completed: 08/27/12

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 46.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/18/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois (last) (first)
Address: 3176 Charlotte Highway
City: York State: SC Zip: 29745-7609
Telephone: Work: (803) 684-6289 Home:

2. LOCATION OF WELL: York **COUNTY:** York
Name: Smith's Grocery
Street Address: 3176 Charlotte Highway
City: York Zip: 29745-7609
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** IW-16

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 45.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Well Abandoned by		
Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Approximately 7.50		
Gallons of Portlant-Bentonite		
Cement Slurry.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS: IW-16		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 09322

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 45.0 ft. Date Started: 08/27/12 Date Completed: 08/27/12

10. CASING: ☐ Threaded ☐ Welded
Diam.: ____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above /Below Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0.0 ft. to 45.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: ____ (Well Driller) Date: 10/18/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

APPENDIX F:

AQUIFER EVALUATION SUMMARY FORMS, DATA, GRAPHS, EQUATIONS

SUMMARY of SLUG TEST (Page 1 of 2)

SOUTH CAROLINA
Department of Health and Environmental Control (DHEC)

Site Data

SITE ID # 09322 COUNTY York

FACILITY NAME Smith's Grocery

SLUG DATA

See Appendix _____ Table _____ Figure _____ for a list of all data measurements.
(water level logs, etc.)(Complete as appropriate).
Water Level Recovery Data was measured by ORS Interface Probe .
(Hermit Data Logger, Manually with Water Level Indicator, etc.)(List Method)
Complete the following table for each well tested.
COMPLETE A SECOND SHEET IF MORE THAN FOUR WELLS ARE TESTED

Slug Test Conducted in well(s) number	MW-7R	MW-11R		
Initial Rise/Drawdown in well (feet)	4.32	0.96		
Radius of well casing (feet)	0.083	0.083		
Effective Radius of Well (feet)	0.33	0.33		
Static Saturated Aquifer Thickness (feet)	6.60	8.67		
Length of Well Screen (feet)	10	10		
Static Height of Water Column in Well (ft)	6.60	8.67		

Calculations

See Appendix _____ Table _____ Figure _____ for calculations
The method for aquifer calculations was NAVFAC
Calculated values by well were as follows:

Slug Test Conducted in Well(s) number	MW-7R	MW-11R			
Hydraulic Conductivity	2.32E-06	1.04E-04			cm/sec

Thickness of the aquifer used to calculate hydraulic conductivity was N/A feet.
The aquifer is _____ confined _____ semi-confined _____ water table (Check as Appropriate).
SEE SHEET 3
The estimated seepage velocity is 3.93 feet per year based on a hydraulic conductivity of 5.32E-05 cm/sec, a hydraulic gradient of 2.14E-02 ft/ft, and a porosity of 30 percent for SILT soil.

SUMMARY of SLUG TEST

Groundwater Seepage Velocity Calculations (Page 2 of 2)

SOUTH CAROLINA
Department of Health and Environmental Control (DHEC)

Site Data

SITE ID # 09322 COUNTY York

FACILITY NAME Smith's Grocery

Hydraulic Conductivity (average)

Hydraulic Conductivity Average = 5.32E-05 cm/sec
(MW-1 & MW-3)
1.51E-01 ft./day
1.05E-04 ft./min

Groundwater Seepage Velocity

V = (Ki)/(Ne)
(ft./day)

* Enter Values in Shaded Areas Only

where:

K = Hydraulic Conductivity (ft./day)
I = Hydraulic Gradient (ft./ft.)
Ne = Effective Permeability

K = 1.51E-01 ft./day
I = 2.14E-02 ft./ft.
Ne = 0.30

V = **1.1E-02** ft./day **3.93** ft./year

Groundwater Seepage Velocity Calculations

Inflow Permeability Calculation

Smith's Grocery

Test Performed: 9/26/2012

MW-7R

Type II (Uncased Well)

Static: 37.40 ft

*Enter Values in Shaded Areas Only

Time (min)	Depth	delta H	Ht/Ho
0.25	41.72	4.32	1.00
0.50	41.71	4.31	1.00
0.75	41.71	4.31	1.00
1.00	41.71	4.31	1.00
1.25	41.71	4.31	1.00
1.50	41.71	4.31	1.00
1.75	41.71	4.31	1.00
2.00	41.71	4.31	1.00
30.00	41.50	4.10	0.95
40.00	41.45	4.05	0.94
50.00	41.39	3.99	0.92
60.00	41.34	3.94	0.91

Information from data and plot of Ht/Ho vs time

Bore Hole Diameter:	7.5	in
Total Depth of Well:	44	ft
Stand Pipe Area:	44.18	in^2
	0.31	ft^2

Coordinates from Graph for Slope Calc:

H1/Ho:	0.95	
t1:	30.00	min
H2/Ho:	0.92	
t2:	50.00	min

H1:	4.10	H2:	3.97
t1:	30.00	t2:	50.00
Radius	R:	3.75	in
Radius	R:	0.31	ft
Depth	D:	6.60	ft
	R/D:	0.047	
	D/R:	21.12	

Shape Factor Determination Value: 0.388000 *

*This value is used in conjunction with

Figure 13 of Reference [1] to obtain the shape factor.

Shape Factor S: 4.2

Coeff. of Permeability (K):

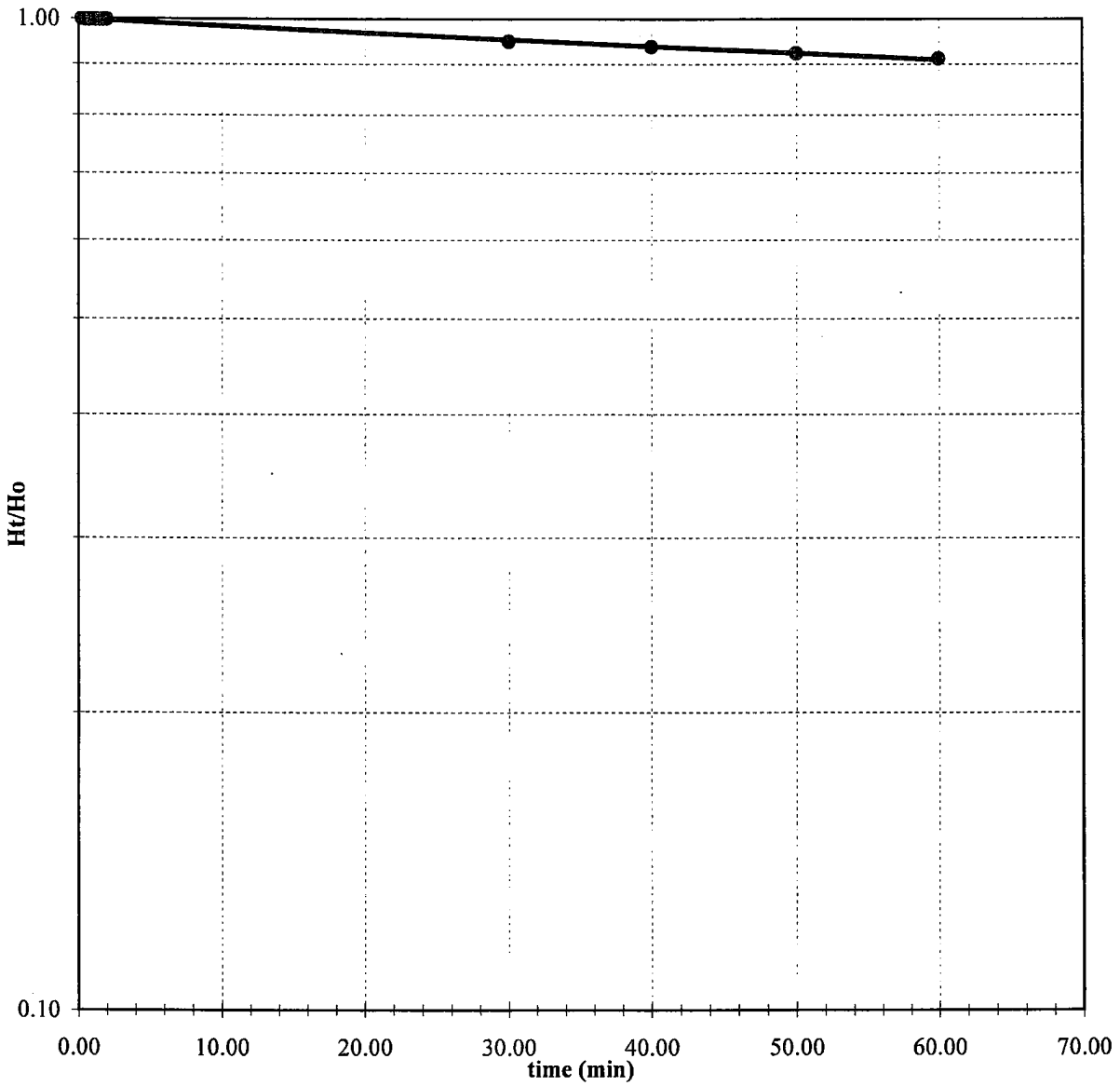
4.57E-06 ft/min

6.57E-03 ft/day

2.32E-06 cm/sec

Ref [1]: Naval Fac. Engr. Command, Design Manual 7.01, soil Mechanics, Condition A.

Inflow for Condition A Well MW-7R.xls



Midlands
Environmental
Consultants, Inc.
235-B Dooley Road, Lexington, SC 29073
(803) 808-2043 fax: 808-2048

Inflow Permeability Calculation

Smith's Grocery

Test Performed: 9/26/2012

MW-11R

Type II (Uncased Well)

Static: 45.33 ft

*Enter Values in Shaded Areas Only

Time (min)	Depth	delta H	Ht/Ho
0.25	46.29	0.96	1.00
0.50	46.24	0.91	0.95
0.75	46.21	0.88	0.92
1.00	46.17	0.84	0.88
1.25	46.12	0.79	0.82
1.50	46.05	0.72	0.75
1.75	46.02	0.69	0.72
2.00	46.00	0.67	0.70
3.00	45.83	0.50	0.52
4.00	45.75	0.42	0.44
5.00	45.65	0.32	0.33
7.00	45.51	0.18	0.19

Information from data and plot of Ht/Ho vs time

Bore Hole Diameter:	7.5	in
Total Depth of Well:	54	ft
Stand Pipe Area:	44.18	in^2
	0.31	ft^2

Coordinates from Graph for Slope Calc:

H1/Ho:	0.70	
t1:	2.00	min
H2/Ho:	0.33	
t2:	5.00	min

H1:	0.67	H2:		0.32
t1:	2.00	t2:		5.00
Radius	R:	3.75	in	
Radius	R:	0.31	ft	
Depth	D:	8.67	ft	
	R/D:	0.036		
	D/R:	27.74		

Shape Factor Determination Value: 0.942976 *

*This value is used in conjunction with

Figure 13 of Reference [1] to obtain the shape factor.

Shape Factor S: 1.3

Coeff. of Permeability (K):

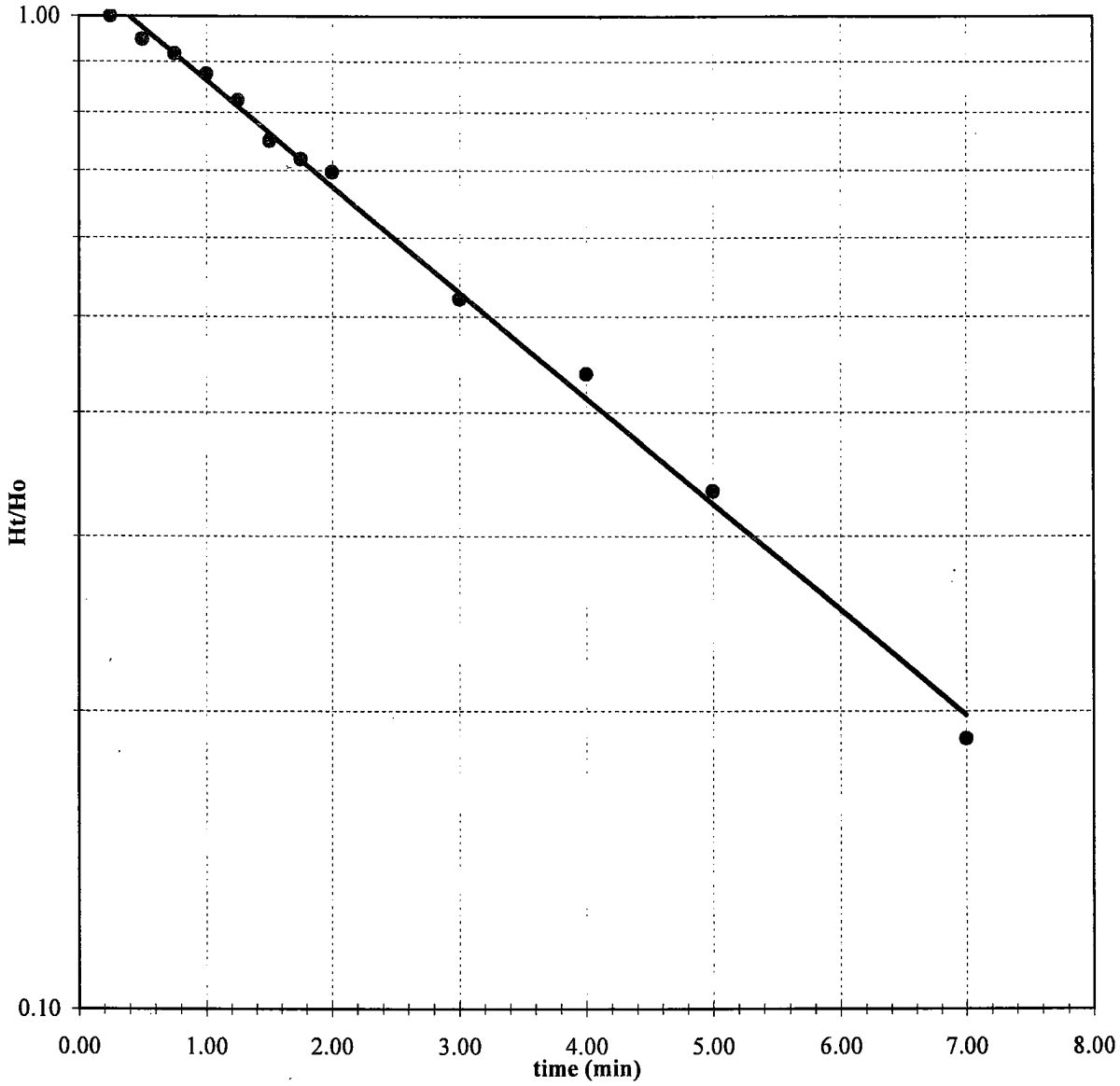
2.05E-04 ft/min

2.95E-01 ft/day

1.04E-04 cm/sec

Ref [1]: Naval Fac. Engr. Command, Design Manual 7.01, soil Mechanics, Condition A.

Inflow for Condition A Well MW-11R.xls



Midlands
Environmental
Consultants, Inc.
235-B Dooley Road, Lexington, SC 29073
(803) 808-2043 Fax: 808-2048

APPENDIX G:

DISPOSAL MANIFEST

Midlands
Environmental
Consultants, Inc.

October 29, 2012

Re: Treatment of Purge Water
Smith's Grocery
York, South Carolina
SCDHEC Site ID Number 09322
MECI Project Number 12-3850

To Whom it May Concern;

Midlands Environmental Consultants, Inc. is providing the following letter as certification that treatment of the referenced purge water complied with the conditions of "Proposed Conditions for Use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater", as described in the following:

Applicability:

Groundwater treated was obtained as a result development of wells and sampling.

Conditions:

1. The purge/bail water from all wells is mixed before usage of the Activated Carbon Unit.
2. No free-product was detected in any of the purge water drums.
3. Analytical results of from well sampling show average concentrations of petroleum hydrocarbon constituents less than 5000 parts per billion (ppb) Benzene and less than 20,000 ppb total BTEX.
4. The existing carbon pack will be replaced/reactivated every 5,000 gallons.
5. Record of usage is maintained by Contractor.
6. Any and all recommendations and conditions issued by the Manufacturer have been adhered to.
7. Any and all recommendations and conditions (even on a site by site basis) issued by the SCDHEC must be adhered to.

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

All purge waters were treated on-site using an up-flow treatment drum loaded with 30 pounds of activated carbon. Carbon will be loaded to a maximum of 3 pounds of total organic compounds or 5,000 gallons of development/purge water, whichever occurs first.

682.0 Gallons were treated on June 27 and August 30, 2012 during the development of the newly installed monitoring wells at the referenced site.

700.0 Gallons were treated on September 25 & 26, 2012 during the comprehensive groundwater sampling event conducted at the referenced site.

A total 1,382.0 Gallons was treated during the subject assessment.

Midlands Environmental also tracks cumulative organic compounds adsorbed on the activated carbon to ensure the capacity of carbon mass is not over-charged. This data is available upon request.

Should you have any questions or comments, please contact the undersigned.

Sincerely,
Midlands Environmental Consultants, Inc.

John C. Bryant
Staff Geologist

WASTE MANAGEMENT

Richland County LF
1047 Highway Church Road
Elgin, SC, 29045
Ph: (803) 788-3054

Original
Ticket# 1167929

Customer Name MIDLANDSENVIRON MIDLANDS ENVI
Ticket Date 05/04/2012
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest 0
Destination
PO
Profile VA2718 (SOIL FROM UST ASSESSMENT)
Generator 126-MIDLANDSENVIRONMENTAL MIDLANDS ENVIRONMENTAL

Carrier MIDLANDSENVIRON MIDLANDS ENVIRONMENT
Vehicle# 1
Container
Driver
Check#
Billing # 0000469
Gen EPA ID

Volume

	Time	Scale	ScaleMaster		
In	05/04/2012 10:21:30	Scale2	joyce	Gross	11760 lb
Out	05/04/2012 10:43:10	Scale1	joyce	Tare	9160 lb
				Net	2600 lb
				Tons	1.30

Comments

	Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1	SOIL-Cont. Soil -	100	1.30	Tons				32-LEXINGT
2	FUEL-Fuel Surcharg	100		%				32-LEXINGT
3	EVF-P-Standard Env	100		%				32-LEXINGT

Total Fees
Total Ticket

SIGNATURE _____

Smiths

403WM

SPECIAL WASTE MANIFEST

WASTE ID NUMBER VA2718	*Richland Landfill* 1047 Highway Church Road Elgin, SC 29045
EXPIRATION DATE November 17, 2013	Special Waste Phone: 803-744-3346 Fax: 866-904-7194
Prepared by:	Karen Truett/Carol Weldon

GENERATOR OF WASTE: Midlands Env. Consultants, Inc. - Various

CUSTOMER Midlands Env. Consultants — ACCOUNT NUMBER: 820-469

LOCATION OF WASTE: Site Address:

CITY: Lexington — COUNTY: Lexington

PHONE NUM 803-808-2043 — CONTACT: Bryan Shane

FAX NUMBER:

GENERATOR'S SIGNATURE R L L — DATE: 5/4/12

TRANSPORTER OF WASTE: MES

DATE: 5/4/12 — TRUCK NUMBER: 1

DRIVER'S SIGNATURE R L L

**** TO BE COMPLETED BY RICHLAND LANDFILL******

DISPOSAL SITE: RICHLAND LANDFILL ELGIN, SC

Waste Class: Soil

DESCRIPTION OF WASTE: Soil from UST Assessment

TICKET NUMBER: 1167929

RECEIVED BY: DM

Smiths

WASTE MANAGEMENT

Richland County LF
1047 Highway Church Road
Elgin, SC, 29045
Ph: (803) 788-3054

Original
Ticket# 1175492

Customer Name	MIDLANDSENVIRON MIDLANDS ENVI	Carrier	MIDLANDSENVIRON MIDLANDS ENVIRONMENT
Ticket Date	06/14/2012	Vehicle#	1
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	
Hauling Ticket#		Check#	
Route		Billing #	0000469
State Waste Code		Gen EPA ID	
Manifest	0		
Destination			
PO			
Profile	VA2718 (SOIL FROM UST ASSESSMENT)		
Generator	126-MIDLANDSENVIRONMENTAL MIDLANDS ENVIRONMENTAL		

	Time	Scale	ScaleMaster		
In	06/14/2012 07:07:53	Scale1	joyce	Gross	15560 lb
Out	06/14/2012 07:26:51	Scale2	joyce	Tare	9140 lb
				Net	6420 lb
				Tons	3.21

Comments

	Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1	SOIL-Cont. Soil -	100	3.21	Tons				32-LEXINGT
2	FUEL-Fuel Surcharg	100		%				32-LEXINGT
3	EVF-P-Standard Env	100		%				32-LEXINGT

Total Fees
Total Ticket

SIGNATURE

Smiths Grocery

403WM

SPECIAL WASTE MANIFEST

WASTE ID NUMBER VA2718	*Richland Landfill* 1047 Highway Church Road Elgin, SC 29045
EXPIRATION DATE November 17, 2013	Special Waste Phone: 803-744-3346 Fax: 866-904-7194
Prepared by:	Karen Truett/Carol Weldon
GENERATOR OF WASTE:	Midlands Env. Consultants, Inc. - Various
CUSTOMER Midlands Env. Consultants	ACCOUNT NUMBER: 820-469
LOCATION OF WASTE: Site Address:	
CITY: Lexington	COUNTY: Lexington
PHONE NUM 803-808-2043	CONTACT: Bryan Shane
FAX NUMBER:	
GENERATOR'S SIGNATURE [signature]	DATE: 6/14/12
TRANSPORTER OF WASTE: MEC I	
DATE: 6/14/12	TRUCK NUMBER: 1
DRIVER'S SIGNATURE [signature]	
**** TO BE COMPLETED BY RICHLAND LANDFILL******	
DISPOSAL SITE: RICHLAND LANDFILL ELGIN, SC	Waste Class: Soil
DESCRIPTION OF WASTE: Soil from UST Assessment	
TICKET NUMBER: 1175492	
RECEIVED BY: [signature]	

Smith Grocery

WASTE MANAGEMENT

Richland County LF
1047 Highway Church Road
Elgin, SC, 29045
Ph: (803) 788-3054

Original
Ticket# 1176148

Customer Name	MIDLANDSENVIRON MIDLANDS ENVI	Carrier	MIDLANDSENVIRON MIDLANDS ENVIRONMENT
Ticket Date	06/18/2012	Vehicle#	1
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	
Hauling Ticket#		Check#	
Route		Billing #	0000469
State Waste Code		Gen EPA ID	
Manifest	0		
Destination			
PO			
Profile	VA2718 (SOIL FROM UST ASSESSMENT)		
Generator	126-MIDLANDSENVIRONMENTAL MIDLANDS ENVIRONMENTAL		

	Time	Scale	ScaleMaster		
In	06/18/2012 09:19:15	Scale1	joyce	Gross	12500 lb
Out	06/18/2012 09:53:23	Scale2	joyce	Tare	9220 lb
				Net	3280 lb
				Tons	1.64

Comments

	Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1	SOIL-Cont. Soil -	100	1.64	Tons				32-LEXINGT
2	FUEL-Fuel Surcharg	100		%				32-LEXINGT
3	EVF-P-Standard Env	100		%				32-LEXINGT

Total Fees
Total Ticket

SIGNATURE _____

Smiths

403WM

SPECIAL WASTE MANIFEST

WASTE ID NUMBER VA2718	*Richland Landfill* 1047 Highway Church Road Elgin, SC 29045
EXPIRATION DATE November 17, 2013	Special Waste Phone: 803-744-3346 Fax: 866-904-7194
Prepared by:	Karen Truett/Carol Weldon

GENERATOR OF WASTE: Midlands Env. Consultants, Inc. - Various

CUSTOMER Midlands Env. Consultants — ACCOUNT NUMBER: 820-469

LOCATION OF WASTE: Site Address:

CITY: Lexington — COUNTY: Lexington

PHONE NUM 803-808-2043 — CONTACT: Bryan Shane

FAX NUMBER:

GENERATOR'S SIGNATURE [signature] — DATE: 6/18/12

TRANSPORTER OF WASTE: MEC1

DATE: 6/18/12 — TRUCK NUMBER: 1

DRIVER'S SIGNATURE [signature]

**** TO BE COMPLETED BY RICHLAND LANDFILL******

DISPOSAL SITE: RICHLAND LANDFILL ELGIN, SC

Waste Class: Soil

DESCRIPTION OF WASTE: Soil from UST Assessment

TICKET NUMBER: 1176148

RECEIVED BY: [signature]

Smiths

WASTE MANAGEMENT

Richland County LF
1047 Highway Church Road
Elgin, SC, 29045
Ph: (803) 788-3054

Original
Ticket# 1178121

Customer Name MIDLANDSENVIRON MIDLANDS ENVI
Ticket Date 06/27/2012
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest 0
Destination
PO
Profile VA2718 (SOIL FROM UST ASSESSMENT)
Generator 126-MIDLANDSENVIRONMENTAL MIDLANDS ENVIRONMENTAL

Carrier MIDLANDSENVIRON MIDLANDS ENVIRONMENT
Vehicle# 1
Container
Driver
Check#
Billing # 0000469
Gen EPA ID

Volume

	Time	Scale	ScaleMaster
In	06/27/2012 07:06:06	Scale1	joyce
Out	06/27/2012 07:23:13	Scale2	joyce

Gross	11080 lb
Tare	9140 lb
Net	1940 lb
Tons	0.97

Comments

	Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1	SOIL-Cont. Soil -	100	0.97	Tons				32-LEXINGT
2	FUEL-Fuel Surcharg	100		%				32-LEXINGT
3	EVF-P-Standard Env	100		%				32-LEXINGT

Total Fees
Total Ticket

SIGNATURE

Smiths Grocery

403WM

SPECIAL WASTE MANIFEST

WASTE ID NUMBER VA2718	*Richland Landfill* 1047 Highway Church Road Elgin, SC 29045 Special Waste Phone: 803-744-3346 Fax: 866-904-7194
EXPIRATION DATE November 17, 2013	

Prepared by: Karen Truett/Carol Weldon

GENERATOR OF WASTE: Midlands Env. Consultants, Inc. - Various

CUSTOMER Midlands Env. Consultants ACCOUNT NUMBER: 820-469

LOCATION OF WASTE: Site Address:

CITY: Lexington COUNTY: Lexington

PHONE NUM 803-808-2043 CONTACT: Bryan Shane

FAX NUMBER:

GENERATOR'S SIGNATURE [signature] DATE: 6/27/12

TRANSPORTER OF WASTE: MECI

DATE: 6/27/12 TRUCK NUMBER: 1

DRIVER'S SIGNATURE [signature]

**** TO BE COMPLETED BY RICHLAND LANDFILL******

DISPOSAL SITE: RICHLAND LANDFILL ELGIN, SC

Waste Class: Soil

DESCRIPTION OF WASTE: Soil from UST Assessment

TICKET NUMBER: 117812

RECEIVED BY: [signature]

Smiths Grocery

APPENDIX H:
LOCAL ZONING REGULATIONS

This appendix is not applicable to the scope of services presented in the subject report, however this page has been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP and provide report continuity

APPENDIX I:
FATE AND TRANSPORT MODELING

This appendix is not applicable to the scope of services presented in the subject report, however this page has been included in order to conform to the SCDHEC UST Management Division Programmatic QAPP and provide report continuity

APPENDIX J:
ACCESS AGREEMENTS

RECEIVED APR 15 2012 BY: MEC

Application for Encroachment Permit

S.C. Department of Transportation
Form 637 (Rev 11/2003)

Permit Nbr: 125339

Applicant: Midlands Environmental Cons.	County: York
Street: P.O. Box 854	Enter Road/Route And then the corresponding Road Name below:
City: Lexington	1. SC HWY 49 — 1. Charlotte Highway
State & Zip: SC 29071	2. — 2.
Phone: 803-808-2043	3. — 3.
	4. — 4.
	5. — 5.

1. The undersigned applicant hereby applies to the South Carolina Department of Transportation (SCDOT) for a permit for encroachment on State Highway Right of Way as shown and described below:

2. Type of Encroachment:
Installation of four groundwater monitoring wells within the SCDOT Rigt of Way.

3. Description of Location:
Along Charlotte Highway(SC 49), off roadside, in the SCDOT Right of Way.
From the intersection with Southern Pines Avenue towards Old Son Lowery Road.
See attached Figure 2 for proposed well locations.

(Attach sketch indicating roadway features such as: pavement width, shoulder width, sidewalk and curb and gutter location, significant drainage structure, north arrow, right of way width, and loction of the proposed encroachment with respect to the roadway centerline and the nearest intersecting road on the State system.)

4. The undersigned applicant hereby requests the SCDOT to permit encroachment on the SCDOT right of way as described herein. It is expressly understood that the encroachment, if and when constructed, shall be installed in accordance with the sketch attached hereto and made a part hereof.

The applicant agrees to comply with and be bound by the SCDOT's "A Policy for Accommodating Utilities on Highways Rights of way", "Standard Specifications for Highway Construction", the "General Provisions" and "Special Provisions", attached hereto or made a part hereof by reference, during the installation, operation and maintenance of said encroachment within the SCDOT's Right of Way.

The applicant hereby further agrees, and binds his/her/its heirs, personal representatives, successors, assigns, to assume any and all liability for accidents or injuries to persons, or damage to property, including the highway, that may be caused by the construction, maintenance, use, moving or removing of the physical appurtenances contemplated herein, and the applicant agrees to indemnify and hold SCDOT harmless from and against any and all claims for personal injury and/or property damage which may be sustained by any person by reason of the construction, maintenance or existence of said encroachment on the SCDOT's right of way.

Applicant's Name: John C. Bryant (Please print or type) Date: 3/26/12

Applicant's Sig: Title: Staff Geologist

In accordance with your request and subject to all the provisions, terms, conditions and restrictions stated in the application and the general and special provisions attached hereto, the SCDOT hereby approves your application for an encroachment permit. This permit shall become null and void unless the work contemplated herein shall have been completed prior to: 4/30/13

3/29/12
(Date received by Res. Maint. Engr.)

Bradley L. Trout, II
(SCDOT Approval)

4/11/12
(Date)

- [X] Resident Maintenance Engineer
- [ ] State Highway Engineer
- [ ] District Engineering Administrator
- [ ] District Maint./Constr. Engineer

Application for Encroachment Permit
General Provisions

Permit Nbr: _____

1. DEFINITIONS: The word "Permittee" used herein shall mean the name of the person, firm, or corporation to whom this permit is addressed, his, her, its, heirs, personal representatives, successors and assigns. The word "DEPARTMENT" shall mean the South Carolina Department of Transportation.

2. NOTICE PRIOR TO STARTING WORK: Before starting the work contemplated herein within the limits of the highway right of way, the Department's Resident Maintenance Engineer in the county in which the proposed work is located shall be notified 24 hours in advance so that he may be present while the work is under way.

3. PERMIT SUBJECT TO INSPECTION: This permit shall be kept at the site of the work at all times while said work is under way and must be shown to any representative of the Department or law enforcement officer on demand.

4. PROTECTION OF HIGHWAY TRAFFIC: The applicant shall be responsible for the protection of the highway traffic at all times during the construction, maintenance, removing or moving of the encroachment permitted herein. Detours, barricades, warning signs and flagmen, as necessary, shall be provided by and at the expense of the Permittee and shall be in accordance with the "Manual on Uniform Traffic Control Devices" (MUTCD). The work shall be planned and carried out so that there will be the least possible inconvenience to the motoring public. The Permittee agrees to observe all rules and regulations of the Department while carrying on the work contemplated herein and take all other precautions that circumstances warrant.

5. STANDARDS OF CONSTRUCTION: All work shall conform to the Department's standards of construction and shall be performed in a workman-like manner. The applicant shall make adequate provisions for maintaining the proper drainage of the highway as it may be affected by the encroachment permitted herein. All work shall be subject to the supervision and satisfaction of the Department.

6. FUTURE MOVING OF PHYSICAL APPURTENANCES: If, in the opinion of the State Highway Engineer, it should ever become necessary to move or remove the physical appurtenances, or any part thereof contemplated herein, on account of change in location of the highway, widening of the highway, or for any other sufficient reason, such moving shall be done on demand of the Department at the expense of the Permittee.

7. RESTORATION OF HIGHWAY FACILITIES UPON MOVING OR REMOVING OF PHYSICAL APPUTENANCES: If, and when, the physical appurtenances contemplated herein shall be moved or removed, either on the demand of the Department or at the option of the Permittee, the highway and facilities shall immediately be restored to their original condition at the expense of the Permittee.

8. COSTS: All work in connection with the construction, maintenance, moving or removing of the physical appurtenances contemplated herein shall be done by and at the expense of the permittee.

9. ADDITIONAL PERMISSIONS:
   (a) It is distinctly understood that this permit does not in any way grant or release any rights lawfully possessed by the abutting property owners. The Permittee shall secure any such rights, as necessary, from said abutting property owners.
   (b) The Permittee shall be responsible for obtaining all other approvals or permits necessary for installation of the encroachment from other government entities.
   (c) There shall be no excavation of soil nearer than two feet to any public utility line or appurtenant facility except with the consent of the owner thereof, or except upon special permission of this Department after an opportunity to be heard is given the owner of such line or appurtenant facility.

10. ADDITIONAL WORK PERFORMANCE:
   (a) All crossings over the highway shall be constructed in accordance with "Specifications for Overhead Crossings of Light and Power Transmission Lines and Telegraph Lines over each other and over Highway Rights of Way in South Carolina," as approved by the Public Service Commission of South Carolina and effective as of date of this permit.
   (b) All tunneling, boring, or jacking shall be done in such a way as not to disturb the highway surfacing.
   (c) No pavement shall be cut unless specifically authorized herein.
   (d) No excavation shall be nearer than three feet to the edge of pavement unless specifically authorized herein.
   (e) Underground facilities will be located at minimum depths as defined in the "Utility Accommodations Manual" for the transmittant, generally as follows: 4 feet minimum for hazardous or dangerous transmittant, 3 feet minimum for other lines. The Department may approve shallower depths if adequate protection is provided. Such approval must be obtained in writing.
   (f) Service and other small diameter pipes shall be jacked, driven, or otherwise forced underneath the pavements on any surfaced road without disturbing the pavement. The section under the highway pavement and within a distance of three (3) feet on either side shall be continuous without joints.

11. ACCESS:
   (a) Permittee is responsible for maintaining reasonable access to private driveways during construction.
   (b) It is expressly provided that, with respect to any limited access highway, the Permittee shall not have or gain access from the main traveled way of the highway, or the on or off ramps to such facility, except upon approval by the Department.

12. DRIVEWAYS:
   (a) The existing crown of the highway shall be continued to the outside shoulder line of the highway.
   (b) If the driveway or approach is concrete pavement, the pavement shall be constructed at least 6 inches thick and with a minimum of class 2500 concrete. There shall be a bituminous expansion joint, not less than 3/4 inches in thickness, placed between the highway paving and the paving of the approach for the full width of the approach.

13. BEAUTIFICATION:
   (a) All trees, plants, flowers, etc. shall be placed in accordance with the provisions specifically stipulated herein.
   (b) All trees, plants, flowers, etc. shall be maintained by, and at the expense of, the Permittee and the provisions of this permit shall become null and void, if and when said Permittee ceases to maintain said trees, plants, flowers, etc.

14. AS-BUILT PLANS:
   (a) The applicant shall provide the Department with survey-quality as-built plans in accordance with the requirements set forth in the Department's "A Policy for Accommodating Utilities on Highway Rights of Way".

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
HIGHWAY MAINTENANCE MANAGEMENT SYSTEM

Encroachment Permit

Permit No: 125339
Permit Decision Date: April 11, 2012
Expiration Date: April 30, 2013

Type Permit

ENVIRONMENTAL

Location

District	Work County	Type	Route	Aux	Begin MP	End MP
4	YORK	SC	49	00	24.35	24.35

Contact Information

Applicant: MIDLANDS ENVIRONMENTAL CONSULT
Phone: (803) 808-2043
Contact: JOHN BRYANT
Phone: (803) 808-2043
Address: P.O. BOX 854

City: LEXINGTON State: SC Zip: 29071

Comments

PERMIT IS FOR THE INSTALLATION OF FOUR GROUNDWATER MONITORING WELLS ALONG SC-49 NEAR THE INTERSECTION WITHSOUTHERN PINES AVE.

Special Provisions

101 - SHOULDER SOD DESTROYED BY THIS INSTALLATION TO BE REPLACED FOR THE ENTIRE AREA. THE AREA SHALL BE RE-SHAPED AND ROLLED TO THE CROSS SECTION EXISTING PRIOR TO THIS WORK.

123 - ALL WORK PERFORMED IN CONNECTION WITH THIS PERMIT SHALL CONFORM TO THE SCDOT "A POLICY FOR ACCOMODATING UTILITIES ON HIGHWAY RIGHT-OF-WAY" MOST CURRENT EDITION.

301 - THE DITCHES AND/OR SHOULDERS DISTURBED DURING THE INSTALLATION SHALL BE RE-ESTABLISHED TO PROPER GRADE, ORIGINAL CROSS SECTION, STABILIZED, AND ALL DRAIN PIPES CLEARED.

306 - TRAFFIC CONTROL, LIGHTS, SIGNS AND FLAG-MEN WILL BE FURNISHED BY APPLICANT AND WILL CONFORM TO PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

315 - TEST WELL SHALL BE LOCATED OUTSIDE OF WHEEL PATH.

318 - THE APPLICANT SHALL BE RESPONSIBLE FOR IMMEDIATE REMOVAL OF SUCH TRAFFIC HAZARDS AS MUD, DEBRIS, LOOSE STONE, AND TRASH AS MAY BE WASHED OR SPILLED ON THE TRAVELED ROADWAY AS A RESULT OF THE PROPOSED WORK.

4 - SCDOT SHALL BE NOTIFIED WHEN WORK DEFINED IN THE PERMIT STARTS AS WELL AS WHEN THE WORK IS COMPLETED. REFERENCE SHALL BE MADE BY PERMIT NUMBER.

FORM 742 (REV. 1997)

DATE _____

COUNTY _____

ROUTE

NAME OF APPLICANT:

SPECIAL PROVISIONS

All work including pavement repairs and bridge attachments to be in accordance with SCDHPT Manual (A Policy for Accommodating Utilities on Highway Rights-of-Way) dated March 1987. A copy of which may be obtained from the State Utilities Engineer's office in Columbia.

Signing of construction area will comply with the 1982 SCDHPT Manual on Uniform Traffic Control Devices for Streets and Highways Revised 1988, and all subsequent addendums.

All materials and construction methods are to be in accordance with SCDHPT Standard Specifications for Highway Construction, Edition 1986. All work shall be maintained for a period of two (2) years from the date of expiration of the permit. Where pavement is cut longitudinally, entire roadway is to be resurfaced one year after cut is made for its entire length.

The erosion and sediment control are to be in accordance with the Erosion and Sediment Reduction Act of 1983. Roadway drainage will be maintained at all times. Permittee will take whatever measures necessary to control erosion and to minimize silting of streams.

Shoulders and ditches that are disturbed shall be replanted in accordance with Section 810 of the Standard Specifications noted above, and a satisfactory stand of grass achieved.

Traffic to be maintained where open cuts are made with no trenches to be left unattended or open overnight.

No excavation material is to be placed on pavement surface without permission from the SCDHPT.

All water meters, air valves, fire hydrants, electric transformers, telephone and cable TV pedestals will be placed 1' inside right-of-way, unless prior written approval given by SCDHPT.

SCDHPT will furnish no labor, materials, or incidentals in connection with this work unless otherwise stated.

No work is to be performed on Highway Rights-of-Ways that encroach on Government owned lands, Railroad Rights-of-Way, or other designated lands without the written permission of the entity or property owner.

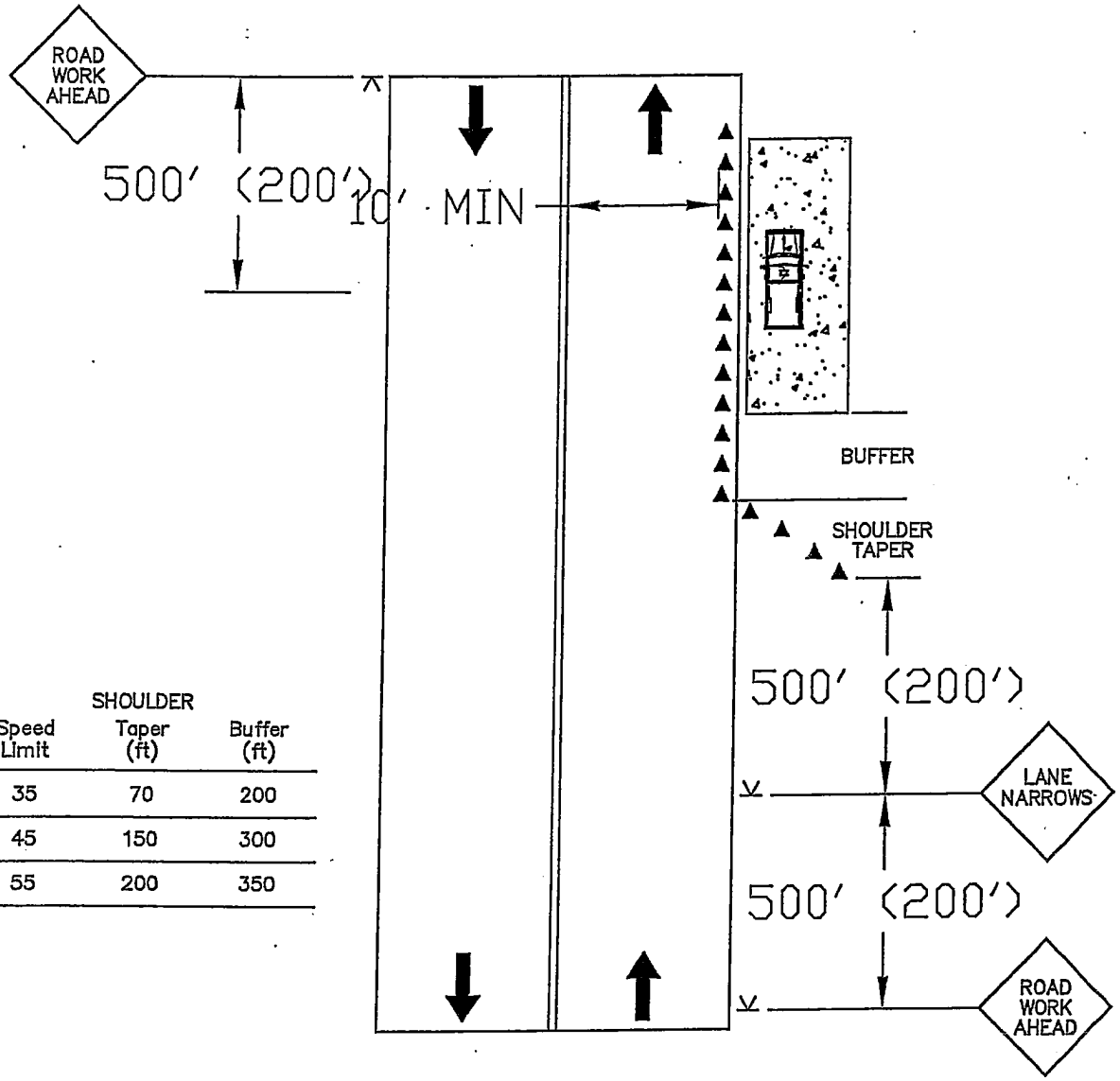
All concrete driveways are to be constructed with 6" thickness concrete with curb and ramps installed at all intersections.

Date received by R.M.E. _____ Signed _____

Date forwarded by R.M.E _____ Applicant _____

SHOULDER WORK WITH MINOR ENCROACHMENT

(WITHIN 2' OF THE EDGE OF PAVEMENT)



Speed Limit	SHOULDER Taper (ft)	Buffer (ft)
35	70	200
45	150	300
55	200	350

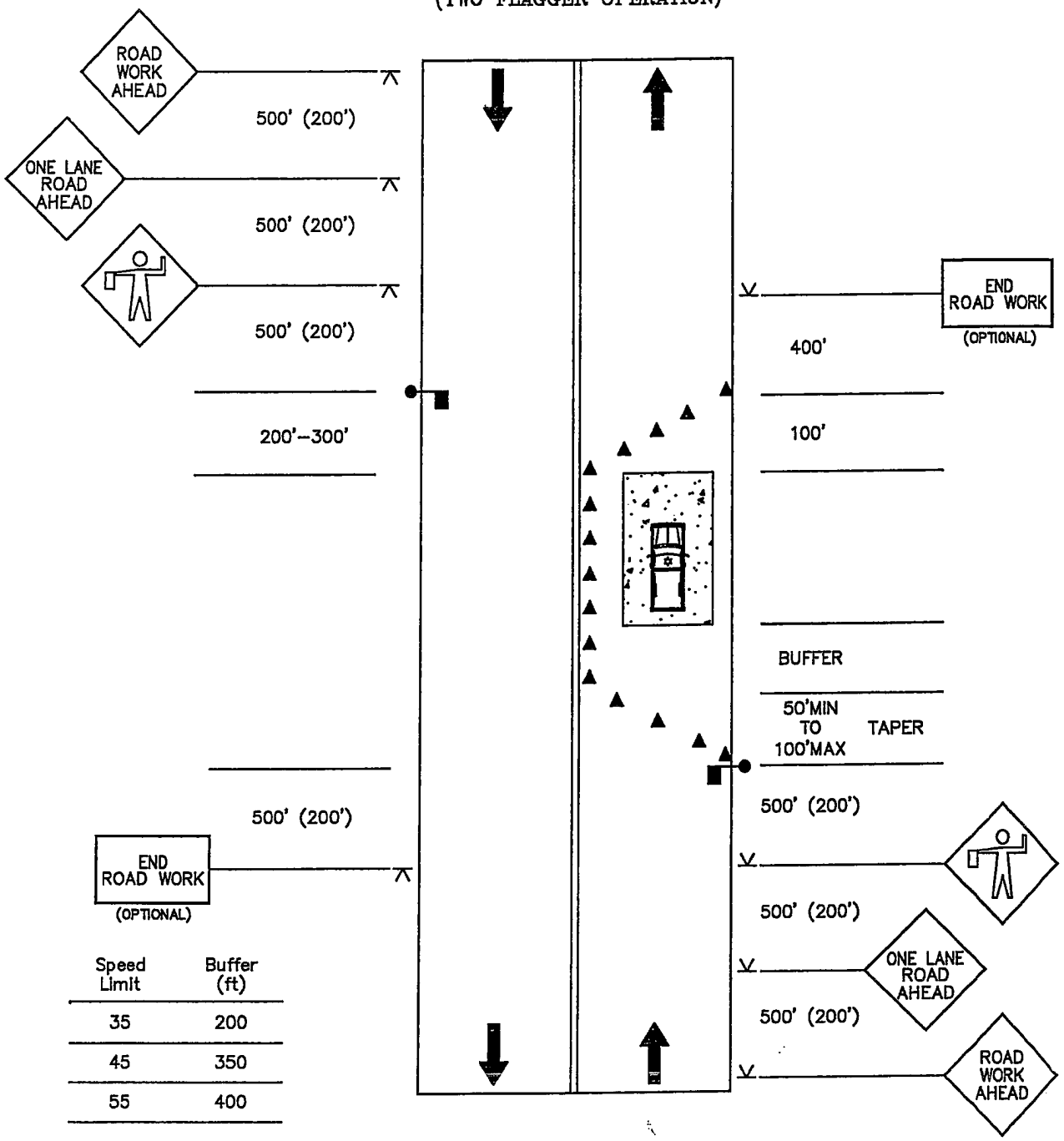
NOTES

1. For traffic conditions with speeds greater that 35 MPH, a lane closure should be considered (see pages 17 and 18).
2. The lane encroachment should either permit a remaining lane width of 10', or the lane should be closed. However, 9-foot width is acceptable for use in low volume, low speed roadways, provided the traffic does not include long and/or wide heavy commercial vehicles.
3. For two-lane, low speed (35 MPH or less) urban streets, a 200-foot sign spacing may be used.
4. The "LANE NARROWS" sign may be deleted on low-volume, low-speed roads.
5. Another acceptable advance warning sign is "UTILITY WORK AHEAD".

	TRAFFIC CONTROL	DATE : SCALE : JOB NO.:

LANE CLOSURE ON A TWO-LANE ROAD

(TWO FLAGGER OPERATION)



Speed Limit	Buffer (ft)
35	200
45	350
55	400

NOTES

1. For two-lane, low speed (35 MPH or less) urban streets, a 200-foot sign spacing may be used.
2. Generally, the use of the "END ROAD WORK" signs is optional for short duration work sites. However, if the work site, itself, is long, or the beginning and end of the work site are not visible to a driver passing through it, the "END ROAD WORK" sign should be used.

	TRAFFIC CONTROL	DATE : SCALE : JOB NO.:

APPENDIX K:
DATA VERIFICATION CHECKLIST

Contractor Checklist

Item#	Item	Yes	No	N/A
1	Are Facility Name, Permit #, and address provided?	X		
2	Is UST Owner/Operator name, address, & phone number provided?	X		
3	Is name, address, & phone number of current property owner provided?	X		
4	Is the DHEC Certified UST Site Rehabilitation Contractor's Name, Address, telephone number, and certification number provided?	X		
5	Is the name, address, telephone number, and certification number of the well driller that installed borings/monitoring wells provided?	X		
6	Is the name, address, telephone number, and certification number of the certified laboratory(ies) performing analytical analyses provided?	X		
7	Has the facility history been summarized?	X		
8	Has the regional geology and hydrogeology been described?	X		
9	Are the receptor survey results provided as required?	X		
10	Has current use of the site and adjacent land been described?	X		
11	Has the site-specific geology and hydrogeology been described?	X		
12	Has the primary soil type been described?	X		
13	Have field screening results been described?	X		
14	Has a description of the soil sample collection and preservation been detailed?	X		
15	Has the field screening methodology and procedure been detailed?	X		
16	Has the monitoring well installation and development dates been provided?	X		
17	Has the method of well development been detailed?	X		
18	Has justification been provided for the locations of the monitoring wells?	X		
19	Have the monitoring wells been labeled in accordance with the UST QAPP guidelines?	X		
20	Has the groundwater sampling methodology been detailed?	X		
21	Have the groundwater sampling dates and groundwater measurements been provided? (Table 2 & Figure 5)	X		
22	Has the purging methodology been detailed?	X		
23	Has the volume of water purged from each well been provided along with measurements to verify that purging is complete? (Appendix B)	X		
24	If free-product is present, has the thickness been provided?			X
25	Does the report include a brief discussion of the assessment done and the results?	X		
26	Does the report include a brief discussion of the aquifer evaluation and results?	X		
27	Does the report include a brief discussion of the fate & transport models used?			X

Item#	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk Evaluation)		X	
29	Have the exposure pathways been analyzed? (Tier 2 Risk Evaluation)	X		
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 Risk Evaluation)	X		
31	Have recommendations for further action been provided and explained?	X		
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)	X		
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)	X		
34	Has the current and historical laboratory data been provided in tabular format? (Tables 3 & 3A)	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form? (Appendix F)	X		
36	Have the Site conceptual model tables been included? (Tier 1 Risk Evaluation)	X		
37	Has the topographic map been provided with all required elements? (Figure 1)	X		
38	Has the site base map been provided with all required elements? (Figure 2)	X		
39	Have the CoC site maps been provided? (Figures 3, 4)	X		
40	Has the site potentiometric map been provided? (Figure 5)	X		
41	Have the geologic cross-sections been provided? (Figure 6)	X		
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)	X		
43	Has the site survey been provided and include all necessary elements? (Appendix A)	X		
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements? (Appendix B)	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements? (Appendix C)	X		
47	Have the soil boring/field screening logs been provided? (Appendix D)	X		
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)	X		
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)	X		
50	Have the disposal manifests been provided? (Appendix G)	X		
51	Has a copy of the local zoning regulations been provided? (Appendix H)			X
52	Has all fate and transport modeling been provided? (Appendix I)			X
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)	X		
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided? (Appendix K)	X		

IrfanView AVI File
WigghamDownHole42512.AVI
Thursday, January 01, 2009 9:56:10 AM

D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

LOUIS SMITH
C/O REID SMITH
1280 S PARAHAM RD
YORK SC 29745

NOV 16 2012

Re: Water Supply Well Replacement
Smith's Grocery, 3176 Charlotte Hwy , York, SC
UST Permit #09322; CA#44869
Release reported June 30, 1993
Price Quotes received November 2, 2012
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the price quotes submitted by Midlands Environmental Consultants, Inc. to replace two water supply wells. Cost agreement number 44869 has been approved for the amount shown on the enclosed cost agreement form.

The report, contractor checklist, and invoice should be submitted to the Division within ninety (90) days of the date of this correspondence. Midlands Environmental Consultants, Inc. can submit an invoice for direct payment from State Underground Petroleum Environmental Response Bank (SUPERB) Account for preapproved costs. By law, the SUPERB Account cannot compensate any costs that are not pre-approved. Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

The Agency grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the CoC concentrations based on laboratory analysis is below Risk Based Screening Levels (RBSLs), please contact the project manager for approval to dispose of soil and/or groundwater on site.

On all correspondence regarding this site, please reference UST Permit #09322. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6397, fax me at (803) 896-6245, or e-mail me at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Approved Cost Agreement (ACA)

cc: Bryan Shane, Midlands Environmental Consultants, Inc., PO Box 854, Lexington, SC, 29071 (w/ enc.)
Technical File (w/ enc.)

Approved Cost Agreement 44869

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
18 MISCELLANEOUS					
		1.5 HP PUMP	2.0000	900.00	1,800.00
		6 INCH ROCK WELL	2.0000	11,000.00	22,000.00
		BLADDER TANK	2.0000	500.00	1,000.00
		DIRT REMOVAL	1.0000	5,000.00	5,000.00
		INSTALLATION & TRENCHING	1.0000	1,400.00	1,400.00
		LANDSCAPING	1.0000	5,000.00	5,000.00
		MOBILIZATION	1.0000	6,500.00	6,500.00
		PVC AND WIRE	1.0000	900.00	900.00
		REMOVE EXISTING PUMP	2.0000	500.00	1,000.00
		WELL ABANDONMENT	400.0000	10.00	4,000.00
19 RPT/PROJECT MNGT & COORDINATIO					
		PCT PERCENT	0.1500	48,600.00	7,290.00
			Total Amount		55,890.00

Midlands Environmental Consultants, Inc.

February 12, 2013

Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Report of Water Supply Well Replacement and Abandonment
Smith's Grocery
3176 Charlotte Highway
York, South Carolina 09322
SCDHEC Site ID# ~~09120~~, CA # 41892
MECI Project Number 12-4247
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

On behalf of Ms. Louis Smith, Midlands Environmental Consultants, Inc. (MECI) is pleased to submit this letter report outlining the replacement and abandonment of two water supply wells at the referenced site. This report describes the activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control guidelines.

Midlands Environmental appreciates the opportunity to offer our professional environmental services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.

John C. Bryant
Staff Geologist

Jeff L. Coleman
Senior Scientist

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

PROJECT INFORMATION

The subject site (Smith's Grocery) is located near the intersection of S.C. Highway 49 and Southern Pines Road, York, York County, South Carolina (see Figure 1). The site consists of an approximately 2.00 acre parcel of land (see Figure 2), and currently occupied by a convenience store. The site formerly maintained one 6,000 gallon gasoline UST and one 8,000 gallon gasoline UST. The South Carolina Department of Health and Environmental Control (SCDHEC) reported release of petroleum product from two single walled underground storage tanks (UST) at the subject site in June of 1993, which was confirmed in September of 1996.

Further assessment activities in 2012 including; adding second GAC units to water wells WSW-2 and WSW-3, down hole camera events on WSW-2 and WSW-24, and open rock field screening activities took place. From these assessment activities it was determined by SCDHEC and MECI personnel that the water supply wells for the Hill and Wiggam residence needed to be replaced and the old water supply wells abandoned.

The above project information is based on MECI field notes and SCDHEC files

FIELD EXPLORATION

Field exploration conducted at the site included:

- construction of two water supply wells; and,
- abandonment of two water supply wells.

The water supply well locations were selected based on SCDHEC and MECI project manager instructions, existing site conditions, and drilling accessibility.

WATER SUPPLY WELL INSTALLATION

From January 28 through January 31, 2012, two water supply wells were installed on the Hill and Wiggam properties. These wells were installed by Mullis Well Drilling of Monroe, NC (N.C. Driller Certification: Chad Mullis # C01678) using a Truck-mounted drilling rig employing 12.0-inch outer diameter air hammer to construct the borehole. The following table presents the new water supply well installation details:

Well Number	Total Depth (ft)	Steel Casing Depth (ft)	PVC Casing Depth (ft)	Pump Depth (ft)
WSW-Hill	345.0	177.0	220.0	320.0
WSW-Wiggam	885.0	148.0	220.0	800.0

Following completion of the water supply wells, the wells were developed on February 2, 2013 by pump test until a satisfied capacity was met. During the pump test WSW-Hill produced a 17.0 gallon per minute (GPM) capacity. WSW-Wiggam produced a 15.0 GPM capacity. Please find the attached SCDHEC 1903 Water Well Drilling Records.

Drill cuttings were containerized and transported to York County Landfill, York, SC by MECI personnel.

MONITORING WELL ABANDONMENT

As requested by SCDHEC, water supply well WSW-2 and WSW-3 were abandoned on February 1, 2013 at the subject site according to South Carolina Well Standards and Regulations R.61-71.H. The water supply well abandonment was conducted under the direction of Mr. Tommy Bolyard (SC Driller's License # B 01846) of EDPS of Rock Hill, SC. The following matrix presents the well identification numbers, surface coverings, well diameter, and total well depth:

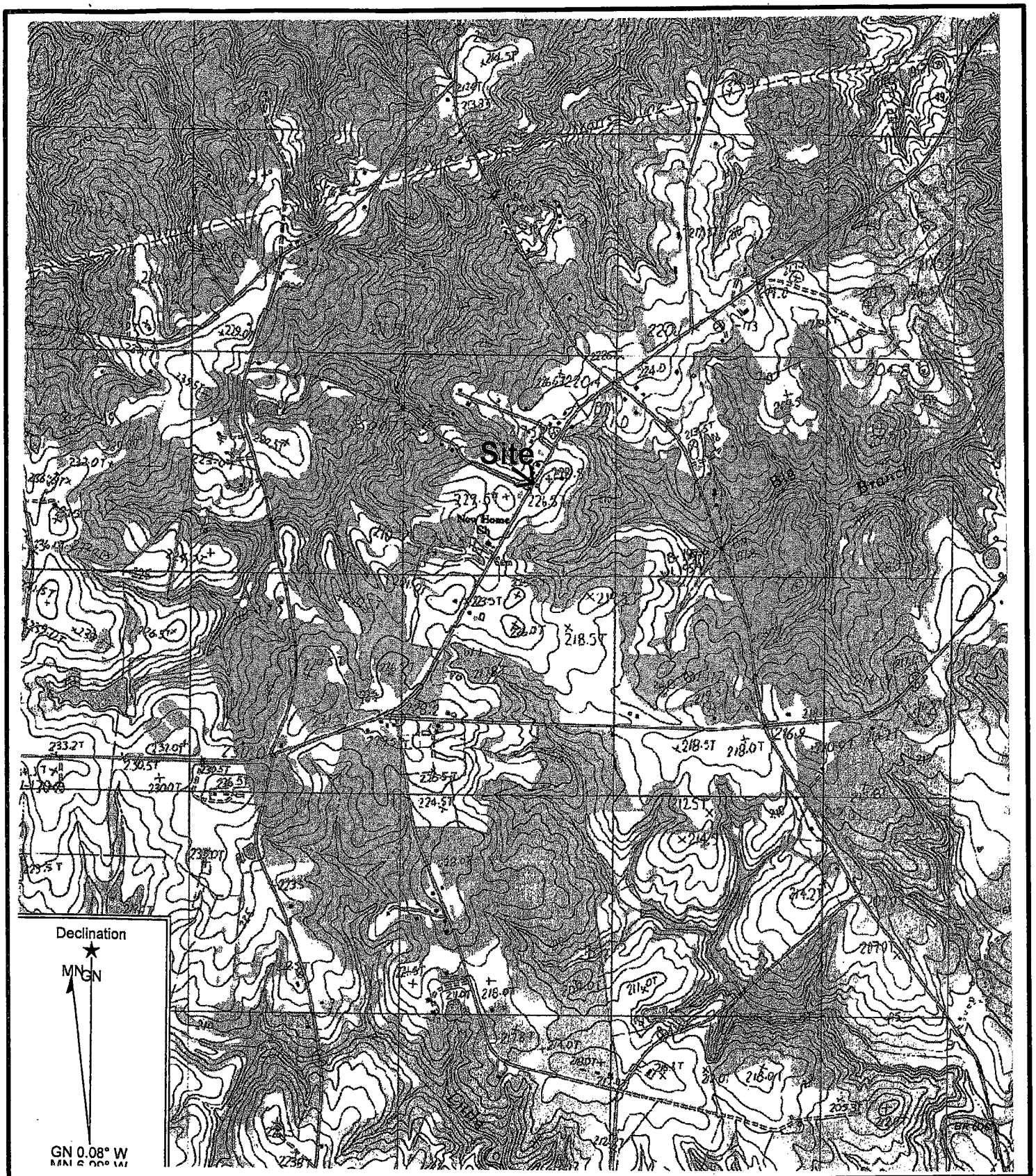
Well Number	Surface Covering	Well Diameter (Inches)	Total Depth (Feet)
WSW-2 (Wiggam)	Grass	6"	**200.0**
WSW-3 (Hill)	Grass	6"	**200.0**
Total Footage of Abandoned Water Wells			**400.0**

The monitoring well was abandoned with portland bentonite slurry utilizing tremie pipe. A total of 400.0 feet of water supply wells were abandoned by the methods described above. Please find the attached SCDHEC 1903 Water Well Abandonment Records.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assessment are consistent with those normally employed in hydrogeological assessment and waste management projects of this type. Our evaluation of site conditions has been based on our understanding of the site, project information provided to us, and data obtained in our exploration. The general subsurface conditions utilized in our evaluation have been based on interpretation of subsurface data between borings. Contents of this report are intended for the sole use of SCDHEC under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

-oOo-



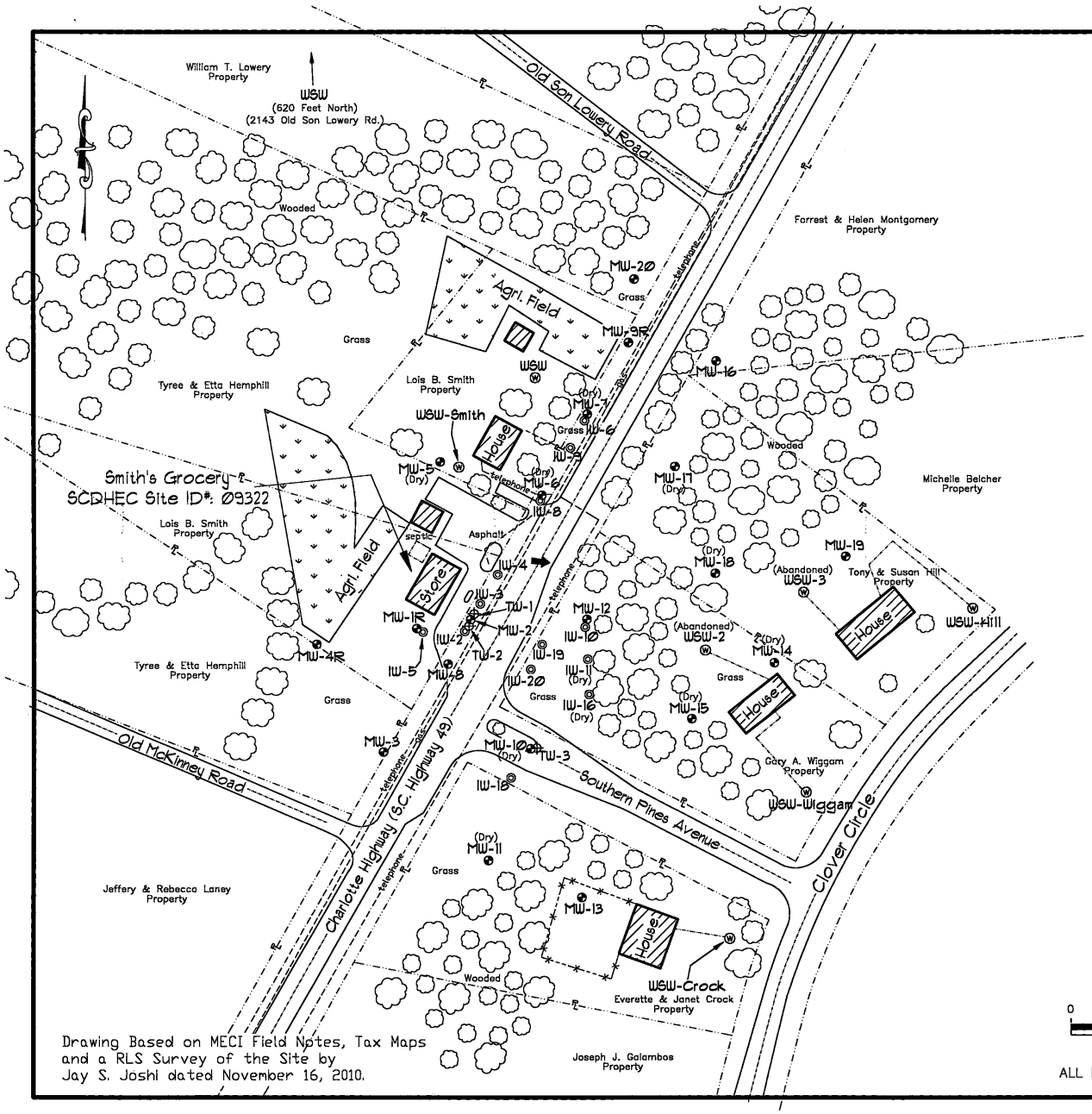
GRAPHIC SCALE

0 1000 2000 4000

1IN = 2000FT

Reference: Clover, South Carolina
USGS 7.5 Min. Quad
Countour Interval – 3 Meters

Midlands Environmental Consultants, Inc.	Site Location
Smith's Grocery South Carolina Highway 49, Clover, SC SCDHEC Site ID# Ø9322	
Figure 1	MEC1 12-4247



Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.

Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Injection Well
- Location of Double Cased Monitoring Well
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Buried Sewer
- Under Ground Telephone
- Fence

GRAPHIC SCALE

0 50 100 150 200

1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Site Features

Smith's Grocery
York, South Carolina
SCDHEC Site ID# 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-4247
DATE February 12, 2013
FIGURE 2

BORING LOGS AND 1903 FORMS

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE. PROTECT. PROSPER.

2-17
18
19
20

1. WELL OWNER INFORMATION: 21 22
Name: Enviro Pro (last) (first)
Address: 2646 Farm Lake Rd.
City: Fort Mill State: SC Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY:
Name: Enviro Pro
Street Address: 3049 Clover Circle
City: York SC Zip:
Latitude: 35 3 52 Longitude: 81 9 19

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☐ Yes ☐ No
Give Details Below
Grouted Depth: from 0 ft. to 28 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Clay	0	-35
Weathered Granite	35	138
Med Granite	138	147
Hard Granite	147	345
Water Bearing Zone	325	
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: 4" Liner Installed 0-220 Feet. Grouted Neat Cement

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: SCW4612 4164

8. USE:
☑ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 1/31/13
345 ft. Date Completed: 1/31/13

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 & 4 5/8
Type: ☐ PVC ☑ Galvanized ☐ Steel ☐ Other
6 in. to 177 ft. depth
4 in. to 220 ft. depth
Height: Above/Below Surface 1 ft.
Weight ____ lb./ft.
Drive Shoe? ☑ Yes ☐ No

11. SCREEN:
Type: ____ Diam.: ____
Slot/Gauge: ____ Length: ____
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 53 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
54 ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: 15

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other ____
Depth: From 0 ft. to 220 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 300 ft. E direction
Type Trichloroethylene, Benzene
Well Disinfected ☑ Yes ☐ No Type: Chlorine Amount: 12 Floz

18. PUMP: Date Installed: 2-1-13 Not Installed ☐
Mfr. Name: Grundfos Model No.: 10S08
H.P. 3/4 Volts 220 Length of drop pipe 320 ft. Capacity 17 gpm
TYPE: ☑ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Chad Mullis CERT. NO.: 1678
Address: (Print) 4227 Pigg Mather Rd Monroe, NC 28112
Level: A B (C) D (circle one)
Telephone No.: 704-545-5694 Fax No.: 704-545-9449

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Chad Mullis (Well Driller) Date: 1-30-13

If D Level Driller, provide supervising driller's name:

DHEC 1903 (03/2004) COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Enviro Pro (last) (first)
Address: 2646 Farm Lake Ln.
City: Fort Mill State: SC Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: York
Name: Enviro Pro
Street Address: 3043 Clover Circle
City: York SC Zip:
Latitude: 35228 Longitude: 81843

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☐ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Clay	0	37
Weathered Granite	37	141
Med Granite	141	147
Hard Granite	147	885
Water Bearing		
Zone	860	
*Indicate Water Bearing Zones		
(Use a 2nd sheet if needed)		

5. REMARKS: 4" Liner Installed 0-220 Feet Grouted Neat-Cement

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: SCW46124160

8. USE: ☑ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 1/28/13
885 ft. Date Completed: 1/30/13

10. CASING: ☐ Threaded ☐ Welded
Diam.: _____
Type: ☐ PVC ☑ Galvanized ☐ Steel ☐ Other
6 in. to 148 ft. depth
4 in. to 220 ft. depth
Height: Above/Below Surface 1 ft.
Weight _____ lb./ft.
Drive Shoe? ☑ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 54 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
54 ft. after _____ hrs. Pumping 15 G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 147 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 300 ft. E direction
Type Trichloroethlye, Benzyne
Well Disinfected ☑ Yes ☐ No Type: Chlorine Amount: 125 F/02

18. PUMP: Date Installed: 2-1-13 ☐ Not Installed
Mfr. Name: Grundfos Model No.: 10S16
H.P. 1 Volts 220 Length of drop pipe 200 ft. Capacity 15 gpm
TYPE: ☑ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Chad Mullis CERT. NO.: 1678
Address: (Print) 4227 Pigg Mattox Rd. Monroe, NC 28110
Level: A B ◉ D (circle one)
Telephone No.: 704-545-5691 Fax No.: 704-545-9449

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 1-30-13

If D Level Driller, provide supervising driller's name:

DHEC 1903 (03/2004) COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Gary Wiggam (last) (first)
Address: 3043 Clover Circle
City: York State: SC Zip: 29745-0000
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** York
Name: Gary Wiggam
Street Address: 3043 Clover Circle
City: York Zip: 29745-0000
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** WSW-2

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 200.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Water Well Abandoned by		
Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Approximately 75.0		
Gallons of Portlant-Bentonite		
Cement Slurry.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
WSW-2

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 09322

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 2/1/2013
200.0 ft. Date Completed: 2/1/2013

10. CASING: ☐ Threaded ☐ Welded
Diam.: _____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
_____ in. to _____ ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 200.0 ft. to 0.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 2/12/13
Well Driller
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Tony Hill (last) (first)
Address: 3049 Clover Circle
City: York State: SC Zip: 29745-0000
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** York
Name: Tony Hill
Street Address: 3049 Clover Circle
City: York Zip: 29745-0000
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 09322 **PUBLIC SYSTEM NUMBER:** WSW-3

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0.0 ft. to 200.0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Water Well Abandoned by		
Environmental Drilling and		
Probing Services, LLC via tremie		
pipe with Approximately 75.0		
Gallons of Portlant-Bentonite		
Cement Slurry.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
WSW-3

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 09322

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 2/1/2013
200.0 ft. Date Completed: 2/1/2013

10. CASING: ☐ Threaded ☐ Welded
Diam.: _____
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
_____ in. to _____ ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☑ Bentonite/Cement ☐ Other _____
Depth: From 200.0 ft. to 0.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Tommy Bolyard **CERT. NO.:** 01846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte. NC 28278
Telephone No.: 704-607-7529 Fax No.: 803-548-2233

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 2/12/13

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

BRYAN SHANE
MIDLANDS ENVIRONMENTAL CONSULTANTS
PO BOX 854
LEXINGTON SC 29071

APR 12 2013

UST DOCKETING 674ech

Re: **Notice to Proceed-Groundwater Sampling/QAPP Contractor Addendum Approval**
Groundwater Sampling Contract
Solicitation # IFB-5400002759, PO#4600088529
Smith's Grocery, 3176 Charlotte Hwy., York
UST Permit #09322
York County

Dear Mr. Shane:

In accordance with bid solicitation # IFB-5400002759 and the UST Management Division Quality Assurance Program Plan (QAPP), the Site-Specific Contractor Addendum has been reviewed and approved. In accordance with the QAPP, a status report of the project should be provided on a weekly basis via e-mail. If any quality assurance problems arise, you must contact me within 24 hours via phone or e-mail. In addition, a discussion of the problem(s) encountered, including quality assurance problems, the actions taken, and the results must be included in the final report submitted to the UST Management Division.

MECI will perform services at the site on behalf of the site's responsible party (RP); however, payment will be made from the SUPERB Account. The site's RP has no obligation for payment for this scope of work. Please coordinate access to the facility with the property owner. The Department grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. A copy of the disposal manifest and/or cceptance letter from the receiving facility that clearly designates the quantity received must be included with the final report. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs. **Please note, the final report is due within 3 weeks from the date the site is sampled. If the site is not sampled by the specified due date or the report is not received in the specified time period, a late fee may be imposed.**

The final report should contain the requirements of Section III.2.15 of the bid solicitation. The final report should be submitted to my attention. If you have any questions, please contact me at (803) 896-6397 or via e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Approved QAPP Contractor Addendum Signature Page
Approved Cost Agreement

cc: Kelly Maberry, Shealy Environmental, 106 Vantage Point Dr., West Columbia, SC, 29172 (w/ approved CA)
Technical Files (w/o enc)

Approved Cost Agreement 45753

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
11 ANALYSES					
	GW GROUNDWATER	A1 BTEXNM+OXYGS+1,2-DCA+ETH-8260B	4.0000	35.00	140.00
		F EDB	3.0000	20.00	60.00
			Total Amount		200.00

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SC DHEC UST Programmatic QAPP
For

Smith's Grocery, SCDHEC Site ID# 09322

3176 Charlotte Highway, York, South Carolina

Prepared by:
Courtney M. Sanders
Staff Biologist
Midlands Environmental Consultants, Inc.
(Certified Site Rehabilitation Contractor UCC-0009)
235-B Dooley Road
Lexington, SC 29073
(803)808-2043

Date: April 8, 2013

Approvals

Debra Thoma SC DHEC Project Manager	Debra J Thoma Signature	Date 4/16/13
Courtney M. Sanders Contractor QA Manager	 Signature	Date 4-9-13
Jeff L. Coleman Site Rehabilitation Contractor	 Signature	Date 4/9/13
Daniel J. Wright Laboratory Director	Daniel J Wright Signature	Date 04/08/2013

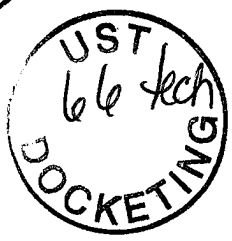
Approved Cost Agreement 45754

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB						
		B	PERSONNEL	1.0000	100.00	100.00
10 SAMPLE COLLECTION						
		C	WATER SUPPLY	1.0000	2.00	2.00
		H	FIELD BLANK	1.0000	2.00	2.00
18 MISCELLANEOUS						
			QAPP PREP	1.0000	0.00	0.00
				Total Amount		104.00

April 8, 2013

Midlands Environmental Consultants, Inc.



Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: QAPP Contractor Addendum – Revision 0
Smith's Grocery
York, South Carolina
SCDHEC Site ID Number 09322
MECI Project Number 13-4414
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached QAPP Contractor Addendum for the referenced site.

On April 05, 2013, MECI personnel performed a site visit to the subject site to evaluate site conditions, locate monitoring wells and identify potential problems for future sampling activities.

If you have any question or comments please feel free to contact us at 803-808-2043.

Sincerely,
Midlands Environmental Consultants, Inc.

Courtney M. Sanders
Staff Biologist

Jeff L. Coleman
Senior Scientist

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SC DHEC UST Programmatic QAPP
For

Smith's Grocery, SCDHEC Site ID# 09322

3176 Charlotte Highway, York, South Carolina

Prepared by:
Courtney M. Sanders
Staff Biologist
Midlands Environmental Consultants, Inc.
(Certified Site Rehabilitation Contractor UCC-0009)
235-B Dooley Road
Lexington, SC 29073
(803)808-2043

Date: April 8, 2013

Approvals

Debra Thoma SC DHEC Project Manager	Signature	Date
Courtney M. Sanders Contractor QA Manager	Signature	Date 4.9.13
Jeff L. Coleman Site Rehabilitation Contractor	Signature	Date 4/9/13
Daniel J. Wright Laboratory Director	Signature	Date 04/08/2013

A2 Table of Contents

A1 Title and Approval Page 1
A2 Table of Contents 2
A3 Distribution List 3
Table 1A Addendum Distribution List 3
A4 Project Organization 3
Table 2A Addendum Role Identification and Contact Information 4
Figure 1A Organizational Chart 4
A5 Problem Definition/Background 5
A6 Project/Task Description 6
A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs) 6
A8 Training and Certificates 6
Table 3A Required Training and Licenses 7
A9 Documents and Records 8
Table 4A Record Identification, Storage, and Disposal 8
Section B Measurement/Data Acquisition 8
B1 Sampling Process/Experimental Design 8
Table 5A Sampling Activities 9
B2 Sampling Methods 9
Table 6A Field Corrective Action 10
B3 Sample Handling and Custody 10
B4 Analytical Methods 11
Table 7A Analytical SOPs and Referenced Methods 12
Table 8A SOP Abbreviation Key 12
Table 9A Corrective Action Procedures 13
Table 10A Sample Disposal Procedures 14
B5 Quality Control Requirements: 14
B6 Field Instrument and Equipment Testing, Inspection and Maintenance 14
Table 11A Instrument and Equipment Maintenance 16
Table 12A Instrument and Equipment Inspection 16
B7 Instrument Calibration and Frequency 16
Table 13A Instrument Calibration Criteria and Corrective Action 18
B8 Inspection/Acceptance Requirements for Supplies and Consumables 18
Table 14A List of Consumables and Acceptance Criteria 19
B9 Data Acquisition Requirements (Non-Direct Measurements) 19
Table 15A Non-Direct Measurements 19
B10 Data Management 19
Section C Assessment and Oversight 20
C1 Assessment and Response Actions 20
C2 Reports to Management 21
Section D Data Validation and Usability 21

A3 Distribution List

Name	Title	Organization/Address	Telephone Number	Fax Number	Email Address
Debra Thoma	SC DHEC Technical Project Manager	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6397	803-896-6245	thomadl@dhec.sc.gov
Jeff L. Coleman	Site Rehabilitation Contractor	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	jlc@meci.net
Courtney M. Sanders	Quality Assurance Officer	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net
Kyle V. Pudney	Field Manager	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	kvp@meci.net
Daniel J. Wright	Laboratory Director	Shealy Environmental Services,Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	dwright@shealylab.com
	Well Services/Driller				

Table 1A Addendum Distribution List

A4 Project Organization

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
Project Manager	Debra Thoma	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6397	803-896-6245	thomadl@dhec.sc.gov
Site Rehabilitation Contractor	Jeff L. Coleman	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	jlc@meci.net
Quality Assurance Officer	Courtney M. Sanders	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net
Field Manager	Kyle V. Pudney	Midlands Environmental Consultants, Inc.	803-808-2043	803-808-2048	kvp@meci.net

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
		235-B Dooley Road Lexington, SC 29073			
Analytical Laboratory Director	Daniel J. Wright	Shealy Environmental Services,Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	dwright@shealylab.com
Project Verifier	Courtney M. Sanders or Kyle V. Pudney	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net

Table 2A Addendum Role Identification and Contact Information

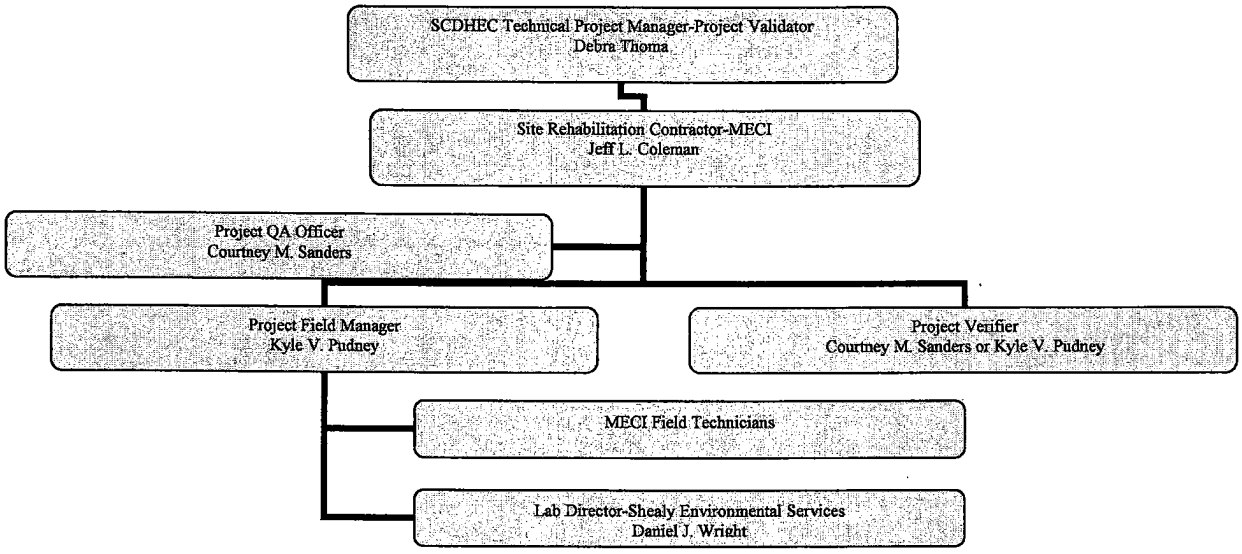


Figure 1A Organizational Chart

Project Manager (Debra Thoma) – The project manager is responsible for direct oversight of contractors conducting assessment and site rehabilitation of releases at UST sites.

Site Rehabilitation Contractor (Jeff L. Coleman) – The Site Rehabilitation Contractor is an independent contractor responsible for managing and coordinating field and office activities needed for assessments or cleanup.

-Final Review of all work produced for a scope of work.
-Final say on technical interpretation of data.

Quality Assurance Officer (Courtney M. Sanders) – The Quality Assurance Officer is responsible for the oversight of all quality assurance activities associated with projects performed by the Site Rehabilitation Contractor.

-In charge of producing and maintaining the QAPPA for MECI.
-Reviews (and Audits, if necessary) all work produced in conjunction with a scope of work.
-Quality control of data entry and report preparation.

Field Manager (Kyle Pudney) –The field manager will oversee all work done on any given project.

-Assign, direct and oversee all field personnel working on each project.
-Responsible for coordinating with the SCDHEC project manager, should any problems or clarifications arise.
-Responsible for all reporting done in conjunction with field work.

Analytical Laboratory Director (Daniel J. Wright) – The Laboratory Director is directly responsible for the Analytical Laboratory used during a scope of work. The Analytical Laboratory receives the soil and water samples from the site rehabilitation contractor, performs the requested analyses, and provides analytical reports.

Project Verifier (Courtney M. Sanders) – The project verifier is responsible for verifying the quality of data produced during a scope of work. This includes review of field work and laboratory reports for potential quality issues.

Field Technicians (various employees) – Responsible for all field activities for a given scope of work.

-Conduct all initial site visit, and record findings
-Conduct all field activities associated with a scope of work. All work will be conducted according to the MECI SOP. Will be responsible for reporting any potential problems are inconsistencies found during assessment activities.
-Completes the chain of custody upon completion of sampling event and delivers samples to lab or office for later lab pick-up.

A5 Problem Definition/Background

Discuss the background (as much as is known) of the site and appropriate historical information, and why this site is being assessed.

The subject site (Smith's Grocery) is located at 3176 Charlotte Highway, York, York County, South Carolina. The subject site previously maintained one 6,000 gallon gasoline underground storage tank (UST) and one 8,000 gallon gasoline UST. These UST's were abandoned by removal from ground in March of 1996. The South Carolina Department of Health and Environmental Control (SCDHEC) reported a release of petroleum product from these UST's in June of 1993 and confirmed the release in September of 1996. The subject site is currently rated a Class 1D.

The site is being sampled in conjunction with the SCDHEC Groundwater Sampling Contract (Solicitation # IFB-5400002759, PO# 4600088529).

Please answer the following: Does this project fall under UST or Brownfields area?

Underground Storage Tank Division

A6 Project/Task Description

1. ***Summarize what is known about the work to be done. This can be a short sentence indicating what the Scope of this project is (see Master QAPP Section A6).***

The subject site (Smith's Grocery) will be sampled in conjunction with the SCDHEC Groundwater Sampling Contract (Solicitation # IFB-5400002759, PO# 4600088529). During assessment activities monitoring wells will be sampled for petroleum constituents.

2. ***The work will begin within*** fourteen (14) days of receipt of approved QAPP contractors addendum ***after cost approval and sampling should be complete by*** twenty-one (21) days of receipt of approved QAPP contractors addendum.

3. ***Are there are time or resource constraints? Include those factors that may interfere with the tentative schedule.***

Factors that may prevent schedule work will be, but not limited to, inclement weather, equipment malfunction, and machine failure.

A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs)

The subject site is located at 3176 Charlotte Highway, York, York County, South Carolina. The site is currently occupied by an abandoned store front.

A8 Training and Certificates

Required training and licenses:

Title/Job	Name	Training Required	Date training received	Type of License	License Number
Principal Geologist	Bryan T. Shane, P.G.	Professional Geologist	10/30/1993	State of South Carolina	1102
Senior Scientist	Jeff Coleman	OSHA 40 hr HAZWOPER	7/27/2007	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/10/2012	N/A	N/A
Staff Geologist	John Bryant	OSHA 40 hr HAZWOPER	4/17/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/102012	N/A	N/A
Staff Biologist	Courtney Sanders	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A

Title/Job	Name	Training Required	Date training received	Type of License	License Number
		OSHA 8 hr HAZWOPER refresher	12/10/2012	N/A	N/A
Staff Biologist	Kyle Pudney	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/10/2012	N/A	N/A
Staff Biologist	Chris Lashley	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/10/2012	N/A	N/A
Staff Biologist	Gavin Globensky	OSHA 40 hr HAZWOPER	7/29/2011	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/10/2012	N/A	N/A
Staff Biologist	Ryan Ariail	OSHA 40 hr HAZWOPER	9/23/2011	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/10/2012	N/A	N/A
Staff Geologist	Patrick Boylan	OSHA 40 hr HAZWOPER	07/20/2012	N/A	N/A
Lab Manager	Daniel J. Wright	***	***	Lab Certification	SC 32010

Table 3A Required Training and Licenses

Courtney M. Sanders of Midlands Environmental Consultants, Inc. is responsible to ensuring that personnel participating in this project receive the proper training. All training records will be stored in the following location:235-B Dooley Road, Lexington, SC 29073.

It is understood that training records will be produced if requested by SC DHEC.

The Following Laboratory(ies) will be used for this Project:

Commercial Lab(s)

Full Name of the Laboratory___Shealy Environmental Services, Inc.____
Name of Lab Director_____Daniel J. Wright_____
SC DHEC Certification Number_____32010_____
Parameters this Lab will analyze for this project:

All samples will be analyzed for BTEX, Naphthalene, MTBE, 1,2 DCA, 8-Oxygenates (EPA Method 8260-B), and EDB (EPA Method 8011).

Please note: SC DHEC may require that the contractor submit some or all of the Laboratory's SOPs as part of this QAPP.

A9 Documents and Records

Personnel will receive the most current version of the QAPP Addendum via: (Check all that apply)

____US Mail ____Courier __X__ Hand delivered

Other (please specify):____E-mailed electronic copies___

Record	Produced By	Hardcopy/ Electronic	Storage Location For how long?	Archival
Instrument Raw Data	Target, Thermospec, or Iteva software	Hardcopy and Electronic	Hardcopy: Offsite storage for 7 yrs Electronic: Two external storage device backups – one offsite, one onsite storage for 10 yrs	Yes
Final Reports	LIMS	Electronic	Electronic: Two external storage device backups – one offsite, one onsite storage for 10 years	Yes
Field Work	Field Staff	Hardcopy	MECI office: 235/B Dooley Road / Min. 5 years	Yes
Chain of Custody	Field Staff	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
QAPP Addendum	Courtney Sanders	Hardcopy & Electronic	MECI office: 235B Dooley Road / Min. 5 years	Yes
Internal QC record	Courtney Sanders	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
Sampling Report	Courtney Sanders	Hardcopy & Electronic	MECI office: 235B Dooley Road / Min. 5 years	Yes

Table 4A Record Identification, Storage, and Disposal

Section B Measurement/Data Acquisition

B1 Sampling Process/Experimental Design

Item	Start Date	End Date	Comments
Site Reconnaissance	4/5/13	4/5/13	Already Completed
QAPP preparation	4/8/13	4/8/13	In progress
QAPP approval	4/9/13	4/30/13	Assuming three week turnaround
Monitoring well Sampling	5/1/13	5/15/13	Sampled within 2 weeks of QAPP approval
Report Preparation	5/16/13	6/6/13	Three weeks to prepare/submit report

Item	Start Date	End Date	Comments

Table 5A Sampling Activities

B2 Sampling Methods

Please note: The contractor must follow sampling protocols as given in the UST QAPP.

***Estimate* the number of samples of each matrix that are expected to be collected:**

Soil	_____
Ground Water from monitoring wells	_____
From Drinking/Irrigation water wells	_____1____
Field Duplicate Collection	_____1____
Field Blank Collection	_____1____
Trip Blank	_____1____
From surface water features	_____
Total number of Water samples	_____4____

Notes:
During the April 05, 2013 site visit, one (1) water supply well was located was located.

Please note this scope of work was approved verbally on April 04, 2013 and the work was conducted on April 05, 2013.

All water supply well samples will be analyzed by BTEX, Naphthalene, MTBE, 1,2 DCA, 8-Oxygenates (EPA Method 8260-B), and EDB (EPA Method 8011).

For the sample matrices indicated above, please describe how samples will be collected and the equipment needed.

Please see MECI Monitoring Well Sampling SOP for sampling procedures and type of materials used for sampling.

Will Sampling Equipment have to be cleaned and decontaminated or is everything disposable?

All equipment, excluding electronic water level indicators, field probes and turbidity tubes, is disposable.

If sampling equipment must be cleaned please give a detailed description of how this is done and the disposal of by-products from the cleaning and decontamination.

Please see MECI Monitoring Well Sampling SOP for decontamination procedures.

Identify any equipment and support facilities needed. This may include such things as Fed-ex to ship the samples, a Geoprobe, field analysis done by another contractor (who must be certified), and electricity to run sampling equipment.

All samples will be shipped to the lab via courier or overnight shipping company. Please see MECI Monitoring Well Sampling SOP for sample shipping procedures.

Address the actions to be taken when problems occur in the field, and the person responsible for taking corrective action and how the corrective action will be documented.

Failure	Response	Documentation	Individual Responsible
Water level indicator not working properly	Attempt to clean probe, change battery, use back-up indicator if need be.	Record on field sheets, notify office staff. Take indicator out of rotation until problem identified and corrected.	Field Staff, Field Manager
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
Wells not located	Use metal detector, measure from known points, contact project manager for additional information.	Record method used to attempt to locate the well on field sheets, and possibly reasoning for the well to be missing	Field Staff

Table 6A Field Corrective Action

B3 Sample Handling and Custody

1. ***How will the samples get from the Site to the Lab to ensure holding requirements are met?***

Following sample collection, the samples are immediately place in a laboratory provided cooler, pre-filled with wet ice obtained from the MECI office. Samples are transported to the MECI office once a sampling event is complete. A Chain of Custody (CoC) is filled out following the sampling event by the field staff. See attached CoC. If a lab provided courier is scheduled to visit the MECI offices the day following a sampling event, sampling coolers are repacked with wet ice, and left at the office for pick-up the following morning. If no courier is schedule to visit the MECI office the day following a sampling event, all sampling coolers are repacked with ice and are dropped off at a lab approved shipping company for overnight delivery to the lab.

2. ***How will the contactors cool the samples and keep the samples cool?***

All samples are kept on wet ice, obtained from MECI office.

3. ***How will the lab determine the temperature of the samples upon receipt? Will they be using a temperature blank?***

A calibrated thermometer and temperature blank will be used to document sample temperature. The temperature blank is immediately checked by the sample receiving technician upon arrival at the laboratory.

4. ***Where will the samples be stored in the Lab once they are received?***

All samples are stored in clean refrigeration units monitored and maintained at 4 degrees C + or – 2 degrees. Volatile organic samples are stored separately form all other samples.

5. ***Describe the chain of custody procedure and attach a copy of each chain of custody that will be used. If a Chain of Custody SOP exists from the Lab and the Contractor is willing to adhere to it, then this may be attached.***

A chain of custody (COC) will be filled out for each sampling event at each project site. COC to be signed by MECI and Shealy Environmental technician at time physical transfer of samples occurs to courier. Shealy uses the following COC procedures to protect sample integrity following pickup by their courier: A full time Sample Receiving Technician receives all samples and completes a Sample Receipt Checklist (SRC), which will identify any anomalies, if any exist the Sample Receiving Technician or Project Manager must resolve the deviation internally and/or notify the client to resolve the anomaly

B4 Analytical Methods

1. ***Identify the SOPs which will be used to analyze the samples, the method which the SOP references and the equipment or instrumentation that is needed:***

Parameter	SOP ID*	Method Referenced	Equipment	Comments
BTEX+Naph+MTBE+Oxygentaes	S-VO-002	8260B	GC/MS	
PAH's	S-SV-021	8270D	GC/MS	
EDB	S-SV-012	8011	GC	
Lead,T.	S-IM-022	6010C	ICP	
Ferrous Iron	S-IN-009	SM 3500-FED	Spectrophotometer	
Nitrate	S-IN-042	353.2	Auto-analyzer/Lachate	
Sulfate	S-IN-010	300.0	Ion Chromatograph	
Methane	S-VO-004	RSK-175	GC	
TOC	S-IN-030	Walkley-Black	N/A	
DRO - TPH	S-SV-001	8015C	GC	
pH	MECI SOP 4.3.6	*	YSI 63	
Conductivity	MECI SOP 4.3.6	*	YSI 63	
Dissolved Oxygen	MECI SOP 4.3.6	*	YSI 550A	

Temperature	MECI SOP 4.3.6	*	YSI 550A	
Turbidity	MECI SOP 4.3.6	*	60 cm Turbidity Tube	

Table 7A Analytical SOPs and Referenced Methods

- **This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.**

Abbreviation	Lab Identification of this SOP	Full Name of the SOP
S-VO-002	S-VO-002	GC/MS VOLATILES ANALYSIS BASED ON EPA METHODS 8260B AND 624 PREPARED BY EPA METHODS 5030B, 5035 AND 3585
S-SV-021	S-SV-021	GC/MS ANALYSIS BASED ON EPA METHOD 8270D PREPARED BY EPA METHODS 3520C, 3550C AND 3580A
S-SV-012	S-SV-012	GC/ECD ANALYSIS OF EDB AND DBCP BASED ON METHOD 8011 & 504.1
S-IM-022	S-IM-022	INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPECTROSCOPY-PECTROMETRIC METHOD for TRACE ELEMENT ANALYSES METHOD 6010C
S-IN-009	S-IN-009	FERROUS IRON (PHENANTHROLINE METHOD) STANDARD METHOD 3500-Fe D
S-IN-042	S-IN-042	NITRATE+NITRITE NITROGEN BY EPA METHOD 353.2, NITRATE NITROGEN BY 353.2 SUBTRACTION, AND NITRITE NITROGEN BY EPA METHOD 353.2
S-IN-010	S-IN-010	INORGANIC ANIONS BY ION CHROMATOGRAPHY EPA METHOD 300.0 and SW-846 9056 and 9056A
S-VO-004	S-VO-004	STANDARD OPERATING PROCEDURE GC ANALYSIS BASED ON METHOD RSKSOP-175
S-IN-030	S-IN-030	TOTAL ORGANIC CARBON (TOC) WALKLEY-BLACK PROCEDURE
S-SV-001	S-SV-001	GC/FID DIESEL RANGE ORGANICS ANALYSIS BASED ON METHOD 8015B and/or 8015C PREPARED BY EPA METHODS 3520C, 3550C and 3580A
MECI SOP 4.3.6	MECI SOP 4.3.6	Sampling Standard operating procedures

Table 8A SOP Abbreviation Key

2. Identify procedures to follow when failures occur, identify the individual responsible for corrective action and appropriate documentation:

Failure	Response	Documented Where?	Individual Responsible
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
COC or	Call Client	Sample Receiving Checklist	PM – Kelly Maberry

Sample Receiving issues		(SRC)	kmaberry@shealylab.com
Analytical errors	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director – Daniel J. Wright dwright@shealylab.com
QA/QC Failure	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Daniel J. Wright dwright@shealylab.com QA/QC Officer – Jami Savje Jsavje@shealylab.com
On time delivery	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Daniel J. Wright dwright@shealylab.com QA/QC Officer – Jami Savje Jsavje@shealylab.com

Table 9A Corrective Action Procedures

3. Identify sample disposal procedures.

Analysis	Matrix	Schedule for disposal	Method for disposal	Comments
BTEX+Naph+MTBE+Oxygenates	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
PAH's	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
EDB	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Lead	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous	

			waste.	
Ferrous Iron	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Nitrate,Sulfate	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Methane	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
All	Water	On-Site	Portable Granulated Activated Carbon (GAC) Unit	All waste water produced from sampling and decontamination activities will be run through a GAC unit

Table 10A Sample Disposal Procedures

4. Provide SOPs for the Kerr Method or the Ferrous Iron Method if these are parameters for this study. This can be attached or written here. If attached please note that it is an attachment and where it is located (if applicable).

B5 Quality Control Requirements:

All QC will follow the requirements laid out in Section B5 of the UST Programmatic QAPP.

B6 Field Instrument and Equipment Testing, Inspection and Maintenance

1. Identify all field and laboratory equipment needing periodic maintenance, the schedule for this, and the person responsible. Note the availability and location of spare parts.

Instrument	Serial Number	Type of Maintenance	Frequency	Parts needed/Location	Person responsible
Volatiles Mass Spec	Shealy SOP S-SV-021 Page 7	Change traps, clean ion source, replace filaments	Periodic	Laboratory	MSV Analyst

Semivolatile Mass Specc	Shealy SOP S-SV-021 Page 7	Injection port maintenance, ion source maintenance, column replacement	Periodic	Laboratory	MSSV Analyst
ECD GC	Shealy SOP S-SV-012 Page 5	Injection port maintenance, column replacement	Periodic	Laboratory	GC Analyst
Dionex IC	Shealy SOP S-IN-010 Page 6	Replace auto sampler filter, tubing, line filter, sample Line and Waste Line, as needed. Check Reagent levels, flow rate, waste line.	Periodic	Laboratory	IC Analyst
ICP	Shealy SOP S-IM-005 Page 6 & 7	Clean Sample introduction system , auto sampler, torch, Change spray chamber, torch tubing, tubing	Periodic	Laboratory	ICP Analyst
Leeman Mercury Analyzer	Shealy SOP S-IM-006 Page 5	Clean GLS, Change Pump tubing, Nafion Dryer, Lamp	Periodic	Laboratory	Mercury Analyst
Flow Injection Analysis – Lachat 8000	Shealy SOP S-IN-042 Page 5	Replace sample and reagent lines, replace light source, re-wrap heating coil, replace column	Periodic/As Needed	Laboratory	Nitrate Analyst
YSI 63	09C 101302, 10K 101895, 07M 100905	Replace probe tip	Yearly	Order from YSI	C. Sanders
YSI 63	09C 101302, 10K 101895, 07M 100905	Replace batteries	As Needed	In stock at office	Field Staff
YSI 63	09C 101302, 10K 101895, 07M 100905	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
YSI 63	09C 101302, 10K 101895, 07M 100905	Check buffer solutions for expiration	Weekly	In stock at office	C. Sanders
YSI 550A	04L 2026AK, 08B 101407, 04A 0912AI	Replace membrane	4 to 8 weeks	In stock at office	Field Staff
YSI 550A	04L 2026AK, 08B 101407, 04A 0912AI	Replace batteries	As Needed	In stock at office	Field Staff
YSI 550A	04L 2026AK, 08B 101407, 04A 0912AI	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
Turbidity Tube	#1, #2, #3	General inspection for wear and tear on equipment, clarity of	Daily	Tubes will be cleaned/fixed in office	Field Staff

		Secchi Disk			

Table 11A Instrument and Equipment Maintenance

2. Identify the testing criteria for each lab or field instrument that is used to ensure the equipment is performing properly. Indicate how deficiencies, if found, will be resolved, re-inspections performed, and effectiveness of corrective action determined and documented. Give the person responsible for this

Instrument/Equipment & Serial Number	Type of Inspection	Requirement	Individual Responsible	Resolution of Deficiencies
Volatiles Mass Spec Shealy SOP S-SV-021 Page 7	Daily calibration check	Method Requirements	MSV Analyst	Recalibration or instrument maintenance
Semi-volatiles Mass Spec Shealy SOP S-SV-021 Page 7	Daily calibration check	Method Requirements	MSSV Analyst	Recalibration or instrument maintenance
ECD GC Shealy SOP S-SV-012 Page 5	Daily calibration check	Method Requirements	GC Analyst	Recalibration or instrument maintenance
Dionex IC Shealy SOP S-IN-010 Page 6	Daily calibration check	Method Requirements	IC Analyst	Recalibration or instrument maintenance
ICP Shealy SOP S-IM-005 Page 6 & 7	Daily calibration check	Method Requirements	ICP Analyst	Recalibration or instrument maintenance
Leeman Mercury Analyzer Shealy SOP S-IM-006 Page 5	Daily calibration check	Method Requirements	Mercury Analyst	Recalibration or instrument maintenance
Flow Injection Analysis – Lachat 8000 Shealy SOP S-IN-042 Page 5	Daily and continuing calibration check	See calibration criteria	Nitrate Analyst	Recalibration or instrument maintenance
YSI 63 - 09C 101302, 10K 101895, 07M 100905	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
YSI 550A - 04L 2026AK, 08B 101407, 04A 0912AI	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer

Table 12A Instrument and Equipment Inspection

B7 Instrument Calibration and Frequency

1. Identify equipment, tools, and instruments for field or lab work that should be calibrated and the frequency.
2. Describe how the calibrations should be performed and documented, indicating test criteria and standards or certified equipment.
3. Identify how deficiencies should be resolved and documented. Identify the person responsible for corrective action.

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Volatiles Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by continuous calibration verification standard	Method Criteria	Detailed in SOP	MSV Analyst	S-VO-002
Semi-volatile Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	MSSV Analyst	S-SV-021
GC ECD	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	GC Analyst	S-SV-012
Dionex IC	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	IC Analyst	S-IN-010
ICP	Minimum of 3 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	ICP Analyst	S-IM-022
Cetac Mercury Analyzer	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	Mercury Analyst	S-IM-006
Lacaht QuickChem 8000	Minimum of 5 calibration standards	Daily or when indicated by calibration verification standard	Method Criteria	Detailed in SOP	Nitrate Analyst	S-IN-042
YSI 63	pH Calibration	Daily	+/- 0.2 pH units	clean/replace probe tip, recalibrate	Field Staff	4.3.6
YSI 63	Conductivity Calibration	As directed by manufacturer	+/- 10 uS	clean/replace probe tip, recalibrate	Field Staff	4.3.6
YSI 550A	DO calibration	Daily	+/- 0.25 mg/l	clean/replace probe tip, recalibrate	Field Staff	4.3.6
YSI 550A	Temperature	Daily	+/- 1 °C	clean/replace	Field Staff	4.3.6

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
	Calibration			probe tip, recalibrate		
Electronic Water Level Indicator	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***
Oil/Water Interface probe	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***

Table 13A Instrument Calibration Criteria and Corrective Action

*** This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.**

B8 Inspection/Acceptance Requirements for Supplies and Consumables

1. Identify critical supplies and consumables for field and laboratory, noting supply source, acceptance criteria, and procedures for tracking, storing and retrieving these materials.
2. Identify the individual(s) responsible for this.

Item	Vendor	Acceptance criteria	Handling/Storage Conditions	Person responsible for inspection and tracking.
Laboratory Chemicals	Fisher,VWR	Certificates of analysis and laboratory testing	Laboratory storage	Receiving and laboratory personnel
Laboratory standards	O2Si, Restek, High Purity, VHG, Supelco	Certificates of analysis and laboratory verifications	Vendor specific storage conditions	Laboratory Analysts
Sample Containers	Daniels Scientific, QEC	Certificates of analysis and laboratory testing	Bottle storage area	Sample receiving personnel
Clear, Disposable polyethylene Bailers	Preferred Pump	Individual sleeves intact, ball valve operational	Stored in Vehicle Bay, Off of the ground	C. Sanders, Field Staff
Nylon Rope	Preferred Pump	Covered with plastic	Stored in Vehicle Bay, Off of the ground	C. Sanders, Field Staff
Nitrile Gloves	Preferred Pump	Unopened box, no holes	Stored in Vehicle Bay, Off of the ground	C. Sanders, Field Staff
40 mL HCL preserved amber vials	Shealy Environmental Services	Custody seal intact	Stored in Vehicle Bay, Off of the ground	C. Sanders, Field Staff
250 mL HNO3 preserved metals vials	Shealy Environmental Services	Custody seal intact	Stored in Vehicle Bay, Off of the ground	C. Sanders, Field Staff
Coolers	Shealy Environmental Services	Intact	Stored in Vehicle Bay, Off of the ground	C. Sanders, Field Staff
pH Buffer	TRS Environmental, Enviroequipment	Within expiration date	Stored in calibration room	C. Sanders, Field Staff

Conductivity Standard	TRS Environmental, Enviroequipment	Within expiration date	Stored in calibration room	C. Sanders, Field Staff
DO Membranes	YSI, Enviroequipment	Clean, in box	Stored in calibration room	C. Sanders, Field Staff
Batteries	Any Store	Not previously used	Stored in calibration room	C. Sanders, Field Staff

Table 14A List of Consumables and Acceptance Criteria

B9 Data Acquisition Requirements (Non-Direct Measurements)

1. Identify data sources, for example, computer databases or literature files, or models that should be accessed or used.
2. Describe the intended use of this information and the rationale for their selection, i.e., its relevance to project.
3. Indicate the acceptance criteria for these data sources and/or models.

Data Source	Used for	Justification for use in this project	Comments
Historical Data	Site Maps and Well Construction Information	Well Location and Detail	

Table 15A Non-Direct Measurements

4. Identify key resources/support facilities needed.

There are no non-direct measurements in this project

B10 Data Management

1. Describe the data management scheme from field to final use and storage.

Following sample collection and chain of custody production, samples are shipped to the lab. Field work from the field staff is reviewed by the MECI project manager, and converted into digital form. All data entry is subsequently checked to validate the data entry. The original copies of the field work are stored in MECI files for a minimum of 5 years. Digital copies of the work are stored on the MECI server, which is backed up weekly, and stored for a minimum of 5 years. The digital copy of the field work is presented to SCDHEC with the final report.

2. How does the lab and field staff ensure that no unauthorized changes are made to the chain of custody, sampling notebooks, laboratory notebooks and computer records?

The laboratory maintains comprehensive Quality Control and Training Programs. All sample receipt data, sample log-in, and analytical data is peer reviewed, including review for inappropriate changes. Data management, review procedures and the Quality Systems Program are documented in the laboratory's Quality Manual and Standard Operating Procedures. The Quality Assurance Department oversees adherence to and review of these programs.

All MECI field work is produced using ink-pens. Any attempt to alter field data, after sampling is complete, can be readily identified. MECI keeps a carbon copy of the chain of custody after it is shipped to the lab. This copy is kept with the field work. If any change to the CoC are suspected, this original carbon copy can be use to identify potential changes.

3. How does the lab ensure that there are no errors in samples records including times when sample information is compiled, data calculated and/or transmitted?

Sample data acquisition software is reviewed periodically. The LIMS database is backed up daily and is able to be restored in the event of a system failure. These procedures are documented in laboratory SOP S-AD-003, LIMS. The IT Manager is responsible for these systems and procedures."

4. How will the data be archived once the report is produced? How can it be retrieved? (This applies to both electronic and hard copies).

Laboratory Hardcopy data stored off site is logged, maintained and archived by the Quality Assurance Department. Laboratory Electronic Data Reports are maintained through IT back up under the responsibility of the IT Systems Manager.

MECI keeps all field work and paper copies of reports in its in-house filing system. All paper copies are stored for a minimum of 5 years. Any file can be retrieved easily by going to the correct filing cabinet/box.

All electronic copies of reports generated are kept on the MECI server. This server is backed-up on a weekly basis. Any file stored on the MECI server can be retrieved instantly, by accessing the server. All electronic files are stored for a minimum of 5 years on the server.

Section C Assessment and Oversight

C1 Assessment and Response Actions

1. *The Contractor is supposed to observe field personnel daily during sampling activities to ensure samples are collected and handled properly and report problems to DHEC within 24 hours. . Please state who is responsible for doing this and what observations will be made. Will this person have the authority to stop work if severe problems are seen?*

Field audits can be conducted on any field personnel at any time. MECI field audits can be conducted by the Field Manger, who will be responsible for ensuring that field personnel adhere to the QAPP. If during a random field audit, severe problems are found, work will be stopped by the field manager and the QA officer contacted to determine corrective action. All problems must be corrected prior to any additional

work being performed. Should it be requested, an On-site Field Audit can be scheduled with the SCDHEC project manager. If severe problems are identified by the SCDHEC project manager, the project manager can stop the work until the problems are corrected.

2. *The SCDHEC UST QAPP states that the Lab will receive an Offsite Technical System Audit. For this project, what assessments will be done on the Commercial Lab(s) that are being used—other than their certification audit? When or how often are these done? Who will the results be given to and who has the ability to stop work if problems are severe?*

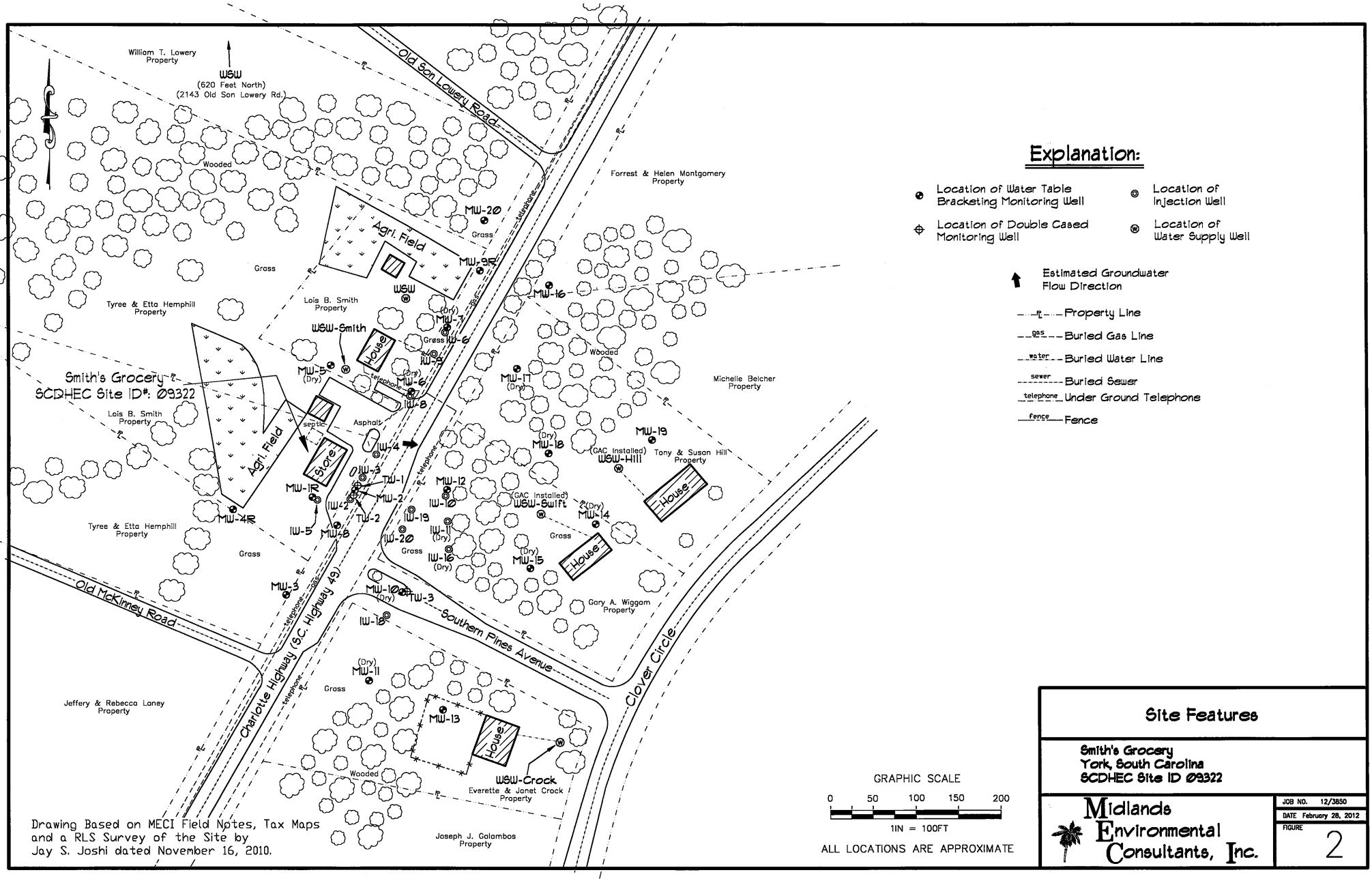
The laboratory participates in annual Proficiency Testing through an approved vendor, Wibby Environmental. If during a random audit, severe problems are found, work will be stopped by the according Wibby Environmental representative and the QA officer contacted to determine corrective action. Proficiency Testing results are provided to the Office of Environmental Laboratory Certification.

C2 Reports to Management

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

Section D Data Validation and Usability

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).


William T. Lowery Property
WSW
(620 Feet North)
(2143 Old Son Lowery Rd.)
Old Son Lowery Road
Wooded
Forrest & Helen Montgomery Property
MW-20
Grass
Agri. Field
MW-9R
Grass
WSW
Tyree & Etta Hemphill Property
Lois B. Smith Property
WSW-Smith
House
(Dry) MW-7
Grass
IW-6
IW-7
MW-16
Wooded
Smith's Grocery
SCDHEC Site ID#: 09322
MW-5 (Dry)
(Dry) MW-6
IW-8
MW-17 (Dry)
Michelle Belcher Property
Lois B. Smith Property
Agri. Field
septic
Asphalt
IW-4
Store
MW-19
(GAC Installed) WSW-Hill
Tony & Susan Hill Property
(Dry) MW-18
IW-3
TW-1
MW-12
MW-1R
IW-2
TW-2
MW-2
IW-10
(GAC Installed) WSW-Swift
(Dry) MW-14
House
MW-4R
IW-19
IW-11 (Dry)
Tyree & Etta Hemphill Property
IW-5
MW-8
IW-20
Grass
Grass
IW-16 (Dry)
(Dry) MW-15
House
MW-3
MW-10 (Dry)
TW-3
Old McKinney Road
Charlotte Highway (S.C. Highway 49)
Southern Pines Avenue
Clover Circle
Gary A. Wiggam Property
IW-18
(Dry) MW-11
Grass
Jeffery & Rebecca Laney Property
MW-13
House
Wooded
WSW-Crock
Everette & Janet Crock Property
Joseph J. Galambos Property
Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated November 16, 2010.
Explanation:
Location of Water Table Bracketing Monitoring Well
Location of Injection Well
Location of Double Cased Monitoring Well
Location of Water Supply Well
Estimated Groundwater Flow Direction
Property Line
Buried Gas Line
Buried Water Line
Buried Sewer
Under Ground Telephone
Fence
GRAPHIC SCALE
0 50 100 150 200
1IN = 100FT
ALL LOCATIONS ARE APPROXIMATE
Site Features
Smith's Grocery
York, South Carolina
SCDHEC Site ID #9322
Midlands Environmental Consultants, Inc.
JOB NO. 12/3850
DATE February 28, 2012
FIGURE 2

SHEALY

Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number

Client	Report to Contact	Sampler (Printed Name)	Quote No.
Address	Telephone No. / Fax No. / Email	Waybill No.	Page ___ of ___
City / State / Zip Code	Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		Number of Containers / Bottle (See Instructions on back) / Preservative / Lot No.
Project Name			
Project Number	P.O Number		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis	Remarks / Cooler ID

Turn Around Time Required (Prior lab approval required for expedited TA)
☐ Standard ☐ Rush (Please Specify)

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

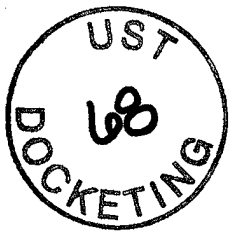
1. Relinquished by / Sampler	Date	Time	1. Received by	Date	Time
2. Relinquished by	Date	Time	2. Received by	Date	Time
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by	Date	Time	4. Laboratory Received by	Date	Time

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack
Receipt Temp. _____ °C
Temp. Blank ☐ Y / ☐ N

Midlands Environmental Consultants, Inc.

April 12, 2013



Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Report of Groundwater Sampling
Smith's Grocery
3760 Charlotte Highway
York, South Carolina
SCDHEC Site ID Number 09322, CA# 45754
MECI Project Number 13-4414
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached Report of Groundwater Sampling for the referenced site. This report describes site activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control's (SCDHEC) Quality Assurance Program Plan for the Underground Storage Tank Management Division (QAPP).

PROJECT INFORMATION

The subject site (Smith's Grocery) is located at 3176 Charlotte Highway, York, York County, South Carolina. The subject site previously maintained one 6,000 gallon gasoline underground storage tank (UST) and one 8,000 gallon gasoline UST. These UST's were abandoned by removal from ground in March of 1996. The South Carolina Department of Health and Environmental Control (SCDHEC) reported a release of petroleum product from these UST's in June of 1993 and confirmed the release in September of 1996. The subject site is currently rated a Class 1D.

MONITORING WELL SAMPLING AND CHEMICAL ANALYSIS

On April 5, 2013, MECI personnel collected samples from one (1) water supply well at the subject site. MECI personnel utilized an electronic water level indicator for water level measurements and an oil/water interface probe for free phase petroleum product level measurements. Based on a request by SCDHEC personnel, not all monitoring wells were to be purged prior to sample collection. Sampling/purging was completed utilizing a prepackaged, clear, disposable polyethylene bailer and nylon rope. A new set of nitrile gloves were worn at each monitoring well, and at all time samples were handled. Field measurements of pH, conductivity, dissolved oxygen, and water temperature

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

were obtained before well sampling process. MECI utilized YSI550A meter for DO (mg/L) and temperature readings (°C) and YSI63 meters for pH and conductivity (uS) readings. The attached Field Data Information Sheets presents the results of the field measurements obtained. The wells were sampled in accordance with SCDHEC's Quality Assurance Program Plan for the Underground Storage Tank Management Division (QAPP, Dated June 2011) and MECI's Standard Operating Procedures (MECI SOP, Dated August, 2011).

Groundwater samples obtained were sent to Shealy Environmental Services, Inc. of West Columbia, SC (SCDHEC Laboratory Certification #32010) for analysis.

The following sampling matrix contains well development and requested analyses for each well:

Monitoring Well	Purge	No Purge	Gauge Only	Not Located	BTEX, Naphthalene, MTBE (EPA Method 8260-B)	EDB (EPA Method 8011)	1,2 DCA (EPA Method 8260-B)	8 Oxygenates (EPA Method 8260-B)	Total Lead (EPA Method 6010)	Sulfate (EPA Method 375.2)	Nitrate (EPA Method 335.2)	Methane (RSK Method)	PAH's (EPA Method 8270)	Ferrous Iron (Field Test)
					Analyte Sampled									
WSW-1					X	X	X	X						
WSW-1 Dup.					X	X	X	X						
Field Blank					X	X	X	X						
Trip Blank					X		X	X						

Notes: BTEX = benzene, toluene, ethylbenzene, & total xylenes MTBE=methyl tertiary butyl ether 1,2 DCA = 1,2 dicloroethane PAH = polycyclic aromatic hydrocarbons

No purged water was produced during sampling activities.

Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.

Jeff L. Coleman
Senior Scientist

Courtney M. Sanders
Project Biologist

Attachments:

Contractor Checklist

Item#	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	X		
2	Is UST Owner/Operator name, address, & phone number provided?			X
3	Is name, address, & phone number of current property owner provided?			X
4	Is the DHEC Certified UST Site Rehabilitation Contractor's Name, Address, telephone number, and certification number provided?	X		
5	Is the name, address, telephone number, and certification number of the well driller that installed borings/monitoring wells provided?			X
6	Is the name, address, telephone number, and certification number of the certified laboratory(ies) performing analytical analyses provided?	X		
7	Has the facility history been summarized?	X		
8	Has the regional geology and hydrogeology been described?			X
9	Are the receptor survey results provided as required?			X
10	Has current use of the site and adjacent land been described?			X
11	Has the site-specific geology and hydrogeology been described?			X
12	Has the primary soil type been described?			X
13	Have field screening results been described?			X
14	Has a description of the soil sample collection and preservation been detailed?			X
15	Has the field screening methodology and procedure been detailed?			X
16	Has the monitoring well installation and development dates been provided?			X
17	Has the method of well development been detailed?			X
18	Has justification been provided for the locations of the monitoring wells?			X
19	Have the monitoring wells been labeled in accordance with the UST QAPP guidelines?			X
20	Has the groundwater sampling methodology been detailed? (For detailed specifics, See MECI's SOP on file with SCDHEC)	X		
21	Have the groundwater sampling dates and groundwater measurements been provided? See attached Site Activity Summary Sheet	X		
22	Has the purging methodology been detailed? (For detailed specifics, See MECI's SOP on file with SCDHEC)	X		
23	Has the volume of water purged from each well been provided along with measurements to verify that purging is complete? See attached Field Data Information Sheets	X		
24	If free-product is present, has the thickness been provided? See attached Site Activity Summary Sheets	X		
25	Does the report include a brief discussion of the assessment done and the results?			X
26	Does the report include a brief discussion of the aquifer evaluation and results?			X
27	Does the report include a brief discussion of the fate & transport models used?			X

Item#	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk Evaluation)			X
29	Have the exposure pathways been analyzed? (Tier 2 Risk Evaluation)			X
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 Risk Evaluation)			X
31	Have recommendations for further action been provided and explained?			X
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)			X
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)			X
34	Has the current and historical laboratory data been provided in tabular format?			X
35	Have the aquifer characteristics been provided and summarized on the appropriate form?			X
36	Have the Site conceptual model tables been included? (Tier 1 Risk Evaluation)			X
37	Has the topographic map been provided with all required elements? (Figure 1)		X	
38	Has the site base map been provided with all required elements? (Figure 2)	X		
39	Have the CoC site maps been provided? (Figure 3 & Figure 4)			X
40	Has the site potentiometric map been provided? (Figure 5)			X
41	Have the geologic cross-sections been provided? (Figure 6)			X
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements? (Appendix A)			X
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements? (Appendix B)	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements? (Appendix C)			X
47	Have the soil boring/field screening logs been provided? (Appendix D)			X
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)			X
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)			X
50	Have the disposal manifests been provided? See attached	X		
51	Has a copy of the local zoning regulations been provided? (Appendix H)			X
52	Has all fate and transport modeling been provided? (Appendix I)			X
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)			X
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided?	X		

Site Activity Summary

UST Permit #: 09322
Facility Name: Smith's Grocery
County: York
Field Personnel: John Bryant

Midlands Environmental Consultants, Inc.
235-B Dooley Road, Lexington, SC 29073
(803) 808-2043 fax: 808-2048

Sample ID	Sampled?	Date	Time	Screened Interval	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Initial Dissolved Oxygen (mg/l)	# Gals. Purged	Comments
WSW-Smith	Y	4/5/13	13:00	***	***	***	***	***	***	Taken from Kitchen Sink Faucet
WSW-Smith Duplicate	Y	4/5/13	13:00	***	***	***	***	***	***	Duplicate Sample
Field Blank	Y	4/5/13	13:05	***	***	***	***	***	***	Field Blank
Trip Blank	Y	4/5/13	13:05	***	***	***	***	***	***	Trip Blank
									0.0	**TOTAL GALLONS PURGED**

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Midlands Environmental Consultants, Inc.
235 Dooley Rd
Lexington, SC 29073
Attention: Bryan Shane

Project Name: **Smith's Grocery**

Project Number: **12-3946**

Lot Number: **OD05031**

Date Completed: **04/08/2013**

Kelly M. Maberry
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
Midlands Environmental Consultants, Inc.
Lot Number: OD05031

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Volatiles
The RPD for ethanol exceeded method control limits in batch 17860; however, all other QA/QC criteria for this compound in the LCS/LCSD were within acceptance criteria and method control limits. The associated sample results were reported and no corrective action was required.

Sample Summary

Midlands Environmental Consultants, Inc.

Lot Number: OD05031

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	WSW-Hill	Aqueous	04/05/2013 1300	04/05/2013
002	WSW-Hill Dup	Aqueous	04/05/2013 1300	04/05/2013
003	Field Blank	Aqueous	04/05/2013 1305	04/05/2013
004	Trip Blank	Aqueous	04/05/2013 1305	04/05/2013

(4 samples)

Executive Summary

Midlands Environmental Consultants, Inc.

Lot Number: OD05031

Sample Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page

(0 detections)

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-Hill**
Date Sampled: **04/05/2013 1300**
Date Received: **04/05/2013**

Laboratory ID: **OD05031-001**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/05/2013 2019	JAC		17860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/08/2013 0934	AMY	04/05/2013 1639	17839

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		122	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **OD05031-002**
Description: **WSW-Hill Dup** Matrix: **Aqueous**
Date Sampled: **04/05/2013 1300**
Date Received: **04/05/2013**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/05/2013 2041	JAC		17860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/08/2013 0955	AMY	04/05/2013 1639	17839

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		115	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **OD05031-003**
Description: **Field Blank** Matrix: **Aqueous**
Date Sampled: **04/05/2013 1305**
Date Received: **04/05/2013**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/05/2013 1933	JAC		17860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/08/2013 1017	AMY	04/05/2013 1639	17839

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		120	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Midlands Environmental Consultants, Inc.**
Description: **Trip Blank**
Date Sampled: **04/05/2013 1305**
Date Received: **04/05/2013**

Laboratory ID: **OD05031-004**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/05/2013 1956	JAC		17860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: OQ17860-001
Batch: 17860
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	04/05/2013 1906
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	04/05/2013 1906
Benzene	ND		1	1.0	0.13	ug/L	04/05/2013 1906
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	04/05/2013 1906
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	04/05/2013 1906
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	04/05/2013 1906
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	04/05/2013 1906
Ethanol	ND		1	1000	33	ug/L	04/05/2013 1906
Ethylbenzene	ND		1	1.0	0.33	ug/L	04/05/2013 1906
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	04/05/2013 1906
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	04/05/2013 1906
Naphthalene	ND		1	1.0	0.40	ug/L	04/05/2013 1906
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	04/05/2013 1906
Toluene	ND		1	1.0	0.33	ug/L	04/05/2013 1906
Xylenes (total)	ND		1	1.0	0.33	ug/L	04/05/2013 1906

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: OQ17860-002
Batch: 17860
Analytical Method: 8260B
Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	970		1	97	70-130	04/05/2013 1734
tert-Amyl methyl ether (TAME)	50	43		1	87	70-130	04/05/2013 1734
Benzene	50	47		1	95	70-130	04/05/2013 1734
tert-Butyl formate (TBF)	250	230		1	90	70-130	04/05/2013 1734
1,2-Dichloroethane	50	46		1	91	70-130	04/05/2013 1734
Diisopropyl ether (IPE)	50	46		1	91	70-130	04/05/2013 1734
3,3-Dimethyl-1-butanol	1000	970		1	97	70-130	04/05/2013 1734
Ethanol	5000	4500		1	90	70-130	04/05/2013 1734
Ethylbenzene	50	49		1	98	70-130	04/05/2013 1734
Ethyl-tert-butyl ether (ETBE)	50	45		1	91	70-130	04/05/2013 1734
Methyl tertiary butyl ether (MTBE)	50	44		1	88	70-130	04/05/2013 1734

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: OQ17860-002 **Matrix:** Aqueous
Batch: 17860 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Naphthalene	50	48		1	97	70-130	04/05/2013 1734
tert-butyl alcohol (TBA)	1000	860		1	86	70-130	04/05/2013 1734
Toluene	50	46		1	92	70-130	04/05/2013 1734
Xylenes (total)	100	100		1	100	70-130	04/05/2013 1734

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: OQ17860-003 **Matrix:** Aqueous
Batch: 17860 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1000		1	100	2.9	70-130	20	04/05/2013 1757
tert-Amyl methyl ether (TAME)	50	45		1	90	3.6	70-130	20	04/05/2013 1757
Benzene	50	50		1	100	4.7	70-130	20	04/05/2013 1757
tert-Butyl formate (TBF)	250	230		1	92	1.9	70-130	20	04/05/2013 1757
1,2-Dichloroethane	50	47		1	95	3.7	70-130	20	04/05/2013 1757
Diisopropyl ether (IPE)	50	47		1	93	2.5	70-130	20	04/05/2013 1757
3,3-Dimethyl-1-butanol	1000	1000		1	101	3.7	70-130	20	04/05/2013 1757
Ethanol	5000	5600	+	1	113	23	70-130	20	04/05/2013 1757
Ethylbenzene	50	51		1	102	4.2	70-130	20	04/05/2013 1757
Ethyl-tert-butyl ether (ETBE)	50	46		1	93	2.5	70-130	20	04/05/2013 1757
Methyl tertiary butyl ether (MTBE)	50	45		1	89	1.5	70-130	20	04/05/2013 1757
Naphthalene	50	50		1	101	3.9	70-130	20	04/05/2013 1757
tert-butyl alcohol (TBA)	1000	880		1	88	2.4	70-130	20	04/05/2013 1757
Toluene	50	49		1	98	5.9	70-130	20	04/05/2013 1757
Xylenes (total)	100	100		1	104	3.9	70-130	20	04/05/2013 1757

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MB

Sample ID: OQ17839-001 **Matrix:** Aqueous
Batch: 17839 **Prep Method:** 8011
Analytical Method: 8011 **Prep Date:** 04/05/2013 1639

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	04/08/2013 0852

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		118	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: OQ17839-002 **Matrix:** Aqueous
Batch: 17839 **Prep Method:** 8011
Analytical Method: 8011 **Prep Date:** 04/05/2013 1639

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.28		1	114	60-140	04/08/2013 0913

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		118	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 16967

Client	Report to Contact	Sampler (Printed Name)	Quote No.
MEG	B. Shane	John C. Bryant	

Address	Telephone No. / Fax No. / Email	Waybill No.	Page
235B Dooky Rd			1 of 1

City	State	Zip Code
Lexington	SC	29073

Project Name	Project Number	P.O Number
Smiths Gravel		

Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCl 6. Na Thio. 7. NaOH

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: CW	DW	WW	S	Other	Analysis: BTEX & MN	EDB 8011	8-DAY 14 days	Lot No.	Remarks / Cooler ID
												OD05031	
WSW-Hill	4/5	13:00	6		X				X	X	X		
WSW-Hill Dup		13:00	6		X				X	X	X		*
Field Blank	↓	13:05	6	X					X	X	X		
Trip Blank	4/5	13:05	6	X					X				
													Quick Turn Lab Please Report Limits & Detection
													*

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☒ Rush (Please Specify) 2 Day

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐Non Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler	4/5	13:49	1. Received by	4/5/13	1349
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by	4/5/13	1411	4. Laboratory Received by	4/5/13	1411

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY — Received on Ice (Check) ☒ Yes ☐ No ☐ Ice Pack — Receipt Temp. 1.0 °C — Temp. Blank ☐ Y / ☒ N

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com
Level 1 Report v2.1

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Receipt Checklist (SRC)

Client: MCC Cooler Inspected by/date: ECC 4/5/13 Lot #: OD050 31

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other

Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐		2. If custody seals were present, were they intact and unbroken?

Cooler ID/temperature upon receipt: 0.8/1.0 °C 1 °C 1 °C 1 °C
Method: ☐ Temperature Blank ☑ Against Bottles Trip Blank
Method of coolant: ☐ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____. (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☑	No ☐		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☐	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH) with the SR # (number)

Sample(s) _____ were received with bubbles >6 mm in diameter.

Sample(s) _____ were received with TRC >0.2 mg/L for NH3/ TKN/cyanide/BNA/pest/PCB/herb.

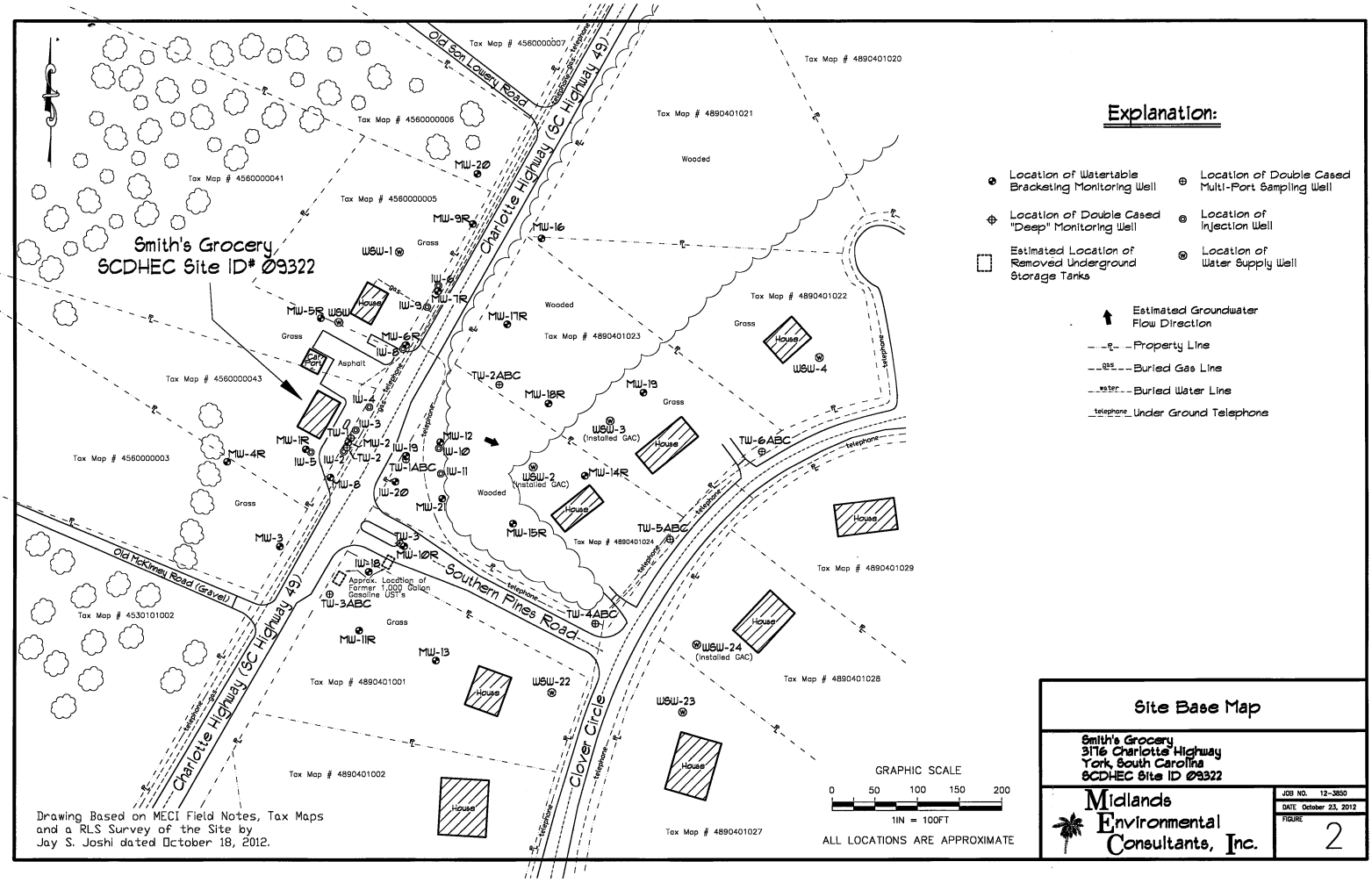
Sample labels verified by: _____ Date: 4-5-13

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: _____ Date of response: _____

Comments: _____



Explanation:

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Multi-Port Sampling Well
- Location of Double Cased "Deep" Monitoring Well
- Location of Injection Well
- Estimated Location of Removed Underground Storage Tanks
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Under Ground Telephone

Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated October 18, 2012.

Site Base Map

Smith's Grocery
3116 Charlotte Highway
York, South Carolina
SCDHEC Site ID 09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 2

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Midlands Environmental Consultants, Inc.
235 Dooley Rd
Lexington, SC 29073
Attention: Bryan Shane

Project Name: **Smith's Grocery**

Project Number: **12-3946**

Lot Number: **OD05031**

Date Completed: **04/08/2013**

Kelly M. Maberry
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

OD05031

Case Narrative
Midlands Environmental Consultants, Inc.
Lot Number: OD05031

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Volatiles
The RPD for ethanol exceeded method control limits in batch 17860; however, all other QA/QC criteria for this compound in the LCS/LCSD were within acceptance criteria and method control limits. The associated sample results were reported and no corrective action was required.

Sample Summary

Midlands Environmental Consultants, Inc.

Lot Number: OD05031

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	WSW-Hill	Aqueous	04/05/2013 1300	04/05/2013
002	WSW-Hill Dup	Aqueous	04/05/2013 1300	04/05/2013
003	Field Blank	Aqueous	04/05/2013 1305	04/05/2013
004	Trip Blank	Aqueous	04/05/2013 1305	04/05/2013

(4 samples)

Executive Summary

Midlands Environmental Consultants, Inc.

Lot Number: OD05031

Sample Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page

(0 detections)

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **OD05031-001**

Description: **WSW-Hill** Matrix: **Aqueous**

Date Sampled: **04/05/2013 1300**

Date Received: **04/05/2013**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/05/2013 2019	JAC		17860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/08/2013 0934	AMY	04/05/2013 1639	17839

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		122	57-137

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
Q = Surrogate failure
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
L = LCS/LCSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"
S = MS/MSD failure

Client: **Midlands Environmental Consultants, Inc.**
Description: **WSW-Hill Dup**
Date Sampled: **04/05/2013 1300**
Date Received: **04/05/2013**

Laboratory ID: **OD05031-002**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/05/2013 2041	JAC		17860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		99	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/08/2013 0955	AMY	04/05/2013 1639	17839

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		115	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **OD05031-003**
Description: **Field Blank** Matrix: **Aqueous**
Date Sampled: **04/05/2013 1305**
Date Received: **04/05/2013**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/05/2013 1933	JAC		17860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		97	70-130

EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/08/2013 1017	AMY	04/05/2013 1639	17839

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		120	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Midlands Environmental Consultants, Inc.** Laboratory ID: **OD05031-004**

Description: **Trip Blank** Matrix: **Aqueous**

Date Sampled: **04/05/2013 1305**

Date Received: **04/05/2013**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	04/05/2013 1956	JAC		17860

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit | B = Detected in the method blank | E = Quantitation of compound exceeded the calibration range | H = Out of holding time | Q = Surrogate failure

ND = Not detected at or above the MDL | J = Estimated result < PQL and ≥ MDL | P = The RPD between two GC columns exceeds 40% | N = Recovery is out of criteria | L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" | S = MS/MSD failure

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: OQ17860-001
Batch: 17860
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	100	6.7	ug/L	04/05/2013 1906
tert-Amyl methyl ether (TAME)	ND		1	10	0.20	ug/L	04/05/2013 1906
Benzene	ND		1	1.0	0.13	ug/L	04/05/2013 1906
tert-Butyl formate (TBF)	ND		1	100	1.0	ug/L	04/05/2013 1906
1,2-Dichloroethane	ND		1	1.0	0.15	ug/L	04/05/2013 1906
Diisopropyl ether (IPE)	ND		1	10	0.40	ug/L	04/05/2013 1906
3,3-Dimethyl-1-butanol	ND		1	100	1.0	ug/L	04/05/2013 1906
Ethanol	ND		1	1000	33	ug/L	04/05/2013 1906
Ethylbenzene	ND		1	1.0	0.33	ug/L	04/05/2013 1906
Ethyl-tert-butyl ether (ETBE)	ND		1	100	0.20	ug/L	04/05/2013 1906
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	04/05/2013 1906
Naphthalene	ND		1	1.0	0.40	ug/L	04/05/2013 1906
tert-butyl alcohol (TBA)	ND		1	100	6.7	ug/L	04/05/2013 1906
Toluene	ND		1	1.0	0.33	ug/L	04/05/2013 1906
Xylenes (total)	ND		1	1.0	0.33	ug/L	04/05/2013 1906

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCS

Sample ID: OQ17860-002
Batch: 17860
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	970		1	97	70-130	04/05/2013 1734
tert-Amyl methyl ether (TAME)	50	43		1	87	70-130	04/05/2013 1734
Benzene	50	47		1	95	70-130	04/05/2013 1734
tert-Butyl formate (TBF)	250	230		1	90	70-130	04/05/2013 1734
1,2-Dichloroethane	50	46		1	91	70-130	04/05/2013 1734
Diisopropyl ether (IPE)	50	46		1	91	70-130	04/05/2013 1734
3,3-Dimethyl-1-butanol	1000	970		1	97	70-130	04/05/2013 1734
Ethanol	5000	4500		1	90	70-130	04/05/2013 1734
Ethylbenzene	50	49		1	98	70-130	04/05/2013 1734
Ethyl-tert-butyl ether (ETBE)	50	45		1	91	70-130	04/05/2013 1734
Methyl tertiary butyl ether (MTBE)	50	44		1	88	70-130	04/05/2013 1734

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: OQ17860-002 **Matrix:** Aqueous
Batch: 17860 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Naphthalene	50	48		1	97	70-130	04/05/2013 1734
tert-butyl alcohol (TBA)	1000	860		1	86	70-130	04/05/2013 1734
Toluene	50	46		1	92	70-130	04/05/2013 1734
Xylenes (total)	100	100		1	100	70-130	04/05/2013 1734

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		98	70-130

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: OQ17860-003 **Matrix:** Aqueous
Batch: 17860 **Prep Method:** 5030B
Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1000		1	100	2.9	70-130	20	04/05/2013 1757
tert-Amyl methyl ether (TAME)	50	45		1	90	3.6	70-130	20	04/05/2013 1757
Benzene	50	50		1	100	4.7	70-130	20	04/05/2013 1757
tert-Butyl formate (TBF)	250	230		1	92	1.9	70-130	20	04/05/2013 1757
1,2-Dichloroethane	50	47		1	95	3.7	70-130	20	04/05/2013 1757
Diisopropyl ether (IPE)	50	47		1	93	2.5	70-130	20	04/05/2013 1757
3,3-Dimethyl-1-butanol	1000	1000		1	101	3.7	70-130	20	04/05/2013 1757
Ethanol	5000	5600	+	1	113	23	70-130	20	04/05/2013 1757
Ethylbenzene	50	51		1	102	4.2	70-130	20	04/05/2013 1757
Ethyl-tert-butyl ether (ETBE)	50	46		1	93	2.5	70-130	20	04/05/2013 1757
Methyl tertiary butyl ether (MTBE)	50	45		1	89	1.5	70-130	20	04/05/2013 1757
Naphthalene	50	50		1	101	3.9	70-130	20	04/05/2013 1757
tert-butyl alcohol (TBA)	1000	880		1	88	2.4	70-130	20	04/05/2013 1757
Toluene	50	49		1	98	5.9	70-130	20	04/05/2013 1757
Xylenes (total)	100	100		1	104	3.9	70-130	20	04/05/2013 1757

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		97	70-130

PQL = Practical quantitation limit
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
ND = Not detected at or above the MDL
J = Estimated result < PQL and ≥ MDL
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

EDB & DBCP by Microextraction - MB

Sample ID: OQ17839-001 **Matrix:** Aqueous
Batch: 17839 **Prep Method:** 8011
Analytical Method: 8011 **Prep Date:** 04/05/2013 1639

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,2-Dibromoethane (EDB)	ND		1	0.020	0.020	ug/L	04/08/2013 0852

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		118	57-137

EDB & DBCP by Microextraction - LCS

Sample ID: OQ17839-002 **Matrix:** Aqueous
Batch: 17839 **Prep Method:** 8011
Analytical Method: 8011 **Prep Date:** 04/05/2013 1639

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,2-Dibromoethane (EDB)	0.25	0.28		1	114	60-140	04/08/2013 0913

Surrogate	Q	% Rec	Acceptance Limit
1,1,1,2-Tetrachloroethane		118	57-137

PQL = Practical quantitation limit
ND = Not detected at or above the MDL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

SHEALY

Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 16967

Client: MEG
Report to Contact: B. Shane
Sampler (Printed Name): John C. Bryant
Quote No.:
Address: 235B Dooky Rd
Telephone No. / Fax No. / Email:
Waybill No.:
Page 1 of 1
City: Lexington State: SC Zip Code: 29073
Project Name: Smiths Grocery
Project Number:
P.O Number:

Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL (circled) 6. Na Thio. 7. NaOH

Number of Containers / Bottle (See instructions on back) / Preservative

Lot No. 00 05031

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	GW	DW	WW	S	Other	Analysis	BTEXN M	EDB 8011	8-oxy, 1,2 DCA	Remarks / Cooler ID
WSW-Hill	4/5	13:00	G		X					X	X	X	* Quick Turn * Please Report low Detection Limits.
WSW-Hill Dup	↓	13:00	G		X					X	X	X	
Field Blank	↓	13:05	G	X						X	X	X	
Trip Blank	4/5	13:05	G	X						X			

Turn Around Time Required (Prior lab approval required for expedited TAT): ☐ Standard ☑ Rush (Please Specify) 2 Day

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify):

Possible Hazard Identification: ☐Non Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler: [signature]	4/5	13:49	1. Received by: [signature]	4/5/13	1349
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by: [signature]	4/5/13	1411	4. Laboratory Received by: [signature]	4/5/13	1411

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY: Received on Ice (Check) ☑ Yes ☐ No ☐ Ice Pack Receipt Temp. 1.0 °C Temp. Blank ☐ Y / ☑ N

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Receipt Checklist (SRC)

Client: MACTEC Cooler Inspected by/date: ECC 9/5/13 Lot #: OD05031

Means of receipt: ☑ SESI ☐ Client ☐ UPS ☐ FedEx ☐ Airborne Exp ☐ Other			
Yes ☐	No ☑		1. Were custody seals present on the cooler?
Yes ☐	No ☐		2. If custody seals were present, were they intact and unbroken?
Cooler ID/temperature upon receipt: 6.0/1.0 °C ___/___ °C ___/___ °C ___/___ °C Method: ☐ Temperature Blank ☑ Against Bottles Trip Blank Method of coolant: ☐ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
If response is No (or Yes for 14, 15, 16), an explanation/resolution must be provided.			
Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: ___. (For coolers received via commercial courier, PMs are to be notified immediately.
Yes ☐	No ☐	NA ☑	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☐	NA ☑	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed?
Yes ☑	No ☐		7. Was collection date & time listed?
Yes ☑	No ☐		8. Were tests to be performed listed on the COC?
Yes ☑	No ☐		9. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with COC?
Yes ☑	No ☐		11. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		12. Was adequate sample volume available?
Yes ☑	No ☐		13. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		14. Were any samples containers missing?
Yes ☐	No ☑		15. Were there any excess samples not listed on COC?
Yes ☐	No ☑	NA ☐	16. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	17. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	18. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	19. Were all applicable NH3/TKN/cyanide/phenol/BNA/pest/PCB/herb (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	20. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☐	21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) ___ were received incorrectly preserved and were adjusted accordingly in sample receiving with ___ (H_2SO_4,HNO_3,HCl,NaOH) with the SR # (number)

Sample(s) ___ were received with bubbles >6 mm in diameter.

Sample(s) ___ were received with TRC >0.2 mg/L for NH3/TKN/cyanide/BNA/pest/PCB/herb.

Sample labels verified by: ___ Date: 9-5-13

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐ Did client respond: Yes ☐ No ☐

SESI employee: ___ Date of response: ___

Comments: ___

D H E C
PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director
Promoting and protecting the health of the public and the environment

BRYAN SHANE
MIDLANDS ENVIRONMENTAL CONSULTANTS
PO BOX 854
LEXINGTON SC 29071

APR 18 2013

Re: **QAPP Contractor Addendum Request**
Groundwater Sampling Contract
Solicitation # IFB-5400002759, PO#4600088529

Dear Mr. Shane:

In accordance with bid solicitation # IFB-5400002759 and the UST Management Division Quality Assurance Program Plan (QAPP), it is requested that you submit a Contractor Addendum for each site listed below. The Addendums must be submitted within 15 business days in my attention. The project manager for each site will issue a notice to proceed once the Addendum has been reviewed and approved. Please note, site reconnaissance should be conducted during the Addendum review so that any issues that arise may be addressed prior to commencing work at the site.

UST Permit #	Site Name	County	# samples and requested analysis*	Project Manager
07318	Reva of Clinton	Pickens	16-BTEXMN, DCA, & Oxygenates	J. Padgett
19550	Frm George Jackson	York	44-BTEXMN, DCA, Oxygenates, & EDB	D. Thoma
~~11972~~	Pilot Travel Center	Kershaw	20-BTEXMN, DCA, & Oxygenates	D. Thoma
09322	Smiths Grocery	York	106-BTEXMN, DCA, Oxygenates, & EDB	D. Thoma
13004	Rogers & Sons	Charleston	5-BTEXMN & DCA	A. Shrader
09355	Fort Mill Gulf	York	37-BTEXMN, DCA, Oxygenates, EDB & Lead	D. Orgain
03699	Wells Gulf	Georgetown	4-BTEXMN	J. Ford
03426	Perry's Grocery	Colleton	13-BTEXMN, DCA, & Oxygenates	J. Martin
08932	HQ Heath Self Serve	Sumter	48-BTEXMN, DCA, Oxygenates, & EDB	C. Ridgley

* The number of samples may not include trip blanks, field blanks, or field duplicates.

Please contact me with the sampling schedule before commencing work at these facilities. In addition, a weekly update for each site is required to be submitted via e-mail to the site's project manager and myself. If you have any questions or need further assistance, please contact me at (803) 896-6397 or thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

Enc: Site Information Sheet

cc: Technical Files

D H E C
PROMOTE PROTECT PROSPER
Catherine B. Templeton, Director
Promoting and protecting the health of the public and the environment

APR 29 2013

UST 70kel DOCKETING

TONY HILL
3049 CLOVER CIR
YORK SC 29745

Re: Water Supply Well Replacement and Tier II Assessment Report
Smith's Grocery, 3176 Charlotte Hwy., York, SC
UST Permit #09322
Telephone conversation on April 19, 2013
York County

Dear Mr. Hill:

In response to our telephone conversation on April 19, 2013, the following information is provided.

Our records indicate that two Underground Storage Tanks (USTs) were registered with the Agency by Ms. Lois Smith. The registered USTs were removed from the ground in March 1996. An assessment report received in June 1993 documented a release of petroleum products in the vicinity of the UST. Our records indicate that Ms. Smith complied with the regulatory requirements and stopped the leak from the tanks. Corrective action was initiated in December 2001 by SEI Environmental. Corrective action continued until March 2010 when SEI Environmental went out of business. In April 2010, the UST Division then directed Ms. Smith to conduct a groundwater sampling event so that the current conditions could be determined. That report received August 2010 indicated that numerous monitoring wells were missing. In October 2010, the UST Division directed Ms. Smith to replace the missing monitoring wells. The assessment report documenting the replacement of the monitoring wells was submitted in November 2010. In August 2011, the UST Division directed Ms. Smith to conduct a comprehensive sampling event. The sampling report received in October 2011 indicated that the groundwater plume was not defined and additional monitoring wells were required before corrective action could be initiated again. The UST Division directed Ms. Smith to conduct the additional assessment in November 2011. In addition, in November 2012, the UST Division directed Ms. Smith to replace two impacted water supply wells. A groundwater sampling event is currently ongoing to obtain current data so that corrective action may be initiated.

The UST Division was not aware that Ms. Smith's contractor was not providing you with copies of the reports documenting work that was conducted on your property. A copy of the most recent assessment report, the water supply well replacement report, and the sampling report for your water supply well have been enclosed for your records. In addition, the warranty information and the estimated replacement costs for the pump installed in your replacement well is enclosed. The UST Division has been informed that Ms. Smith has passed away. As such, any future work will be procured directly by the UST Division. Copies of all reports submitted to the Agency will be forwarded to you.

Upon completion of the assessment activities, this release will proceed to corrective action. The Agency will require access to your property during reasonable hours to perform necessary rehabilitation activities. You will be contacted by letter before corrective action is initiated

The Agency is not aware of any laws or regulations that prohibit the use or development of adjacent properties and properties where a petroleum release has occurred. However, the Agency advises against installing a water supply well for drinking, cooking, or bathing purposes until active corrective action is completed. If you should choose to install a water supply well for these purposes at this time, it is at your discretion. As stated above, active corrective action measures will be implemented to rehabilitate affected ground water to acceptable levels.

Any future work required by the Agency should not cause any damage to buildings, disrupt deliveries, prevent access to customers, or block main access routes. To further assure you, any required activities associated with the petroleum release would be performed by a SC Certified Site Rehabilitation Contractor who maintains specific levels of insurance coverage for General and Professional Liability and Pollution/Property Damage. Such coverage is required by Section IV of the SUPERB Site Rehabilitation and Fund Access Regulations R. 61-98.

On all correspondence concerning this site, please reference UST Permit # 09322. If there are any questions concerning this project, please contact me at (803) 896-6397 or by email at thomadl@dhec.sc.gov. The manager of the Corrective Action Section is Lee Monts and he can be reached at (803) 896-6677 or montsla@dhec.sc.gov.

Sincerely,

Debra L. Thoma

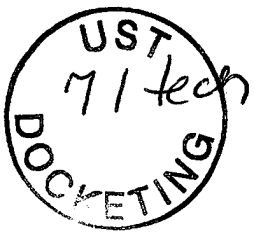
Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

Enc: Tier II report
Water Supply Well Replacement report
Analytical Results for April 5, 2013 sampling
Pump warranty information and replacement cost estimate

cc: Technical File

May 1, 2013

Midlands Environmental Consultants, Inc.



Ms. Debra Thoma, Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: QAPP Contractor Addendum – Revision 0
Smith's Grocery
York, South Carolina
SCDHEC Site ID Number 09322
MECI Project Number 13-4438
Certified Site Rehabilitation Contractor UCC-0009

Dear Ms. Thoma,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached QAPP Contractor Addendum for the referenced site.

On April 29, 2013, MECI personnel performed a site visit to the subject site to evaluate site conditions, locate monitoring wells and identify potential problems for future sampling activities.

If you have any question or comments please feel free to contact us at 803-808-2043.

Sincerely,
Midlands Environmental Consultants, Inc.

Courtney M. Sanders
Project Biologist

Jeff L. Coleman
Senior Scientist

Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SC DHEC UST Programmatic QAPP
For
Smiths Grocery, SCDHEC Site ID# 09322

3176 Charlotte Highway, York, South Carolina

Prepared by:
Courtney M. Sanders
Project Biologist
Midlands Environmental Consultants, Inc.
(Certified Site Rehabilitation Contractor UCC-0009)
235-B Dooley Road
Lexington, SC 29073
(803)808-2043

Date: May 1, 2013

Approvals

Debra Thoma SC DHEC Project Manager	Signature	Date
Courtney M. Sanders Contractor QA Manager	Signature	Date 5-2-13
Jeff L. Coleman Site Rehabilitation Contractor	Signature	Date 5/2/10
Daniel J. Wright Laboratory Director	Signature	Date 05/01/2013

A2 Table of Contents

A1 Title and Approval Page 1
A2 Table of Contents 2
A3 Distribution List 3
Table 1A Addendum Distribution List 3
A4 Project Organization 3
Table 2A Addendum Role Identification and Contact Information 4
Figure 1A Organizational Chart 4
A5 Problem Definition/Background 5
A6 Project/Task Description 6
A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs) 6
A8 Training and Certificates 6
Table 3A Required Training and Licenses 7
A9 Documents and Records 8
Table 4A Record Identification, Storage, and Disposal 8
Section B Measurement/Data Acquisition 8
B1 Sampling Process/Experimental Design 8
Table 5A Sampling Activities 9
B2 Sampling Methods 9
Table 6A Field Corrective Action 10
B3 Sample Handling and Custody 10
B4 Analytical Methods 11
Table 7A Analytical SOPs and Referenced Methods 12
Table 8A SOP Abbreviation Key 12
Table 9A Corrective Action Procedures 13
Table 10A Sample Disposal Procedures 14
B5 Quality Control Requirements: 14
B6 Field Instrument and Equipment Testing, Inspection and Maintenance 14
Table 11A Instrument and Equipment Maintenance 16
Table 12A Instrument and Equipment Inspection 16
B7 Instrument Calibration and Frequency 16
Table 13A Instrument Calibration Criteria and Corrective Action 18
B8 Inspection/Acceptance Requirements for Supplies and Consumables 18
Table 14A List of Consumables and Acceptance Criteria 19
B9 Data Acquisition Requirements (Non-Direct Measurements) 19
Table 15A Non-Direct Measurements 19
B10 Data Management 19
Section C Assessment and Oversight 20
C1 Assessment and Response Actions 20
C2 Reports to Management 21
Section D Data Validation and Usability 21

A3 Distribution List

Name	Title	Organization/Address	Telephone Number	Fax Number	Email Address
Debra Thoma	SC DHEC Technical Project Manager	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6397	803-896-6245	thomadl@dhec.sc.gov
Jeff L. Coleman	Site Rehabilitation Contractor	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	jlc@meci.net
Courtney M. Sanders	Quality Assurance Officer	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net
Kyle V. Pudney	Field Manager	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	kvp@meci.net
Daniel J. Wright	Laboratory Director	Shealy Environmental Services,Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	dwright@shealylab.com
	Well Services/Driller				

Table 1A Addendum Distribution List

A4 Project Organization

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
Project Manager	Debra Thoma	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6397	803-896-6245	thomadl@dhec.sc.gov
Site Rehabilitation Contractor	Jeff L. Coleman	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	jlc@meci.net
Quality Assurance Officer	Courtney M. Sanders	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net
Field Manager	Kyle V. Pudney	Midlands Environmental Consultants, Inc. 235-B Dooley Road	803-808-2043	803-808-2048	kvp@meci.net

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
		Lexington, SC 29073			
Analytical Laboratory Director	Daniel J. Wright	Shealy Environmental Services,Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	dwright@shealylab.com
Project Verifier	Courtney M. Sanders or Kyle V. Pudney	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net

Table 2A Addendum Role Identification and Contact Information

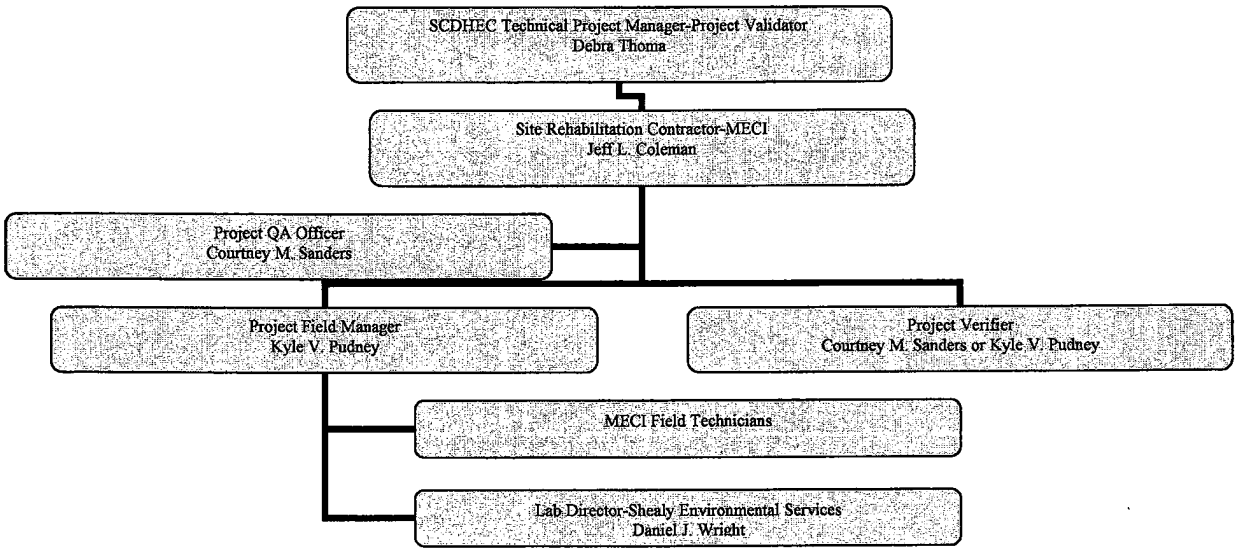


Figure 1A Organizational Chart

Project Manager (Debra Thoma) – The project manager is responsible for direct oversight of contractors conducting assessment and site rehabilitation of releases at UST sites.

Site Rehabilitation Contractor (Jeff L. Coleman) – The Site Rehabilitation Contractor is an independent contractor responsible for managing and coordinating field and office activities needed for assessments or cleanup.

-Final Review of all work produced for a scope of work.
-Final say on technical interpretation of data.

Quality Assurance Officer (Courtney M. Sanders) – The Quality Assurance Officer is responsible for the oversight of all quality assurance activities associated with projects performed by the Site Rehabilitation Contractor.

-In charge of producing and maintaining the QAPPA for MECI.
-Reviews (and Audits, if necessary) all work produced in conjunction with a scope of work.
-Quality control of data entry and report preparation.

Field Manager (Kyle Pudney) –The field manager will oversee all work done on any given project.

-Assign, direct and oversee all field personnel working on each project.
-Responsible for coordinating with the SCDHEC project manager, should any problems or clarifications arise.
-Responsible for all reporting done in conjunction with field work.

Analytical Laboratory Director (Daniel J. Wright) – The Laboratory Director is directly responsible for the Analytical Laboratory used during a scope of work. The Analytical Laboratory receives the soil and water samples from the site rehabilitation contractor, performs the requested analyses, and provides analytical reports.

Project Verifier (Courtney M. Sanders) – The project verifier is responsible for verifying the quality of data produced during a scope of work. This includes review of field work and laboratory reports for potential quality issues.

Field Technicians (various employees) – Responsible for all field activities for a given scope of work.

-Conduct all initial site visit, and record findings
-Conduct all field activities associated with a scope of work. All work will be conducted according to the MECI SOP. Will be responsible for reporting any potential problems are inconsistencies found during assessment activities.
-Completes the chain of custody upon completion of sampling event and delivers samples to lab or office for later lab pick-up.

A5 Problem Definition/Background

Discuss the background (as much as is known) of the site and appropriate historical information, and why this site is being assessed.

The subject site (Smith's Grocery) is located at 3176 Charlotte Highway, York, York County, South Carolina. The subject site previously maintained one 6,000 gallon gasoline underground storage tank (UST) and one 8,000 gallon gasoline UST. These UST's were abandoned by removal from ground in March of 1996. The South Carolina Department of Health and Environmental Control (SCDHEC) reported a release of petroleum product from these UST's in June of 1993 and confirmed the release in September of 1996. The subject site is currently rated a Class 1D.

The site is being sampled in conjunction with the SCDHEC Groundwater Sampling Contract (Solicitation # IFB-5400002759, PO# 4600088529).

Please answer the following: Does this project fall under UST or Brownfields area?

Underground Storage Tank Division

A6 Project/Task Description

1. ***Summarize what is known about the work to be done. This can be a short sentence indicating what the Scope of this project is (see Master QAPP Section A6).***

The subject site (Smith's Grocery) will be sampled in conjunction with the SCDHEC Groundwater Sampling Contract (Solicitation # IFB-5400002759, PO# 4600088529). During assessment activities monitoring wells will be sampled for petroleum constituents.

2. ***The work will begin within*** fourteen (14) days of receipt of approved QAPP contractors addendum ***after cost approval and sampling should be complete by*** twenty-one (21) days of receipt of approved QAPP contractors addendum.

3. ***Are there are time or resource constraints? Include those factors that may interfere with the tentative schedule.***

Factors that may prevent schedule work will be, but not limited to, inclement weather, equipment malfunction, and machine failure.

A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs)

The subject site is located at 3176 Charlotte Highway, York, York County, South Carolina. The site is currently occupied by an abandoned store front.

A8 Training and Certificates

Required training and licenses:

Title/Job	Name	Training Required	Date training received	Type of License	License Number
Principal Geologist	Bryan T. Shane, P.G.	Professional Geologist	10/30/1993	State of South Carolina	1102
Senior Scientist	Jeff Coleman	OSHA 40 hr HAZWOPER	7/27/2007	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/10/2012	N/A	N/A
Staff Geologist	John Bryant	OSHA 40 hr HAZWOPER	4/17/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/102012	N/A	N/A
Staff Biologist	Courtney Sanders	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A

Title/Job	Name	Training Required	Date training received	Type of License	License Number
		OSHA 8 hr HAZWOPER refresher	12/10/2012	N/A	N/A
Staff Biologist	Kyle Pudney	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/10/2012	N/A	N/A
Staff Biologist	Chris Lashley	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/10/2012	N/A	N/A
Staff Biologist	Gavin Globensky	OSHA 40 hr HAZWOPER	7/29/2011	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/10/2012	N/A	N/A
Staff Biologist	Ryan Ariail	OSHA 40 hr HAZWOPER	9/23/2011	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/10/2012	N/A	N/A
Staff Geologist	Patrick Boylan	OSHA 40 hr HAZWOPER	07/20/2012	N/A	N/A
Lab Manager	Daniel J. Wright	***	***	Lab Certification	SC 32010

Table 3A Required Training and Licenses

Courtney M. Sanders of Midlands Environmental Consultants, Inc. is responsible to ensuring that personnel participating in this project receive the proper training. All training records will be stored in the following location:235-B Dooley Road, Lexington, SC 29073.

It is understood that training records will be produced if requested by SC DHEC.

The Following Laboratory(ies) will be used for this Project:

Commercial Lab(s)

Full Name of the Laboratory___Shealy Environmental Services, Inc.____
Name of Lab Director_____Daniel J. Wright_____
SC DHEC Certification Number_____32010_____
Parameters this Lab will analyze for this project:

All samples will be analyzed for BTEX, Naphthalene, MTBE, 1,2 DCA, 8-Oxygenates (EPA Method 8260-B), and EDB (EPA Method 8011).

Please note: SC DHEC may require that the contractor submit some or all of the Laboratory's SOPs as part of this QAPP.

A9 Documents and Records

Personnel will receive the most current version of the QAPP Addendum via: (Check all that apply)

____US Mail ____Courier __X__ Hand delivered

Other (please specify):____E-mailed electronic copies___

Record	Produced By	Hardcopy/ Electronic	Storage Location For how long?	Archival
Instrument Raw Data	Target, Thermospec, or Iteva software	Hardcopy and Electronic	Hardcopy: Offsite storage for 7 yrs Electronic: Two external storage device backups – one offsite, one onsite storage for 10 yrs	Yes
Final Reports	LIMS	Electronic	Electronic: Two external storage device backups – one offsite, one onsite storage for 10 years	Yes
Field Work	Field Staff	Hardcopy	MECI office: 235/B Dooley Road / Min. 5 years	Yes
Chain of Custody	Field Staff	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
QAPP Addendum	Courtney Sanders	Hardcopy & Electronic	MECI office: 235B Dooley Road / Min. 5 years	Yes
Internal QC record	Courtney Sanders	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
Sampling Report	Courtney Sanders	Hardcopy & Electronic	MECI office: 235B Dooley Road / Min. 5 years	Yes

Table 4A Record Identification, Storage, and Disposal

Section B Measurement/Data Acquisition

B1 Sampling Process/Experimental Design

Item	Start Date	End Date	Comments
Site Reconnaissance	4/29/13	4/29/13	Already Completed
QAPP preparation	5/1/13	5/1/13	In progress
QAPP approval	5/2/13	5/22/13	Assuming three week turnaround
Monitoring well Sampling	5/23/13	6/06/13	Sampled within 2 weeks of QAPP approval
Report Preparation	6/07/13	6/28/13	Three weeks to prepare/submit report

Item	Start Date	End Date	Comments

Table 5A Sampling Activities

B2 Sampling Methods

Please note: The contractor must follow sampling protocols as given in the UST QAPP.

***Estimate* the number of samples of each matrix that are expected to be collected:**

Soil	_____
Ground Water from monitoring wells	____53____
From Drinking/Irrigation water wells	____40____
Field Duplicate Collection	_____5____
Field Blank Collection	_____1____
Trip Blank	_____3____
From surface water features	_____
Total number of Water samples	____102____

Notes:
During the April 29, 2013 site visit, fifty three (53) monitoring wells and forty (40) water supply wells were located. Monitoring well MW-18R was not located at the time of the initial site visit. If the monitoring well is located during sampling activities, the newly located monitoring well will be sampled accordingly.

During the site visit it was noted all located monitoring wells were in good condtion.

All monitoring well samples will be analyzed by BTEX, Naphthalene, MTBE, 1,2 DCA, 8-Oxygenates (EPA Method 8260-B), and EDB (EPA Method 8011).

For the sample matrices indicated above, please describe how samples will be collected and the equipment needed.

Please see MECI Monitoring Well Sampling SOP for sampling procedures and type of materials used for sampling.

Will Sampling Equipment have to be cleaned and decontaminated or is everything disposable?

All equipment, excluding electronic water level indicators, field probes and turbidity tubes, is disposable.

If sampling equipment must be cleaned please give a detailed description of how this is done and the disposal of by-products from the cleaning and decontamination.

Please see MECI Monitoring Well Sampling SOP for decontamination procedures.

Identify any equipment and support facilities needed. This may include such things as Fed-ex to ship the samples, a Geoprobe, field analysis done by another contractor (who must be certified), and electricity to run sampling equipment.

All samples will be shipped to the lab via courier or overnight shipping company. Please see MECI Monitoring Well Sampling SOP for sample shipping procedures.

Address the actions to be taken when problems occur in the field, and the person responsible for taking corrective action and how the corrective action will be documented.

Failure	Response	Documentation	Individual Responsible
Water level indicator not working properly	Attempt to clean probe, change battery, use back-up indicator if need be.	Record on field sheets, notify office staff. Take indicator out of rotation until problem identified and corrected.	Field Staff, Field Manager
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
Wells not located	Use metal detector, measure from known points, contact project manager for additional information.	Record method used to attempt to locate the well on field sheets, and possibly reasoning for the well to be missing	Field Staff

Table 6A Field Corrective Action

B3 Sample Handling and Custody

1. ***How will the samples get from the Site to the Lab to ensure holding requirements are met?***

Following sample collection, the samples are immediately place in a laboratory provided cooler, pre-filled with wet ice obtained from the MECI office. Samples are transported to the MECI office once a sampling event is complete. A Chain of Custody (CoC) is filled out following the sampling event by the field staff. See attached CoC. If a lab provided courier is scheduled to visit the MECI offices the day following a sampling event, sampling coolers are repacked with wet ice, and left at the office for pick-up the following morning. If no courier is schedule to visit the MECI office the day following a sampling event, all sampling coolers are repacked with ice and are dropped off at a lab approved shipping company for overnight delivery to the lab.

2. ***How will the contactors cool the samples and keep the samples cool?***

All samples are kept on wet ice, obtained from MECI office.

3. ***How will the lab determine the temperature of the samples upon receipt? Will they be using a temperature blank?***

A calibrated thermometer and temperature blank will be used to document sample temperature. The temperature blank is immediately checked by the sample receiving technician upon arrival at the laboratory.

4. ***Where will the samples be stored in the Lab once they are received?***

All samples are stored in clean refrigeration units monitored and maintained at 4 degrees C + or – 2 degrees. Volatile organic samples are stored separately form all other samples.

5. ***Describe the chain of custody procedure and attach a copy of each chain of custody that will be used. If a Chain of Custody SOP exists from the Lab and the Contractor is willing to adhere to it, then this may be attached.***

A chain of custody (COC) will be filled out for each sampling event at each project site. COC to be signed by MECI and Shealy Environmental technician at time physical transfer of samples occurs to courier. Shealy uses the following COC procedures to protect sample integrity following pickup by their courier: A full time Sample Receiving Technician receives all samples and completes a Sample Receipt Checklist (SRC), which will identify any anomalies, if any exist the Sample Receiving Technician or Project Manager must resolve the deviation internally and/or notify the client to resolve the anomaly

B4 Analytical Methods

1. ***Identify the SOPs which will be used to analyze the samples, the method which the SOP references and the equipment or instrumentation that is needed:***

Parameter	SOP ID*	Method Referenced	Equipment	Comments
BTEX+Naph+MTBE+Oxygentaes	S-VO-002	8260B	GC/MS	
PAH's	S-SV-021	8270D	GC/MS	
EDB	S-SV-012	8011	GC	
Lead,T.	S-IM-022	6010C	ICP	
Ferrous Iron	S-IN-009	SM 3500-FED	Spectrophotometer	
Nitrate	S-IN-042	353.2	Auto-analyzer/Lachate	
Sulfate	S-IN-010	300.0	Ion Chromatograph	
Methane	S-VO-004	RSK-175	GC	
TOC	S-IN-030	Walkley-Black	N/A	
DRO - TPH	S-SV-001	8015C	GC	
pH	MECI SOP 4.3.6	*	YSI 63	
Conductivity	MECI SOP 4.3.6	*	YSI 63	

Dissolved Oxygen	MECI SOP 4.3.6	*	YSI 550A	
Temperature	MECI SOP 4.3.6	*	YSI 550A	
Turbidity	MECI SOP 4.3.6	*	60 cm Turbidity Tube	

Table 7A Analytical SOPs and Referenced Methods

- **This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.**

Abbreviation	Lab Identification of this SOP	Full Name of the SOP
S-VO-002	S-VO-002	GC/MS VOLATILES ANALYSIS BASED ON EPA METHODS 8260B AND 624 PREPARED BY EPA METHODS 5030B, 5035 AND 3585
S-SV-021	S-SV-021	GC/MS ANALYSIS BASED ON EPA METHOD 8270D PREPARED BY EPA METHODS 3520C, 3550C AND 3580A
S-SV-012	S-SV-012	GC/ECD ANALYSIS OF EDB AND DBCP BASED ON METHOD 8011 & 504.1
S-IM-022	S-IM-022	INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPECTROSCOPY-PECTROMETRIC METHOD for TRACE ELEMENT ANALYSES METHOD 6010C
S-IN-009	S-IN-009	FERROUS IRON (PHENANTHROLINE METHOD) STANDARD METHOD 3500-Fe D
S-IN-042	S-IN-042	NITRATE+NITRITE NITROGEN BY EPA METHOD 353.2, NITRATE NITROGEN BY 353.2 SUBTRACTION, AND NITRITE NITROGEN BY EPA METHOD 353.2
S-IN-010	S-IN-010	INORGANIC ANIONS BY ION CHROMATOGRAPHY EPA METHOD 300.0 and SW-846 9056 and 9056A
S-VO-004	S-VO-004	STANDARD OPERATING PROCEDURE GC ANALYSIS BASED ON METHOD RSKSOP-175
S-IN-030	S-IN-030	TOTAL ORGANIC CARBON (TOC) WALKLEY-BLACK PROCEDURE
S-SV-001	S-SV-001	GC/FID DIESEL RANGE ORGANICS ANALYSIS BASED ON METHOD 8015B and/or 8015C PREPARED BY EPA METHODS 3520C, 3550C and 3580A
MECI SOP 4.3.6	MECI SOP 4.3.6	Sampling Standard operating procedures

Table 8A SOP Abbreviation Key

2. Identify procedures to follow when failures occur, identify the individual responsible for corrective action and appropriate documentation:

Failure	Response	Documented Where?	Individual Responsible
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager

COC or Sample Receiving issues	Call Client	Sample Receiving Checklist (SRC)	PM – Kelly Maberry kmaberry@shealylab.com
Analytical errors	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director – Daniel J. Wright dwright@shealylab.com
QA/QC Failure	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Daniel J. Wright dwright@shealylab.com QA/QC Officer – Jami Savje Jsavje@shealylab.com
On time delivery	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Daniel J. Wright dwright@shealylab.com QA/QC Officer – Jami Savje Jsavje@shealylab.com

Table 9A Corrective Action Procedures

3. Identify sample disposal procedures.

Analysis	Matrix	Schedule for disposal	Method for disposal	Comments
BTEX+Naph+MTBE+Oxygenates	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
PAH's	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
EDB	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Lead	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or	

			non-Hazardous waste.	
Ferrous Iron	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Nitrate,Sulfate	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Methane	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
All	Water	On-Site	Portable Granulated Activated Carbon (GAC) Unit	All waste water produced from sampling and decontamination activities will be run through a GAC unit

Table 10A Sample Disposal Procedures

4. Provide SOPs for the Kerr Method or the Ferrous Iron Method if these are parameters for this study. This can be attached or written here. If attached please note that it is an attachment and where it is located (if applicable).

B5 Quality Control Requirements:

All QC will follow the requirements laid out in Section B5 of the UST Programmatic QAPP.

B6 Field Instrument and Equipment Testing, Inspection and Maintenance

1. Identify all field and laboratory equipment needing periodic maintenance, the schedule for this, and the person responsible. Note the availability and location of spare parts.

Instrument	Serial Number	Type of Maintenance	Frequency	Parts needed/Location	Person responsible
Volatiles Mass Spec	Shealy SOP S-SV-021 Page 7	Change traps, clean ion source, replace	Periodic	Laboratory	MSV Analyst

		filaments			
Semivolatile Mass Specc	Shealy SOP S-SV-021 Page 7	Injection port maintenance, ion source maintenance, column replacement	Periodic	Laboratory	MSSV Analyst
ECD GC	Shealy SOP S-SV-012 Page 5	Injection port maintenance, column replacement	Periodic	Laboratory	GC Analyst
Dionex IC	Shealy SOP S-IN-010 Page 6	Replace auto sampler filter, tubing, line filter, sample Line and Waste Line, as needed. Check Reagent levels, flow rate, waste line.	Periodic	Laboratory	IC Analyst
ICP	Shealy SOP S-IM-005 Page 6 & 7	Clean Sample introduction system , auto sampler, torch, Change spray chamber, torch tubing, tubing	Periodic	Laboratory	ICP Analyst
Leeman Mercury Analyzer	Shealy SOP S-IM-006 Page 5	Clean GLS, Change Pump tubing, Nafion Dryer, Lamp	Periodic	Laboratory	Mercury Analyst
Flow Injection Analysis – Lachat 8000	Shealy SOP S-IN-042 Page 5	Replace sample and reagent lines, replace light source, re-wrap heating coil, replace column	Periodic/As Needed	Laboratory	Nitrate Analyst
YSI 63	09C 101302, 10K 101895, 07M 100905	Replace probe tip	Yearly	Order from YSI	C. Sanders
YSI 63	09C 101302, 10K 101895, 07M 100905	Replace batteries	As Needed	In stock at office	Field Staff
YSI 63	09C 101302, 10K 101895, 07M 100905	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
YSI 63	09C 101302, 10K 101895, 07M 100905	Check buffer solutions for expiration	Weekly	In stock at office	C. Sanders
YSI 550A	04L 2026AK, 08B 101407, 04A 0912AI	Replace membrane	4 to 8 weeks	In stock at office	Field Staff
YSI 550A	04L 2026AK, 08B 101407, 04A 0912AI	Replace batteries	As Needed	In stock at office	Field Staff
YSI 550A	04L 2026AK, 08B 101407, 04A 0912AI	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
Turbidity Tube	#1, #2, #3	General inspection for wear and tear on	Daily	Tubes will be cleaned/fixed in	Field Staff

		equipment, clarity of Secchi Disk		office	

Table 11A Instrument and Equipment Maintenance

2. Identify the testing criteria for each lab or field instrument that is used to ensure the equipment is performing properly. Indicate how deficiencies, if found, will be resolved, re-inspections performed, and effectiveness of corrective action determined and documented. Give the person responsible for this

Instrument/Equipment & Serial Number	Type of Inspection	Requirement	Individual Responsible	Resolution of Deficiencies
Volatiles Mass Spec Shealy SOP S-SV-021 Page 7	Daily calibration check	Method Requirements	MSV Analyst	Recalibration or instrument maintenance
Semi-volatiles Mass Spec Shealy SOP S-SV-021 Page 7	Daily calibration check	Method Requirements	MSSV Analyst	Recalibration or instrument maintenance
ECD GC Shealy SOP S-SV-012 Page 5	Daily calibration check	Method Requirements	GC Analyst	Recalibration or instrument maintenance
Dionex IC Shealy SOP S-IN-010 Page 6	Daily calibration check	Method Requirements	IC Analyst	Recalibration or instrument maintenance
ICP Shealy SOP S-IM-005 Page 6 & 7	Daily calibration check	Method Requirements	ICP Analyst	Recalibration or instrument maintenance
Leeman Mercury Analyzer Shealy SOP S-IM-006 Page 5	Daily calibration check	Method Requirements	Mercury Analyst	Recalibration or instrument maintenance
Flow Injection Analysis – Lachat 8000 Shealy SOP S-IN-042 Page 5	Daily and continuing calibration check	See calibration criteria	Nitrate Analyst	Recalibration or instrument maintenance
YSI 63 - 09C 101302, 10K 101895, 07M 100905	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
YSI 550A - 04L 2026AK, 08B 101407, 04A 0912AI	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer

Table 12A Instrument and Equipment Inspection

B7 Instrument Calibration and Frequency

1. Identify equipment, tools, and instruments for field or lab work that should be calibrated and the frequency.
2. Describe how the calibrations should be performed and documented, indicating test criteria and standards or certified equipment.
3. Identify how deficiencies should be resolved and documented. Identify the person responsible for corrective action.

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Volatiles Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by continuous calibration verification standard	Method Criteria	Detailed in SOP	MSV Analyst	S-VO-002
Semi-volatile Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	MSSV Analyst	S-SV-021
GC ECD	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	GC Analyst	S-SV-012
Dionex IC	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	IC Analyst	S-IN-010
ICP	Minimum of 3 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	ICP Analyst	S-IM-022
Cetac Mercury Analyzer	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	Mercury Analyst	S-IM-006
Lacaht QuickChem 8000	Minimum of 5 calibration standards	Daily or when indicated by calibration verification standard	Method Criteria	Detailed in SOP	Nitrate Analyst	S-IN-042
YSI 63	pH Calibration	Daily	+/- 0.2 pH units	clean/replace probe tip, recalibrate	Field Staff	4.3.6
YSI 63	Conductivity Calibration	As directed by manufacturer	+/- 10 uS	clean/replace probe tip, recalibrate	Field Staff	4.3.6
YSI 550A	DO calibration	Daily	+/- 0.25 mg/l	clean/replace probe tip,	Field Staff	4.3.6

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
				recalibrate		
YSI 550A	Temperature Calibration	Daily	+/- 1 °C	clean/replace probe tip, recalibrate	Field Staff	4.3.6
Electronic Water Level Indicator	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***
Oil/Water Interface probe	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***

Table 13A Instrument Calibration Criteria and Corrective Action

*** This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.**

B8 Inspection/Acceptance Requirements for Supplies and Consumables

1. Identify critical supplies and consumables for field and laboratory, noting supply source, acceptance criteria, and procedures for tracking, storing and retrieving these materials.
2. Identify the individual(s) responsible for this.

Item	Vendor	Acceptance criteria	Handling/Storage Conditions	Person responsible for inspection and tracking.
Laboratory Chemicals	Fisher,VWR	Certificates of analysis and laboratory testing	Laboratory storage	Receiving and laboratory personnel
Laboratory standards	O2Si, Restek, High Purity, VHG, Supelco	Certificates of analysis and laboratory verifications	Vendor specific storage conditions	Laboratory Analysts
Sample Containers	Daniels Scientific, QEC	Certificates of analysis and laboratory testing	Bottle storage area	Sample receiving personnel
Clear, Disposable polyethylene Bailers	Preferred Pump	Individual sleeves intact, ball valve operational	Stored in Vehicle Bay, Off of the ground	C. Sanders, Field Staff
Nylon Rope	Preferred Pump	Covered with plastic	Stored in Vehicle Bay, Off of the ground	C. Sanders, Field Staff
Nitrile Gloves	Preferred Pump	Unopened box, no holes	Stored in Vehicle Bay, Off of the ground	C. Sanders, Field Staff
40 mL HCL preserved amber vials	Shealy Environmental Services	Custody seal intact	Stored in Vehicle Bay, Off of the ground	C. Sanders, Field Staff
250 mL HNO3 preserved metals vials	Shealy Environmental Services	Custody seal intact	Stored in Vehicle Bay, Off of the ground	C. Sanders, Field Staff
Coolers	Shealy Environmental Services	Intact	Stored in Vehicle Bay, Off of the ground	C. Sanders, Field Staff
pH Buffer	TRS	Within expiration date	Stored in	C. Sanders, Field Staff

	Environmental, Enviroequipment		calibration room	
Conductivity Standard	TRS Environmental, Enviroequipment	Within expiration date	Stored in calibration room	C. Sanders, Field Staff
DO Membranes	YSI, Enviroequipment	Clean, in box	Stored in calibration room	C. Sanders, Field Staff
Batteries	Any Store	Not previously used	Stored in calibration room	C. Sanders, Field Staff

Table 14A List of Consumables and Acceptance Criteria

B9 Data Acquisition Requirements (Non-Direct Measurements)

1. Identify data sources, for example, computer databases or literature files, or models that should be accessed or used.
2. Describe the intended use of this information and the rationale for their selection, i.e., its relevance to project.
3. Indicate the acceptance criteria for these data sources and/or models.

Data Source	Used for	Justification for use in this project	Comments
Historical Data	Site Maps and Well Construction Information	Well Location and Detail	

Table 15A Non-Direct Measurements

4. Identify key resources/support facilities needed.

There are no non-direct measurements in this project

B10 Data Management

1. Describe the data management scheme from field to final use and storage.

Following sample collection and chain of custody production, samples are shipped to the lab. Field work from the field staff is reviewed by the MECI project manager, and converted into digital form. All data entry is subsequently checked to validate the data entry. The original copies of the field work are stored in MECI files for a minimum of 5 years. Digital copies of the work are stored on the MECI server, which is backed up weekly, and stored for a minimum of 5 years. The digital copy of the field work is presented to SCDHEC with the final report.

2. How does the lab and field staff ensure that no unauthorized changes are made to the chain of custody, sampling notebooks, laboratory notebooks and computer records?

The laboratory maintains comprehensive Quality Control and Training Programs. All sample receipt data, sample log-in, and analytical data is peer reviewed, including review for inappropriate changes. Data management, review procedures and the Quality Systems Program are documented in the laboratory's Quality Manual and Standard Operating Procedures. The Quality Assurance Department oversees adherence to and review of these programs.

All MECI field work is produced using ink-pens. Any attempt to alter field data, after sampling is complete, can be readily identified. MECI keeps a carbon copy of the chain of custody after it is shipped to the lab. This copy is kept with the field work. If any change to the CoC are suspected, this original carbon copy can be use to identify potential changes.

3. How does the lab ensure that there are no errors in samples records including times when sample information is compiled, data calculated and/or transmitted?

Sample data acquisition software is reviewed periodically. The LIMS database is backed up daily and is able to be restored in the event of a system failure. These procedures are documented in laboratory SOP S-AD-003, LIMS. The IT Manager is responsible for these systems and procedures."

4. How will the data be archived once the report is produced? How can it be retrieved? (This applies to both electronic and hard copies).

Laboratory Hardcopy data stored off site is logged, maintained and archived by the Quality Assurance Department. Laboratory Electronic Data Reports are maintained through IT back up under the responsibility of the IT Systems Manager.

MECI keeps all field work and paper copies of reports in its in-house filing system. All paper copies are stored for a minimum of 5 years. Any file can be retrieved easily by going to the correct filing cabinet/box.

All electronic copies of reports generated are kept on the MECI server. This server is backed-up on a weekly basis. Any file stored on the MECI server can be retrieved instantly, by accessing the server. All electronic files are stored for a minimum of 5 years on the server.

Section C Assessment and Oversight

C1 Assessment and Response Actions

1. *The Contractor is supposed to observe field personnel daily during sampling activities to ensure samples are collected and handled properly and report problems to DHEC within 24 hours. . Please state who is responsible for doing this and what observations will be made. Will this person have the authority to stop work if severe problems are seen?*

Field audits can be conducted on any field personnel at any time. MECI field audits can be conducted by the Field Manger, who will be responsible for ensuring that field personnel adhere to the QAPP. If during a random field audit, severe problems are found, work will be stopped by the field manager and the QA

officer contacted to determine corrective action. All problems must be corrected prior to any additional work being performed. Should it be requested, an On-site Field Audit can be scheduled with the SCDHEC project manager. If severe problems are identified by the SCDHEC project manager, the project manager can stop the work until the problems are corrected.

2. *The SCDHEC UST QAPP states that the Lab will receive an Offsite Technical System Audit. For this project, what assessments will be done on the Commercial Lab(s) that are being used—other than their certification audit? When or how often are these done? Who will the results be given to and who has the ability to stop work if problems are severe?*

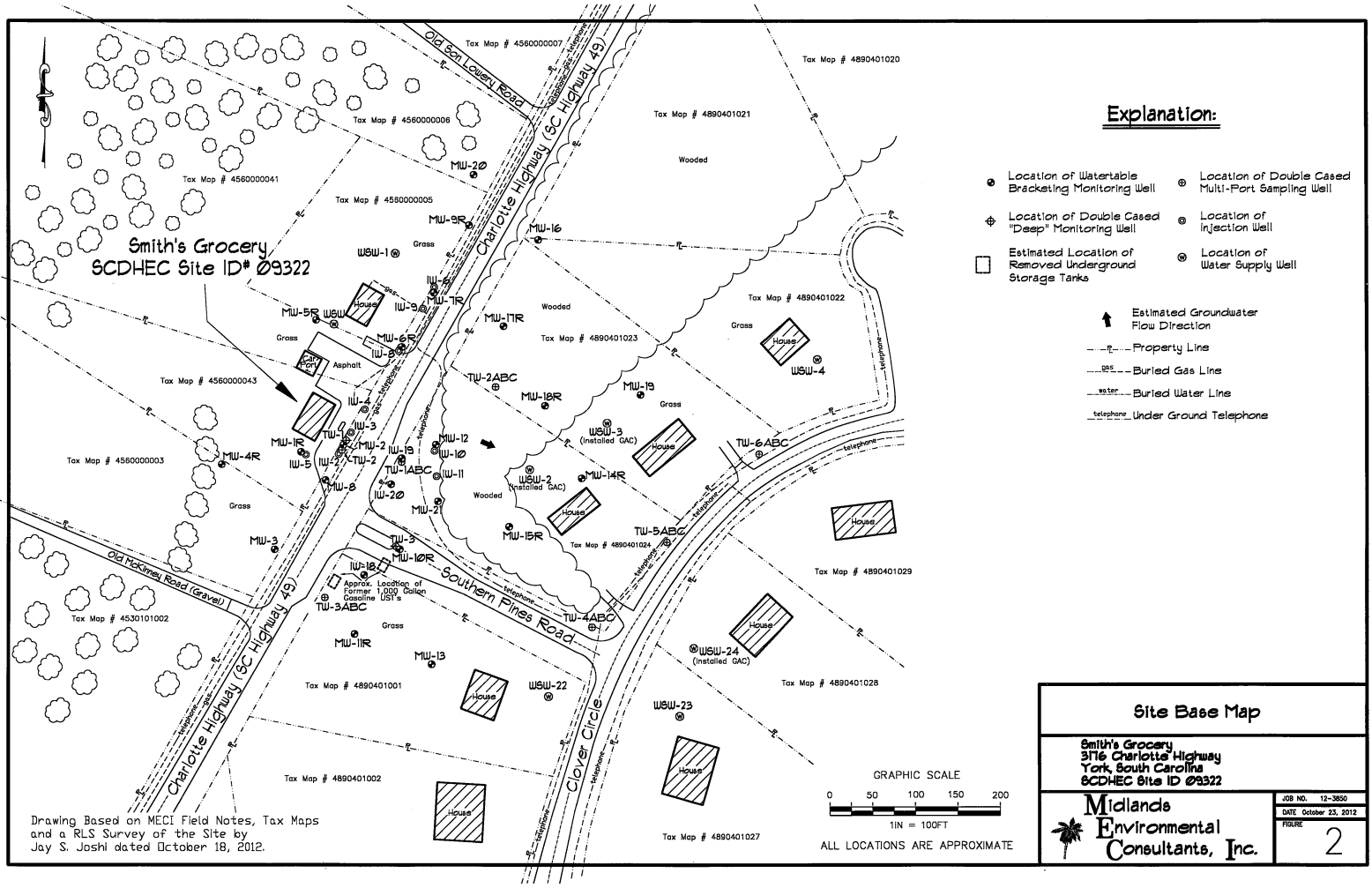
The laboratory participates in annual Proficiency Testing through an approved vendor, Wibby Environmental. If during a random audit, severe problems are found, work will be stopped by the according Wibby Environmental representative and the QA officer contacted to determine corrective action. Proficiency Testing results are provided to the Office of Environmental Laboratory Certification.

C2 Reports to Management

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

Section D Data Validation and Usability

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).



Explanation:

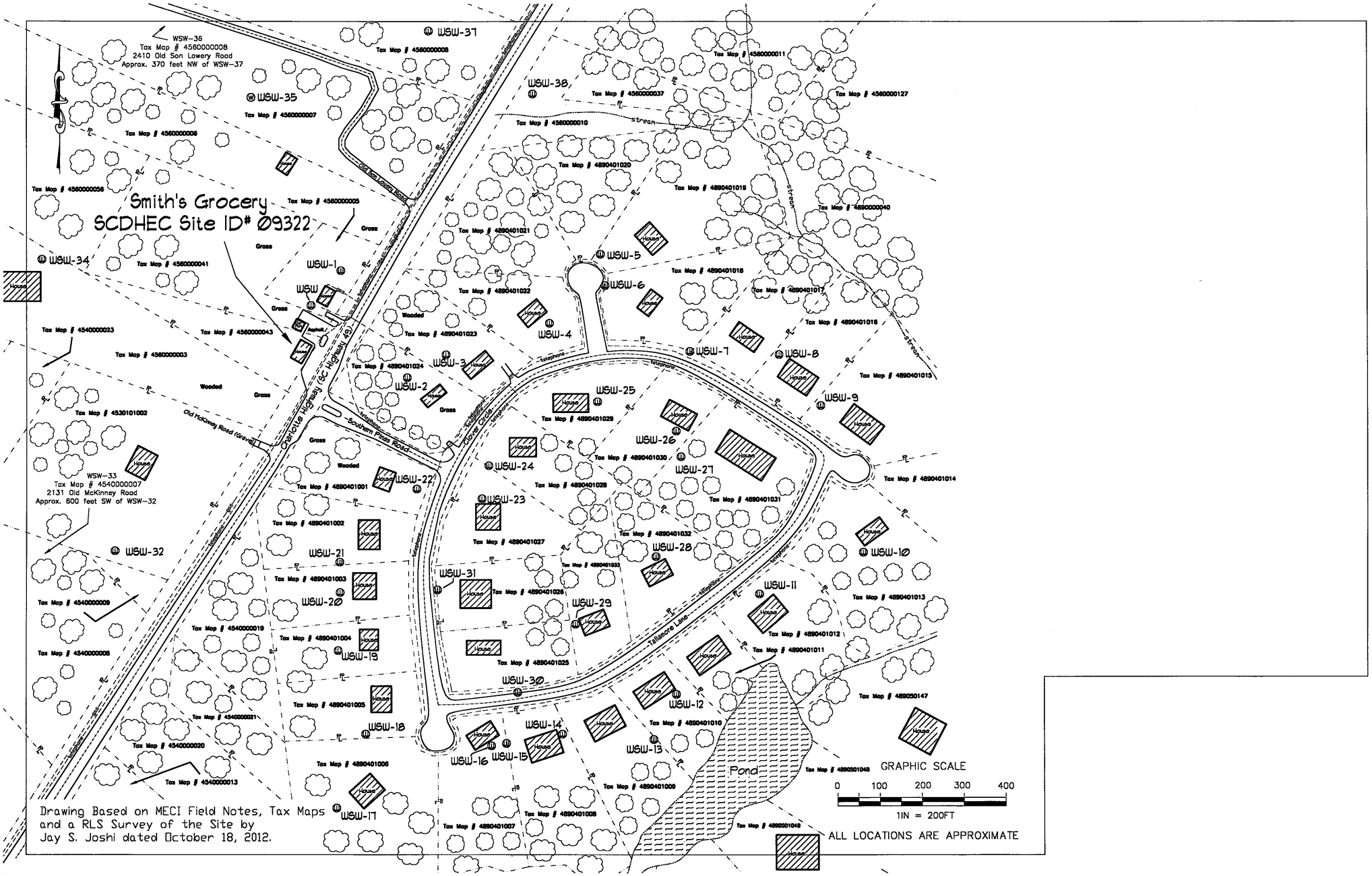
- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Multi-Port Sampling Well
- Location of Double Cased "Deep" Monitoring Well
- Location of Injection Well
- Estimated Location of Removed Underground Storage Tanks
- Location of Water Supply Well
- Estimated Groundwater Flow Direction
- Property Line
- Buried Gas Line
- Buried Water Line
- Under Ground Telephone

Site Base Map

Smith's Grocery
3716 Charlotte Highway
York, South Carolina
SCDHEC Site ID #09322

Midlands Environmental Consultants, Inc.

JOB NO. 12-3850
DATE October 23, 2012
FIGURE 2


Smith's Grocery
SCDHEC Site ID# 09322
WSW-36
Tax Map # 4560000008
2410 Old Son Lowery Road
Approx. 370 feet NW of WSW-37
WSW-33
Tax Map # 4540000007
2131 Old McKinney Road
Approx. 600 feet SW of WSW-32
Old Son Lowery Road
Clarion Highway (SC Highway 49)
Old McKinney Road (Gravel)
Southern Pines Road
Tallamore Lane
Pond
GRAPHIC SCALE
0 100 200 300 400
1IN = 200FT
ALL LOCATIONS ARE APPROXIMATE
Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated October 18, 2012.

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number

Client	Report to Contact	Sampler (Printed Name)	Quote No.
Address	Telephone No. / Fax No. / Email	Waybill No.	Page ___ of ___
City / State / Zip Code	Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		
Project Name			
Project Number	P.O Number		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis	Number of Containers	Bottle (See Instructions on back)	Preservative	Lot No.	Remarks / Cooler ID

Turn Around Time Required (Prior lab approval required for expedited TA)
☐ Standard ☐ Rush (Please Specify)

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

1. Relinquished by / Sampler	Date	Time	1. Received by	Date	Time
2. Relinquished by	Date	Time	2. Received by	Date	Time
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by	Date	Time	4. Laboratory Received by	Date	Time

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack
Receipt Temp. _____ °C
Temp. Blank ☐ Y / ☐ N

D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

MAY 13 2013

UST DOCKETING 72tech

BRYAN SHANE
MIDLANDS ENVIRONMENTAL CONSULTANTS
PO BOX 854
LEXINGTON SC 29071

Re: **Notice to Proceed-Groundwater Sampling/QAPP Contractor Addendum Approval**
Groundwater Sampling Contract
Solicitation # IFB-5400002759, PO#4600088529
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322; CA#45790
York County

Dear Mr. Shane:

In accordance with bid solicitation # IFB-5400002759 and the UST Management Division Quality Assurance Program Plan (QAPP), the Site-Specific Contractor Addendum has been reviewed and approved. In accordance with the QAPP, a status report of the project should be provided on a weekly basis via e-mail. If any quality assurance problems arise, you must contact me within 24 hours via phone or e-mail. In addition, a discussion of the problem(s) encountered, including quality assurance problems, the actions taken, and the results must be included in the final report submitted to the UST Management Division.

MECI will perform services at the site on behalf of the site's responsible party (RP); however, payment will be made from the SUPERB Account. The site's RP has no obligation for payment for this scope of work. Please coordinate access to the facility with the property owner. The Department grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. A copy of the disposal manifest and/or cceptance letter from the receiving facility that clearly designates the quantity received must be included with the final report. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs. **Please note, the final report is due within 3 weeks from the date the site is sampled. If the site is not sampled by the specified due date or the report is not received in the specified time period, a late fee may be imposed.**

The final report should contain the requirements of Section III.2.15 of the bid solicitation. The final report should be submitted to my attention. If you have any questions, please contact me at (803) 896-6397 or via e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

enc: Approved QAPP Contractor Addendum Signature Page
Approved Cost Agreement

cc: Kelly Maberry, Shealy Environmental, 106 Vantage Point Dr., West Columbia, SC, 29172 (w/ approved CA)
Technical Files (w/o enc)

Approved Cost Agreement 45789

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
11 ANALYSES					
	GW GROUNDWATER	A1 BTEXNM+OXYGS+1,2-DCA+ETH-8260B	106.0000	35.00	3,710.00
		F EDB	106.0000	20.00	2,120.00
			Total Amount		5,830.00

Approved Cost Agreement 45790

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB						
		B	PERSONNEL	6.0000	100.00	600.00
10 SAMPLE COLLECTION						
		A	GROUND WATER	18.0000	4.50	81.00
		C	WATER SUPPLY	40.0000	2.00	80.00
		D	GROUNDWATER NO-PURGE	40.0000	4.50	180.00
		H	FIELD BLANK	2.0000	2.00	4.00
17 DISPOSAL						
		A	WASTEWATER	500.0000	0.10	50.00
18 MISCELLANEOUS						
			QAPP PREP	1.0000	0.00	0.00
				Total Amount		995.00

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SC DHEC UST Programmatic QAPP
For
Smiths Grocery, SCDHEC Site ID# 09322

3176 Charlotte Highway, York, South Carolina

Prepared by:
Courtney M. Sanders
Project Biologist
Midlands Environmental Consultants, Inc.
(Certified Site Rehabilitation Contractor UCC-0009)
235-B Dooley Road
Lexington, SC 29073
(803)808-2043

Date: May 1, 2013

Approvals

Debra Thoma SC DHEC Project Manager	Signature	Date 5/8/13
Courtney M. Sanders Contractor QA Manager	Signature	Date 5-2-13
Jeff L. Coleman Site Rehabilitation Contractor	Signature	Date 5/2/10
Daniel J. Wright Laboratory Director	Signature	Date 05/01/2013

Emerald, Inc.

CONSULTING AND ENGINEERING
SERVICES IN ENVIRONMENTAL AFFAIRS

2520 TAHOE DRIVE • POST OFFICE BOX 3050 • SUMTER, SOUTH CAROLINA 29151

WEBSITE:
www.emeraldinc-us.com

TELEPHONE (803) 469-5454
FAX (803) 469-5465

May 21, 2013

Mrs. Debra Thoma
Corrective Action Section
Underground Storage Tank Management
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, SC 29201

QAPP Contractor Addendum
Smith's Grocery
3176 Charlotte Hwy.
York, South Carolina
SCDHEC Site ID #09322

Mrs. Thoma,

Please find the attached QAPP Contractor's Addendum, example chain of custody for pre and post granular activated carbon filter (GAC) sampling and site map. These GAC units are associated with the McCarter residence located at 3032 Clover Circle in York, SC and Jeter residence located at 3040 Clover Circle in York, SC. If you have any questions or concerns please feel free to contact Emerald, Inc. at 803-469-5454.

Sincerely,

William C. McClary, P.G.
Project Manager

Attachments
Appendix A - Quality Assurance Program Plan (Contractor's Addendum)
Appendix B - Example Chain of Custody
Appendix C - Site Map

Appendix A

Quality Assurance Program Plan

(Contractor's Addendum)

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SC DHEC UST Programmatic QAPP
For
Smith's Grocery
SCDHEC Site ID #09322

3176 Charlotte Hwy
York, South Carolina

Prepared by
William C. McClary, P.G.
Project Manager
Emerald, Inc.
2520 Tahoe Drive
Sumter, South Carolina
SCDHEC Site Rehabilitation Contractor Certification Number UCC-067
Phone: 803-469-5454

Date: May 20, 2013

Approvals

Debra Thoma SC DHEC Project Manager	_____ Signature	Date_____
Ronny Lowder Contractor QA Manager	 Signature	Date 05/21/2013
William C. McClary, P.G. Site Rehabilitation Contractor/ Project Manager	William C McClary/NKC Signature	Date 5/21/13
Daniel Wright Laboratory Director	 Signature	Date 05/21/13

A2 Table of Contents

A3 Distribution List 4
A4 Project Organization 4
A5 Problem Definition/Background 6
A6 Project/Task Description 6
A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs) 6
A8 Training and Certificates 7
A9 Documents and Records 8

Section B Measurement/Data Acquisition 8

B1 Sampling Process/Experimental Design 8
B2 Sampling Methods 9
B3 Sample Handling and Custody 10
B4 Analytical Methods 11
B5 Quality Control Requirements: 12
B6 Field Instrument and Equipment Testing, Inspection and Maintenance 12
B7 Instrument Calibration and Frequency 13
B8 Inspection/Acceptance Requirements for Supplies and Consumables 14
B9 Data Acquisition Requirements (Non-Direct Measurements) 15
B10 Data Management 16

Section C Assessment and Oversight 17

C1 Assessment and Response Actions 17
C2 Reports to Management 18

Section D Data Validation and Usability 18

A3 Distribution List

Name	Title	Organization/Address	Telephone Number	Fax Number	Email Address
Debra Thoma	SC DHEC Technical Project Manager	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6397	803-896-6245	thomadl@dhec.sc.gov
Ronny Lowder	Project QA Officer	Emerald, Inc. P.O. Box 3050 Sumter, SC 29151	803-469-5454	803-469-5465	rlowder@emeraldinc-us.com
William McClary, P.G.	Project Manager/ Site Rehabilitation Contractor	Emerald, Inc. P.O. Box 3050 Sumter, SC 29151	803-469-5454	803-469-5465	cmcclary@emeraldinc-us.com
Daniel Wright	Laboratory Director	Shealy Environmental Services, Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	dwright@shealylab.com

Table 1A Addendum Distribution List

A4 Project Organization

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
SCDHEC Technical Project Manager	Debra Thoma	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6397	803-896-6245	thomadl@dhec.sc.gov
Project QA Officer	Ronny Lowder	Emerald, Inc. P.O. Box 3050 Sumter, SC 29151	803-469-5454	803-469-5465	rlowder@emeraldinc-us.com
Project Manager/Site Rehabilitation Contractor	William McClary, P.G.	Emerald, Inc. P.O. Box 3050 Sumter, SC 29151	803-469-5454	803-469-5465	cmcclary@emeraldinc-us.com
Analytical Laboratory Director	Daniel Wright	Shealy Environmental Services, Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	dwright@shealylab.com

Table 2A Addendum Role Identification and Contact Information

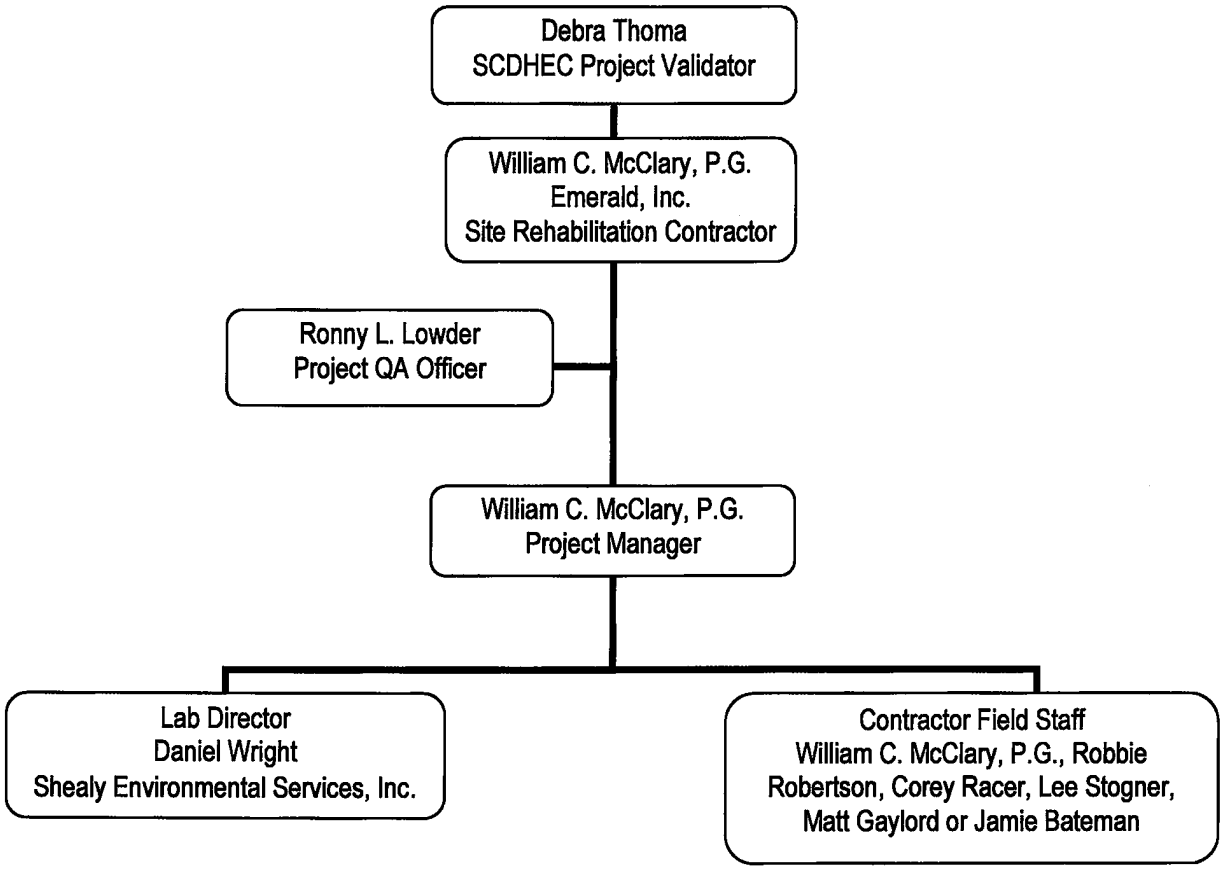


Figure 1A Organizational Chart

Definitions of Project Roles

Project QA Officer

The project QA officer (Mr. Ronny Lowder) provides review of field work, documentation of calibration for field instruments, laboratory data, and technical review of reports produced utilizing this data. The QA officer will independently review data generated from this project and determine if the data meets QA/QC criteria as set forth in the SC DHEC UST Programmatic QAPP.

Project Manager

The project manager (Mr. William C. McClary, P.G.) will be responsible for work conducted during this scope of work and the primary point of contact. His duties will include development of the site specific QAPP, supervising field work, documenting any QA failures, determining corrective actions to QA failures, and preparing reports for submission to SCDHEC. The Project Manager is responsible for overseeing adherence to the site specific QAPP during all phases of work.

Contractor Field Staff

The contractor field staff will perform sampling and field activities per the QAPP document under the direction of the Project Manager. Field staff will be responsible for drilling supervision, collection of sampling related data and calibration of field instruments. The Project Manager, in certain situations, may also be a member of the Field Staff.

A5 Problem Definition/Background

Discuss the background (as much as is known) of the site and appropriate historical information, and why this site is being assessed.

The subject site (Smith's Grocery) is located at 3176 Charlotte Hwy., in York, SC. The subject site formerly maintained one 8,000 gallon gasoline underground storage tank (UST) and one 6,000 gallon gasoline UST. These USTs were abandoned by removal in March 1996. A release of petroleum product was reported in June 30, 1993 and confirmed September 25, 1996. Two nearby water supply wells, WSW-23 (McCarter) and WSW-24 (Jeter) have been impacted by petroleum contamination. These water supply wells have each been attached to a granular activated carbon filter (GAC) to aid in removal of petroleum contaminants.

The above information was obtained from SCDHEC Files.

Please answer the following: Does this project fall under UST or Brownfields area?

UST Area

A6 Project/Task Description

1. ***Summarize what is known about the work to be done. This can be a short sentence indicating what the Scope of this project is (see Master QAPP Section A6).***
   In conjunction with GAC filter changes for water supply wells WSW-23 and WSW-24, Emerald, Inc. will collect pre and post samples from the GAC filter currently installed on the water supply well prior to the filter change. This work will be conducted under Solicitation #IFB-54200005822-5/3/13-EMW and PO# 4600254190.

2. ***The work will begin with 14 after cost approval and sampling should be complete in 60 Days .***

3. ***Are there are time or resource constraints? Include those factors that may interfere with the tentative schedule.***
   The proposed schedule may be affected by weather, and coordination of filter change and sampling with the property owners.

A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs)

The subject site (Smith's Grocery) is located at 3176 Charlotte Hwy., York, SC. There is currently one granular activated carbon filter (GAC) unit filtering water for the McCarter residence (3032 Clover Circle, York, SC) and the Jeter residence (3040 Clover Circle, York, SC). Prior to a carbon change of the GAC unit located at each residence, samples will be collected before filtering and after passing through the GAC filter (before entering residence). The duplicate sample will be collected from the pre-GAC sampling port.

A8 Training and Certificates

Required training and licenses:

Title/Job	Name	Training Required	Date training received	Type of License	License Number
Project Manager/Contractor	William C. McClary, P.G.			Certified Contractor	67
		Professional Geologist	2004	P.G.	2386
		OSHA 8hr Refresher	May 16, 2013		
Field Staff	Robbie Robertson	OSHA 8hr Refresher	August 14, 2012		
Field Staff	Corey Racer	OSHA 40hr	October 12, 2012		
Field Staff	Lee Stogner	OSHA 40hr	March 1, 2013		
Field Staff	Matt Gaylord	OSHA 40hr	March 29, 2013		
Field Staff	Jamie Bateman	OSHA 8hr Refresher	May 16, 2013		
Lab Manager	Daniel Wright	BS Biology	June 1986	Lab Certification	SC 32010

Table 3A Required Training and Licenses

William C. McClary of Emerald, Inc. is responsible to ensuring that personnel participating in this project receive the proper training. All training records will be stored in the following location: 2520 Tahoe Drive, Sumter, SC.

It is understood that training records will be produced if requested by SC DHEC.

The Following Laboratory(ies) will be used for this Project: Shealy Environmental Services, Inc.

Commercial Lab(s)

Full Name of the Laboratory Shealy Environmental Services, Inc.
Name of Lab Director Daniel Wright
SC DHEC Certification Number 32010
Parameters this Lab will analyze for this project:

BTEX, Naphthalene, MTBE, 1,2-DCA and Oxygenates by EPA Method 8260B
EDB by EPA Method 8011
(Low detection limits will be requested)

Please note: SC DHEC may require that the contractor submit some or all of the Laboratory's SOPs as part of this QAPP.

A9 Documents and Records

Personnel will receive the most current version of the QAPP Addendum via: (Check all that apply)

__X__US Mail ____Courier __X__Hand delivered

Record	Produced By	Hardcopy/ Electronic	Storage Location For how long?	Archival
Instrument Raw Data	Target Thermospec, or Iteva Software	Hardcopy and Electronic	Hardcopy: offsite storage for 7 years; Electronic: Two external storage device backups for 10 years	Yes
Final Report	LIMS	Electronic	Two external storage device backups for 10 years	Yes
Monitoring Report	Emerald, Inc.	Hardcopy/Electronic	At Office/minimum 5 years	Electronic Copy
Field Work	Emerald, Inc.	Hardcopy	At Office/minimum 5 years	5 years after project completion

Table 4A Record Identification, Storage, and Disposal

Section B Measurement/Data Acquisition

B1 Sampling Process/Experimental Design

Item	Start Date	End Date	Comments
QAPP Preparation	5/15/13	5/20/13	
QAPP Approval	5/20/13	5/24/13	Approximately one week turnaround
Sample Collection	6/3/13	6/3/13	
Samples Delivered to Laboratory	6/3/13	6/4/13	Delivered by Emerald, Inc. personnel or Shealy courier pickup from Emerald office
Samples are Analyzed by Laboratory	6/4/13	6/11/13	Analyzed under DHEC PO# 4600254190
Report submitted to SCDHEC project manager	6/11/13		

Table 5A Sampling Activities

B2 Sampling Methods

Please note: The contractor must follow sampling protocols as given in the UST QAPP.

***Estimate* the number of samples of each matrix that are expected to be collected:**

Water Supply Well Samples	4
Duplicate Samples	2
Field Blanks	1
Trip Blanks	1 (1 per cooler)
Total number of Water samples	8

The samples will be (check as many as apply): X Homogenized ____Split

If any of the above are circled please indicate how will it be done and the equipment needed.

For the sampling matrices indicated above, please describe how samples will be collected and the equipment needed.
The water supply well samples will be collected from the pre and post GAC sampling ports prior to the GAC filter change. The samples will be collected after opening the spigot for approximately 10 minutes or until the well pump turns on. Samples will be collected by allowing the well water to pour directly into laboratory supplied sampling containers. The duplicate sample will be collected from the pre GAC sampling port.

Will Sampling Equipment have to be cleaned and decontaminated or is everything disposable?

Nitrile gloves used during sample collection will be disposed of properly following collection of each sample.

If sampling equipment must be cleaned please give a detailed description of how this is done and the disposal of by-products from the cleaning and decontamination.

Not applicable.

Identify any equipment and support facilities needed. This may include such things as Fed-ex to ship the samples, a Geoprobe, field analysis done by another contractor (who must be certified), and electricity to run sampling equipment.
Samples will be placed in laboratory supplied coolers filled with wet ice obtained from the Emerald, Inc. office. Samples will be transported to Shealy Environmental Services, Inc. in West Columbia, SC by a Shealy Environmental, Inc. courier or Emerald, Inc. personnel.

Address the actions to be taken when problems occur in the field, and the person responsible for taking corrective action and how the corrective action will be documented.

Failure	Response	Documentation	Individual Responsible
Water Supply Well not functional	Contact William McClary and attempt to contact well owner. If well owner not available contact SCDHEC project manager.	Document possible problem in field notes and report	William C. McClary

Table 6A Field Corrective Action

B3 Sample Handling and Custody

1. ***How will the samples get from the Site to the Lab to ensure holding requirements are met?***
After sample collection, samples will be placed in an ice filled cooler for transport to the laboratory. If possible, Emerald, Inc. personnel will deliver the samples to the laboratory on the day of sample collection. If delivery is not possible, a courier pickup will be scheduled for the following day.

2. ***How will the contactors cool the samples and keep the samples cool?***
Wet ice, obtained from the Emerald, Inc. office will be used to maintain the proper sample temperatures. Ice levels will be monitored throughout the day to ensure proper sample temperatures are maintained.

3. ***How will the lab determine the temperature of the samples upon receipt? Will they be using a temperature blank?***
A calibrated thermometer and temperature blank will be used to document sample temperature. The temperature blank is immediately checked by the sample receiving technician upon arrival at the laboratory.

4. ***Where will the samples be stored in the Lab once they are received?***
All samples are stored in clean refrigeration units monitored and maintained at 4 degrees C + or – 2 degrees. Volatile organic samples are stored separately from all other samples.

5. ***Describe the chain of custody procedure and attach a copy of each chain of custody that will be used. If a Chain of Custody SOP exists from the Lab and the Contractor is willing to adhere to it, then this may be attached.***
A chain of custody (COC) will be filled out for each sampling event. COC will be reviewed by the Emerald, Inc. project manager and signed by Emerald, Inc. field staff. Shealy Environmental lab staff will sign the COC at time physical transfer of samples occurs to courier. Following COC signature by the Shealy representative, Emerald, Inc. will retain one copy of the COC for our records. Shealy uses the following COC procedures to protect sample integrity following pickup by their courier: A full time Sample Receiving Technician receives all samples and completes a Sample Receipt Checklist (SRC), which will identify any anomalies, if any exist the Sample Receiving Technician or Project Manager must resolve the deviation internally and/or notify the client to resolve the anomaly.

B4 Analytical Methods

1. ***Identify the SOPs which will be used to analyze the samples, the method which the SOP references and the equipment or instrumentation that is needed:***

Parameter	SOP ID*	Method Referenced	Equipment	Comments
BTEX+Naph+MTBE +Oxygenates	S-VO-002	8260B	GC/MS	
PAH's	S-SV-021	8270D	GC/MS	
EDB	S-SV-012	8011	GC	
Lead,T.	S-IM-022	6010C	ICP	

Table 7A Analytical SOPs and Referenced Methods

- **This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.**

Abbreviation	Lab Identification of this SOP	Full Name of the SOP
S-VO-002	S-VO-002	GC/MS VOLATILES ANALYSIS BASED ON EPA METHODS 8260B AND 624 PREPARED BY EPA METHODS 5030B, 5035 AND 3585
S-SV-021	S-SV-021	GC/MS ANALYSIS BASED ON EPA METHOD 8270D PREPARED BY EPA METHODS 3520C, 3550C AND 3580A
S-SV-012	S-SV-012	GC/ECD ANALYSIS OF EDB AND DBCP BASED ON METHOD 8011 & 504.1
S-IM-022	S-IM-022	INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPECTROSCOPY-PECTROMETRIC METHOD for TRACE ELEMENT ANALYSES METHOD 6010C

Table 8A SOP Abbreviation Key

2. Identify procedures to follow when failures occur, identify the individual responsible for corrective action and appropriate documentation:

All laboratory corrective actions are outlined in Shealy Environmental Services QAMP (Quality Assurance Management Plan), revision 9 dated 3/18/11.

Failure	Response	Documented Where?	Individual Responsible
COC or Sample Receiving issues	Call Client	Sample Receiving Checklist (SRC)	PM – Kelly Maberry kmaberry@shealylab.com
Analytical errors	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Daniel Wright dwright@shealylab.com
QA/QC Failure	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Daniel Wright dwright@shealylab.com QA/QC Officer – Jami Savje Jsavje@shealylab.com
On time delivery	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Daniel Wright dwright@shealylab.com QA/QC Officer – Jami Savje Jsavje@shealylab.com
Sample accident in Transit	Contact Emerald, Inc. and SCDHEC Project Manager	Field notes and report	William C. McClary cmcclary@emeraldinc-us.com

Table 9A Corrective Action Procedures

3. Identify sample disposal procedures.

Analysis	Matrix	Schedule for disposal	Method for disposal
BTEX+Naph+MTBE +Oxygenates	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.
PAH's	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.
EDB	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.
Lead	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.

Table 10A Sample Disposal

4. Provide SOPs for the Kerr Method or the Ferrous Iron Method if these are parameters for this study. This can be attached or written here. If attached please note that it is an attachment and where it is located (if applicable).

B5 Quality Control Requirements:

All QC will follow the requirements laid out in Section B5 of the UST Programmatic QAPP.

B6 Field Instrument and Equipment Testing, Inspection and Maintenance

1. Identify field and laboratory equipment needing periodic maintenance, the schedule for this, and the person responsible. Not the availability and location of spare parts.

Instrument	Serial Number	Type of Maintenance	Frequency	Parts needed/Location	Person responsible
Volatiles Mass Spec	ALL	Change traps, clean ion source, replace filaments	Periodic	Laboratory	MSV Analyst
Semivolatile Mass Specc	ALL	Injection port maintenance, ion source maintenance, column replacement	Periodic	Laboratory	MSSV Analyst
ECD GC	ALL	Injection port maintenance, column replacement	Periodic	Laboratory	GC Analyst
Dionex IC	ALL	Replace auto sampler filter, tubing, line filter, sample Line and Waste Line, as needed. Check Reagent levels, flow rate, waste line.	Periodic	Laboratory	IC Analyst
ICP	ALL	Clean Sample introduction system , auto sampler, torch, Change spray chamber, torch tubing, tubing	Periodic	Laboratory	ICP Analyst

Table 11A Instrument and Equipment Maintenance

2. Identify the testing criteria for each lab or field instrument that is used to ensure the equipment is performing properly. Indicate how deficiencies, if found, will be resolved, re-inspections performed, and effectiveness of corrective action determined and documented. Give the person responsible for this.

Instrument/Equipment & Serial Number	Type of Inspection	Requirement	Individual Responsible	Resolution of Deficiencies
Volatiles Mass Spec	Daily calibration check	Method Requirements	MSV Analyst	Recalibration or instrument maintenance
Semi-volatiles Mass Spec	Daily calibration check	Method Requirements	MSSV Analyst	Recalibration or instrument maintenance
ECD GC	Daily calibration check	Method Requirements	GC Analyst	Recalibration or instrument maintenance
ICP	Daily calibration check	Method Requirements	ICP Analyst	Recalibration or instrument maintenance
Flow Injection Analysis – Lachat 8000	Daily and continuing calibration check	See calibration criteria	INM Analyst	Recalibration or instrument maintenance

Table 12A Instrument and Equipment Inspection

B7 Instrument Calibration and Frequency

1. Identify equipment, tools, and instruments for field or lab work that should be calibrated and the frequency.
2. Describe how the calibrations should be performed and documented, indicating test criteria and standards or certified equipment.
3. Identify how deficiencies should be resolved and documented. Identify the person responsible for corrective action.

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Volatiles Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by continuous calibration verification standard	Method Criteria	Detailed in SOP	MSV Analyst	S-VO-002
Semi-volatile Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	MSSV Analyst	S-SV-021
GC ECD	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	GC Analyst	S-SV-012
Dionex IC	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	IC Analyst	S-IN-010

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
ICP	Minimum of 3 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	ICP Analyst	S-IM-022

Table 13A Instrument Calibration Criteria and Corrective Action

*** This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.**

B8 Inspection/Acceptance Requirements for Supplies and Consumables

1. Identify critical supplies and consumables for field and laboratory, noting supply source, acceptance criteria, and procedures for tracking, storing and retrieving these materials.
2. Identify the individual(s) responsible for this.

Consumables are things like disposable bailers, nitrile gloves, sample containers, and so on.

Item	Vendor	Acceptance criteria	Handling/Storage Conditions	Person responsible for inspection and tracking
Laboratory Chemicals	Fisher,VWR	Certificates of analysis and laboratory testing	Laboratory storage	Receiving and laboratory personnel
Laboratory standards	O2Si, Restek, High Purity, VHG, Supelco	Certificates of analysis and laboratory verifications	Vendor specific storage conditions	Laboratory Analysts
Sample Containers	Daniels Scientific, QEC	Certificates of analysis and laboratory testing	Bottle storage area	Bottle Room Personnel/ B. Fedorick, Field Staff
Sample Containers	Shealy Environmental Services	Certificates of analysis and laboratory testing	Warehouse/dry and cool	William C. McClary
Nitrile Gloves	Preferred Pump	Unopened box, no holes	Laboratory Storage	Bottle Room Personnel/ B. Fedorick/Laboratory Analysts
40 mL HCL preserved amber vials	QEC	Custody seal intact	Bottle Storage Area	Bottle Room Personnel/ B. Fedorick
Coolers	Shealy Environmental Services	Intact	Warehouse/dry and cool	William C. McClary
Nitrile Gloves	Preferred Pump	Unopened box, no holes	Warehouse	William C. McClary

Table 14A List of Consumables and Acceptance Criteria

B9 Data Acquisition Requirements (Non-Direct Measurements)

This section discusses data that was not generated by this project. This includes historical data, information Tax Maps, computer data bases, weather data from the National Weather Service, Scientific Literature, and so on. This discussion must include information about why this data is usable for this project.

1. Identify data sources, for example, computer databases or literature files, or models that should be accessed or used.
2. Describe the intended use of this information and the rationale for their selection, i.e., its relevance to project.
3. Indicate the acceptance criteria for these data sources and/or models.

Data Source	Used for	Justification for use in this project	Comments
SCDHEC Directive	Determining scope of work	Determining scope of work	Information includes site and address where samples are to be collected

Table 15A Non-Direct Measurements

4. Identify key resources/support facilities needed. Not Applicable.

B10 Data Management

1. Describe the data management scheme from field to final use and storage.

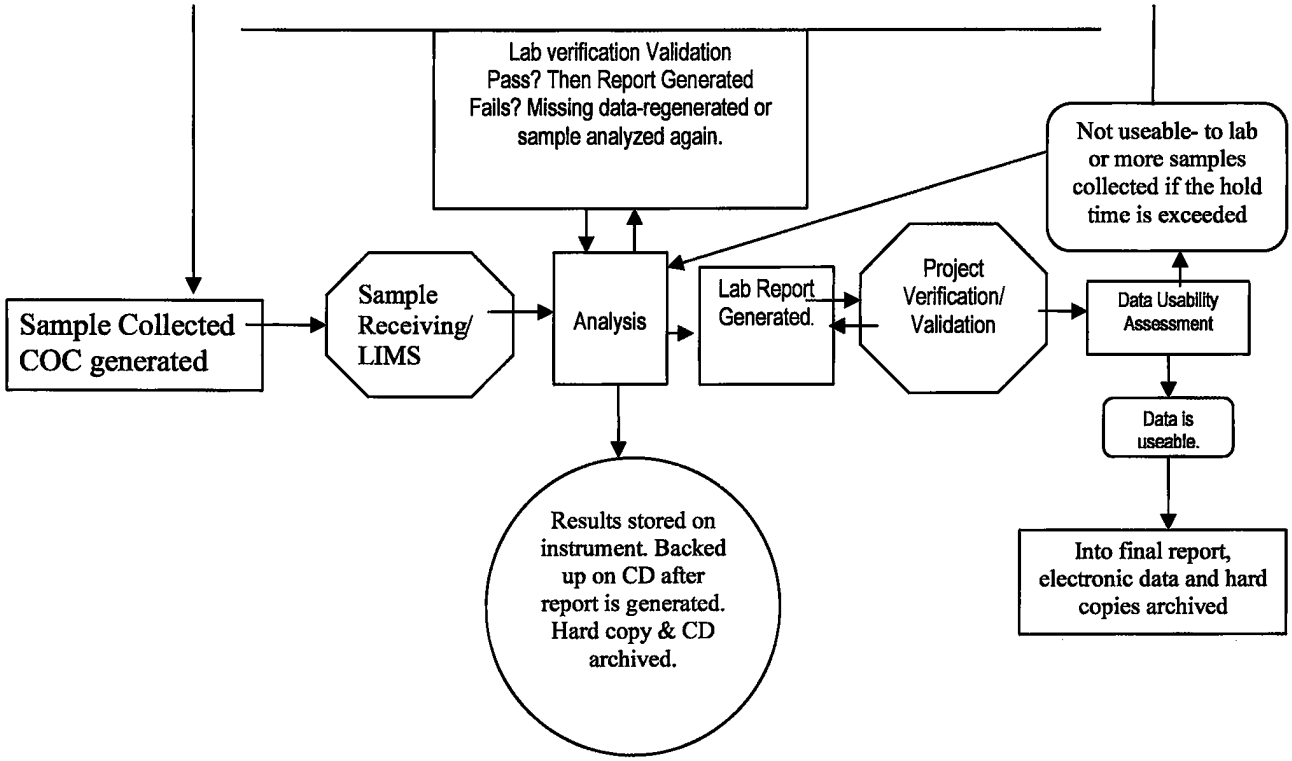


Figure 2 Example of a Data Management Scheme

2. How does the lab and field staff ensure that no unauthorized changes are made to the chain of custody, sampling notebooks, laboratory notebooks and computer records?

The laboratory maintains comprehensive Quality Control and Training Programs. All sample receipt data, sample log-in, and analytical data is peer reviewed, including review for inappropriate changes. Data management, review procedures, and Quality Systems Program are documented in the laboratory's Quality Manual and Standard Operating Procedures. The Quality Assurance Department oversees adherence to and review of these programs.

Emerald, Inc. field notes will be written in pencil on dedicated field sheets documenting field activities. Any changes to field notes will be changed with a single line strikeout and must be initialed and dated by the Emerald, Inc. personnel with any comments noted in the comments section of the field sheet. Field notes will be filed in the appropriate folder upon return from field activities and archived in filing cabinets. Data obtained from field activities (laboratory reports and final reports) will be saved on the company server which is backed up on a weekly basis to preserve data. The project QA/QC officer will be responsible for oversight

3. How does the lab ensure that there are no errors in samples records including times when sample information is compiled, data calculated and/or transmitted?

Sample data acquisition software is reviewed periodically. The LIMS database is backed up daily and is able to be restored in the event of a system failure. These procedures are documented in the laboratory SOP S-AD-003, LIMS. The IT Manager is responsible for these systems and procedures.

4. How will the data be archived once the report is produced? How can it be retrieved? (This applies to both electronic and hard copies).

Laboratory Hardcopy data stored offsite is logged, maintained, and archived by the Quality Assurance Department. Laboratory Electronic Data Reports are maintained through IT back up under the responsibility of the IT Systems Manager.

Emerald, Inc. will archive field notes and paper copies in an on-site filing cabinet. Paper copies will be stored for a minimum of five years. Electronic copies of reports will be stored on the Emerald, Inc. server for future retrieval. Electronic copies will be maintained for a minimum of five years.

Section C Assessment and Oversight

C1 Assessment and Response Actions

1. The Contractor is supposed to observe field personnel daily during sampling activities to ensure samples are collected and handled properly and report problems to DHEC within 24 hours. Please state who is responsible for doing this and what observations will be made. Will this person have the authority to stop work if severe problems are seen?

Field audits will be conducted on a regular basis by Ronny Lowder Project QA officer, to ensure field personnel adherence to the QAPP. If problems are identified during the field audit, Ronny Lowder has the authority to suspend field activities until the problems are addressed. Audit results will be reviewed by William McClary, Project Manager and Ronny Lowder, Project QA officer.

2. The SCDHEC UST QAPP states that the Lab will receive an Offsite Technical System Audit. For this project, what assessments will be done on the Commercial Lab(s) that are being used—other than their certification audit? When or how often are these done? Who will the results be given to and who has the ability to stop work if problems are severe?

The laboratory participates in annual Proficiency Testing through an approved vendor, Environmental Resources Associates. Proficiency Testing results are provided to the Office of Environmental Laboratory Certification. Laboratory reports will include full QA/QC data and the data will be reviewed for quality control issues. Quality issues will be brought to the attention of the Laboratory Director for explanation and resolution. The Emerald, Inc. Project QA officer and Project Manager will have authority to stop work and, upon approval from SCDHEC, chose an alternate laboratory.

C2 Reports to Management

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

Section D Data Validation and Usability

All data produced during these work activities will be validated by Ronny Lowder of Emerald, Inc. before submission to SCDHEC. See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

Appendix B

Example Chain of Custody

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 12846

Client	Report to Contact	Sampler (Printed Name)	Quote No.
Address	Telephone No. / Fax No. / Email	Waybill No.	Page ___ of ___
City / State / Zip Code	Preservative: 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		Number of Containers
Project Name			Bottle (See Instructions on back)
			Preservative
Project Number / P.O Number			Lot No.

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis												Remarks / Cooler ID

Turn Around Time Required (Prior lab approval required for expedited TAT)
☐ Standard ☐ Rush (Please Specify)

Sample Disposal
☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification
☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

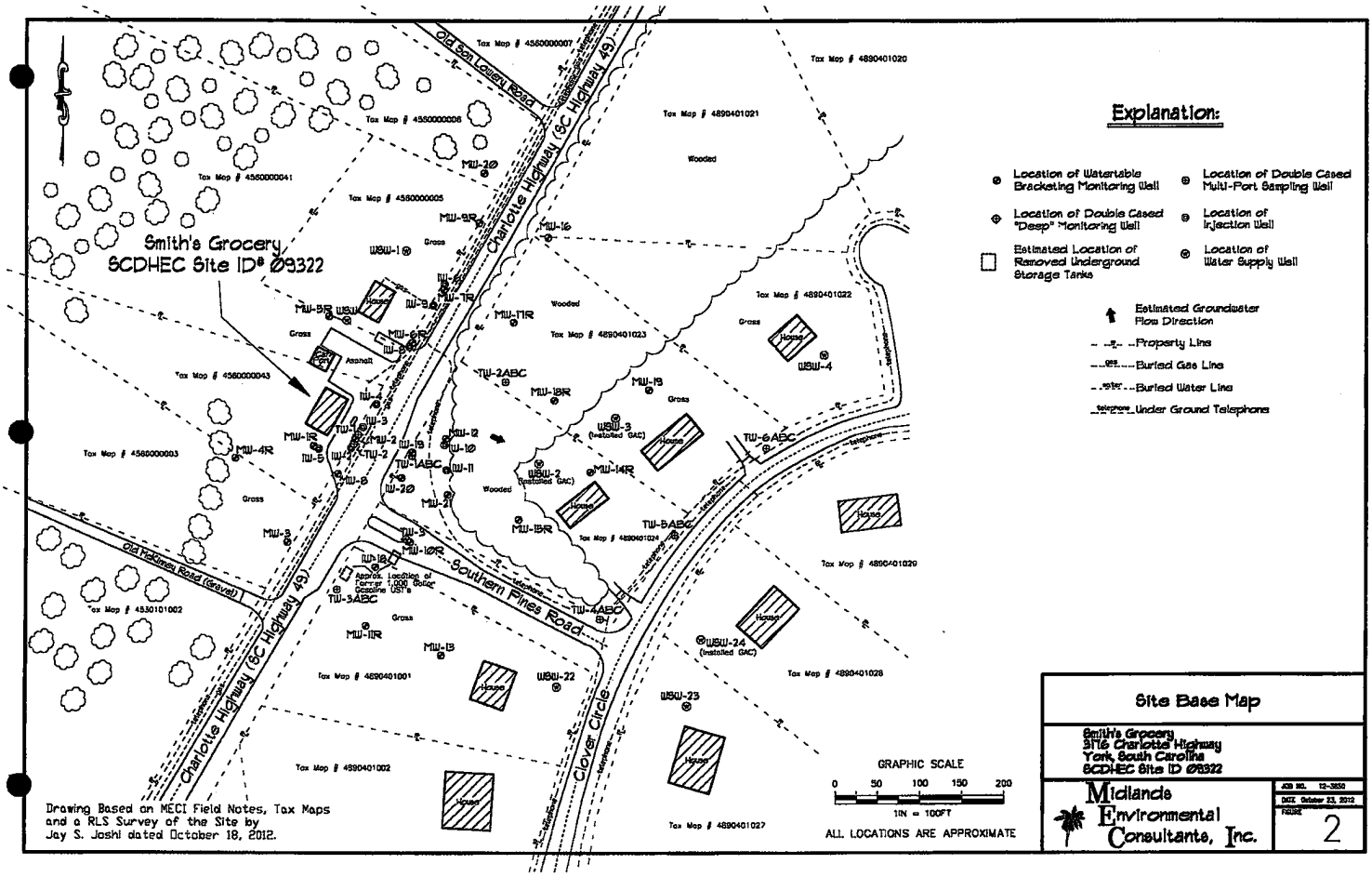
1. Relinquished by / Sampler	Date	Time	1. Received by	Date	Time
2. Relinquished by	Date	Time	2. Received by	Date	Time
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by	Date	Time	4. Laboratory Received by	Date	Time

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack
Receipt Temp. _____ °C
Temp. Blank ☐ Y / ☐ N

Appendix C

Figures


Smith's Grocery
SCDHEC Site ID# 09322
Old Son Lowery Road
Charlotte Highway (SC Highway 49)
Old Hickmans Road (Gravel)
Southern Pines Road
Clover Circle
Explanation:
Location of Waterable Bracketing Monitoring Well
Location of Double Cased Multi-Port Sampling Well
Location of Double Cased "Deep" Monitoring Well
Location of Injection Well
Estimated Location of Removed Underground Storage Tanks
Location of Water Supply Well
Estimated Groundwater Flow Direction
Property Line
Buried Gas Line
Buried Water Line
Under Ground Telephone
GRAPHIC SCALE
0 50 100 150 200
1IN = 100FT
ALL LOCATIONS ARE APPROXIMATE
Drawing Based on MECI Field Notes, Tax Maps and a RLS Survey of the Site by Jay S. Joshi dated October 18, 2012.
Site Base Map
Smith's Grocery
3116 Charlotte Highway
York, South Carolina
SCDHEC Site ID #09322
Midlands Environmental Consultants, Inc.
JOB NO. 12-3830
DATE October 23, 2012
FIGURE 2

D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

MAY 29 2013

RONNY LOWDER
EMERALD INC
PO BOX 3050
SUMTER SC 29151

UST 74bel DOCKETING

Re: Notice to Proceed-GAC Removal
Smiths Grocery, SC Hwy 49, York, SC
UST Permit #09322; CA#45414
IFB-38409-5/6/10-EMW; PO #4600254190
York County

Dear Mr. Lowder:

Under the terms and conditions of the referenced contract, GAC removal has been approved for the Hill and Wiggam Residences residence located at 3049 and 3043 Clover Circle. The contact people are Tony Hill (803) 684-5425 and Gary Wiggam (803) 628-5464 or Nicolette Wiggam (704) 281-7719. This facility has been assigned an individual Cost Agreement (CA) number as listed above. Please reference the **CA number and Purchase Order #4600254190** on the invoice submitted for payment. Emerald Inc. should complete the work in accordance with the contract specifications.

If you have any questions or need further assistance, please contact me at (803) 896-6397 or by email at thomadl@dhec.sc.gov.

Sincerely,

Debra L Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land & Waste Management

Enc: Approved Cost Agreement

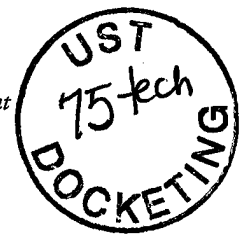
cc: Technical File (w/o enc.)
Tony Hill, 3049 Clover Cir., York, SC, 29745
Gary Wiggam, c/o Nicolette Wiggam, 3440 Toringdon Way Ste 110, Charlotte, NC, 28277
Maia Milenkova, UST Management Division

D H E C

PROMOTE PROTECT PROSPER

Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment



RONNY LOWDER
EMERALD INC
PO BOX 3050
SUMTER SC 29151

MAY 30 2013

Re: **Notice to Proceed- QAPP Contractor Addendum Approval**
Smiths Grocery, SC Hwy 49, York, SC
UST Permit #09322; CA#46064 (Shealy CA#46065)
IFB-5400005822-5/3/13-EMW; PO #4600254190
QAPP Contractor Addendum received May 23, 2013
Lee County

Dear Mr. Lowder:

Under the terms and conditions of the referenced contract, collection of pre- and post- GAC unit groundwater samples has been approved for the McCarter residence, 3032 Clover Cir and the Jeter residence, 3040 Clover Cir. The contact people are Michael McCarter (803) and Christopher Jeter (803) 628-5914. The pre and post GAC unit groundwater samples should be collected and submitted to Shealy Environmental Services, Inc. for analysis.

This facility has been assigned individual Cost Agreement (CA) numbers as listed above. Please reference the **cost agreement number and the purchase order number** on the invoice submitted for payment for the sampling. Emerald Inc. should complete the work in accordance with the contract specifications and established schedule. The work must be conducted as outlined in the UST Quality Assurance Program Plan (QAPP) and in compliance with all applicable regulation. A GAC Unit Installation and Maintenance record should be submitted within thirty (30) days from the date of Notice to Proceed.

If you have any questions, please contact me at (803) 896-6397 or via e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Corrective Action Section
UST Management Division

enc: Signed Site Specific QAPP Contractor Addendum
Approved Cost Agreement forms

cc: Technical File (w/ enc)
Michael McCarter, 3032 Clover Cir, York, SC, 29745
Christopher Jeter, 3040 Clover Cir, York, SC, 29745
Maia Milenkova, UST Management Division (with ACA forms)
Shealy Environmental Services, Inc., 106 Vantage Point Dr., West Columbia, SC 29172 (w/ CA)

Approved Cost Agreement 46065

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
11 ANALYSES					
	GW GROUNDWATER	A1 BTEXNM+OXYGS+1,2-DCA+ETH-8260B	8.0000	35.00	280.00
		F EDB	8.0000	20.00	160.00
			Total Amount		440.00

Approved Cost Agreement 46064

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
01 PLAN						
		C	TIER II/COMP. PLAN/QAPP APP B	1.0000	100.00	100.00
04 MOB/DEMOB						
		B	PERSONNEL	1.0000	90.00	90.00
10 SAMPLE COLLECTION						
		A	GROUND WATER	7.0000	10.00	70.00
24 GAC SYSTEM						
		C	FILTER REPLACEMENT/REMOVAL	2.0000	350.00	700.00
				Total Amount		960.00

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SC DHEC UST Programmatic QAPP
For
Smith's Grocery
SCDHEC Site ID #09322

3176 Charlotte Hwy
York, South Carolina

Prepared by
William C. McClary, P.G.
Project Manager
Emerald, Inc.
2520 Tahoe Drive
Sumter, South Carolina
SCDHEC Site Rehabilitation Contractor Certification Number UCC-067
Phone: 803-469-5454

Date: May 20, 2013

Approvals

Debra Thoma SC DHEC Project Manager	Debra J Thoma Signature	Date 5/28/13
Ronny Lowder Contractor QA Manager	 Signature	Date 05/21/2013
William C. McClary, P.G. Site Rehabilitation Contractor/ Project Manager	William C McClary/NKC Signature	Date 5/21/13
Daniel Wright Laboratory Director	Daniel J Wright Signature	Date 05/21/13

BOARD:
Elizabeth M. Hagood
Chairman
Edwin H. Cooper, III
Vice Chairman
Steven G. Kisner
Secretary

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Henry C. Scott
Paul C. Aughtry, III
Glenn A. McCall
Coleman F. Buckhouse, MD

May 3, 2007

(BOW-GWMGMT-CAW)
Ms. Lois Smith
Smith's Grocery
3176 Charlotte Hwy.
York, SC 29745

RECEIVED
Thomas
MAY 04 2007

UNDERGROUND STORAGE
TANK PROGRAM

Re: Underground Injection Control Permit #563M
Smith's Grocery Site 09322
York County

Dear Ms. Smith:

Enclosed is a Permit to Operate eighteen (18) Class VA-I (Aquifer Remediation) injection wells at the Smith's Grocery Site, York County, SC.

Notice of Appeal Procedure

This decision of the S.C. Department of Health and Environmental Control (Department) becomes the final agency decision 15 days after notice of the decision has been mailed to the applicant or respondent, unless a written request for final review is filed with the Department by the applicant, permittee, licensee, or affected person.

An applicant, permittee, licensee, or affected person who wishes to appeal this decision must file a written request for final review with the Clerk of the Board at the following address or by facsimile at 803-898-3323.

Clerk of the Board
SC DHEC
2600 Bull Street
Columbia, SC 29201

The request for final review should include the following:
- the grounds on which the Department's decision is challenged and the specific changes sought in the decision
- a statement of any significant issues or factors the Board should consider in deciding how to handle the matter
- a copy of the Department's decision or action under review

In order to be timely, a request for final review must be received by the Clerk of the Board within 15 days after notice of the decision has been mailed to the applicant or respondent. If the 15th day occurs on a weekend or State holiday, the request is due to be received by the Clerk of the Board on the next working day. The request for final review must be received by the Clerk of the Board by 5:00 p.m. on the date it is due.

If a timely request for final review is filed with the Clerk of the Board, the Clerk will provide additional information regarding procedures.

The Board of Health and Environmental Control has 60 days from the date of receipt of a request for final review to conduct a final review conference. The conference may be conducted by the Board, its designee, or a committee of three members of the Board appointed by the chair.

UST DOCKET 10

If a final review conference is not conducted within 60 days, the Department decision becomes the final agency decision, and a party may request a contested case hearing before the Administrative Law Court within 30 days after the deadline for the final review conference.

The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.

If you have any questions, please call Christopher Wargo at (803) 898-3799.

Sincerely,

Christopher Wargo, Hydrogeologist
Groundwater Management Section
Bureau of Water

cc: Debra Thoma, BLWM-USTP
Chris Boggs, SEI Environmental, Inc., 130 Penmarc Dr., Suite 108, Raleigh, NC 27603

BOARD:
Elizabeth M. Hagood
Chairman

Edwin H. Cooper, III
Vice Chairman

Steven G. Kisner
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Henry C. Scott

Paul C. Aughtry, III

Glenn A. McCall

Coleman F. Buckhouse, MD

WATER MONITORING ASSESSMENT & PROTECTION DIVISION

Injection Well Operating Approval

for

Class II, III, and V.A. Injection Well(s)

Permit #563M

Date of Issue: May 3, 2007

In accordance with the provisions of Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, and pursuant to receiving a Permit to Operate eighteen (18) Class VA-I (Aquifer Remediation) injection wells, authorization is granted to Lois Smith to operate eighteen (18) Class VA-I (Aquifer Remediation) injection wells located at the Smith's Grocery Site, York County, SC, and are subject to the attached provisos noted for the operator.

The Class VA-I injection wells are two (2) inches in diameter and approximately thirty to forty (30-40) feet deep

Pursuant to Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, this authorization may be rescinded if these injection wells should, at any time, contaminate, pollute, or otherwise adversely affect other water in the vicinity or for any other conditions contained in R61-87, Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended.

Expires: May 3, 2010

Date May 3, 2007

Rob Devlin, Manager
Groundwater Management Section
Bureau of Water

Provisions to the Injection Well Operating Approval
for
Underground Injection Well Permit #563M
Smith's Grocery
York County, S.C.
May 3, 2007

1) Construction of new or abandonment of existing wells must be reported to the Department within thirty (30) days of completion.

2) Only Potassium Triple Salt (PTS) as described in the corrective action plan may be injected into the subsurface at the eighteen (18) Class VA-I (Aquifer Remediation) injection wells. Any changes in the system operation other than as presented in the UIC Permit Application must be reported to the Department prior to implementation.

CORRECTIVE ACTION SYSTEM EVALUATION REPORT
December 2006 through March 2007

Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

PREPARED FOR:

Ms. Louis Smith
Smith's Grocery
3176 Charlotte Highway
York, South Carolina 29745

PREPARED BY:

SEI ENVIRONMENTAL, INC.
130 Penmarc Drive, Suite 108
Raleigh, North Carolina 27603-2434
UST Site Rehabilitation Contractor No. 354

April 18, 2007

SEI
Environmental, Inc.

130 Penmarc Drive, Suite 108
Raleigh, NC 27603
919.832.2535
Fax 919.832.5914

RECEIVED
APR 23 2007
UNDERGROUND STORAGE
TANK PROGRAM

April 18, 2007

Ms. Debra L. Thoma, Hydrogeologist
South Carolina Department of Health and Environmental Control
Assessment & Corrective Action Section, Underground Storage Tank Program
2600 Bull Street
Columbia, South Carolina 29201

RE: Corrective Action System Evaluation Report
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Dear Ms. Thoma:

Please find enclosed the quarterly Corrective Action System Evaluation (C.A.S.E) Report for the March 28, 2007 groundwater sampling event at the above referenced site. As indicated in Table 2 of this report breakthrough was indicated for the carbon system at the Swift well. The carbon for this system was replaced on April 17, 2007. If you have any questions or comments, please contact me at (919) 832-2535.

Sincerely,
SEI Environmental, Inc.

Chris L. Boggs, P.G.
Staff Scientist

cc: Ms. Louis Smith, Smith's Grocery

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: April 18, 2007
For Period Covering: December 4, 2006
Facility Name : Smith's Grocery
UST Permit Number: 09322
County: York
Latitude: N 35°02'30.59"

Monitoring Report Number: 12
to March 28, 2007
Street Address: 176 Charlotte Highway (49)
City: York, South Carolina
Zip Code: 29745
Longitude: W 81°08'47.98"

Submitted by UST Owner/Operator:

Name: Louis Smith
Company: Smith's Grocery
Address: 3176 Charlotte Highway
City: York State: SC
Zip Code: 29745
Telephone: (803) 684-6289
SEI Project Number: 300401

Prepared by Consultant/Contractor:

Name: Chris L. Boggs, P.G.
Company: SEI Environmental, Inc.
Address: 130 Penmarc Drive, Suite 108
City: Raleigh State: NC
Zip Code: 27603
Telephone: (919) 832-2535
UST Site Rehabilitation Contractor No. 354

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: Chris L. Boggs, P.G.
SC Reg. No. 2101
Signature:
Date:

TABLE OF CONTENTS

LIMITATIONS iii

1.0 INTRODUCTION 1

2.0 FIELD MEASUREMENTS AND SAMPLING 1

2.1 GROUNDWATER SAMPLING 1

2.2 WATER SUPPLY WELL SAMPLING 2

3.0 LABORATORY ANALYTICAL RESULTS 3

3.1 GROUNDWATER ANALYTICAL RESULTS 3

3.2 WATER SUPPLY WELL ANALYTICAL RESULTS 3

3.3 SITE SPECIFIC TARGET LEVELS 3

4.0 REMEDIATION SYSTEM EFFECTIVENESS 4

5.0 CONCLUSIONS AND RECOMMENDATIONS 4

LIST OF TABLES

TABLE 1	Historical Groundwater Elevation and Product Thickness Data
TABLE 2	Historical Groundwater Analytical Results

LIST OF FIGURES

FIGURE 1	USGS Quadrangle Map
FIGURE 2	Site Map
FIGURE 3	Potentiometric Surface Map, March 28, 2007
FIGURE 4	Groundwater Chemicals of Concern Site Map, March 28, 2007

LIST OF APPENDICES

APPENDIX A	Figures
APPENDIX B	Tables
APPENDIX C	Field Data Information Sheets for Groundwater Sampling
APPENDIX D	Laboratory Reports and Chain-of-Custody Forms

LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Geologist registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by AccuTest Laboratories.

1.0 INTRODUCTION

Smith's Grocery is a convenience and retail fuel store located at 3176 Charlotte Highway (SC Highway 49) in York, York County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- May 10, 2004 – Groundwater Sampling Event
- August 17, 2004 – Groundwater Sampling Event
- January 14, 2005 – Groundwater Sampling Event
- June 29, 2005 – Groundwater Sampling Event
- September 16, 2005 – Groundwater Sampling Event
- February 28, 2006 – Groundwater Sampling Event
- June 21, 2006 – Groundwater Sampling Event
- October 4, 2006 – Groundwater Sampling Event
- December 4, 2006 – Groundwater Sampling Event
- March 4, 2007 – Groundwater Sampling Event

On March 28, 2007 fifteen groundwater monitoring wells and four water supply wells were sampled in accordance with the requirements of the PFP contract. This report provides details of the groundwater sampling event.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On March 28, 2007, groundwater samples were collected from fifteen (MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-17, and TW-1 through TW-3) of twenty-three existing groundwater monitoring wells. Six (MW-3 through MW-5, MW-9, MW-16, and MW-20) have been removed from the sampling schedule.

Prior to sampling, groundwater monitoring wells were gauged utilizing an oil-water interface probe to measure depth to groundwater, and to detect any free product present. The depth to groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction. Figure 2 in Appendix A is a site map depicting monitoring well locations.

Free product was not currently and has not historically been detected in any of the monitoring wells. Figure 3 in Appendix A presents a groundwater potentiometric map for the current sampling event. Table 1 in Appendix B summarizes groundwater measurement data.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead. Appendix C contains Field Data Information Sheets for Groundwater Sampling.

2.2 Water Supply Well Sampling

On March 28, 2007, groundwater samples were collected from four (Crook, Smith, Swift and Hill) water supply wells. Three water supply wells (Crook, Hill, and Swift) are fitted with granular activated carbon (GAC) filters. As such, samples were collected from the Swift and Hill wells before (pre) and after (post) the GAC filters. The Crook well was not sampled in this manner during the current sampling event. Prior to sampling, the water was allowed to run for at least ten minutes. The samples were placed into laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

Chemicals of Concern (CoC) were detected in ten (MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, MW-17 and TW-2) of the seventeen monitoring wells sampled at concentrations exceeding their respective SSTL. Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.2 Water Supply Well Analytical Results

CoC were detected in two (Swift and Hill) of the pre-GAC filter samples collected at concentrations exceeding their respective SSTLs. The post-GAC filter sample for the Swift water supply well exceeded SSTLs for benzene. Figure 4 in Appendix A is a site map presenting water supply well locations and their CoC concentrations. Table 2 in Appendix B summarizes historical water supply well analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.3 Site Specific Target Levels

Site Specific Target Levels (SSTLs) have been designated for sixteen (MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-17 through MW-19, TW-2, and TW-3) monitoring wells and all four (Crook, Swift, Hill, and Smith) water supply wells. For three (Crook, Swift, and Hill) water supply wells with GAC filters, the SSTLs apply to the pre-GAC filter samples. Table 4 in Appendix B summarizes SSTL information.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target

concentrations for seven (benzene, toluene, ethylbenzene, xylenes, MTBE, naphthalene, lead, and EDB) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial January 6, 2003, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. Monitoring well MW-1 was not located during the current sampling event. Consequently, SSTL data for monitoring well MW-1 from the September 16, 2005, groundwater sampling event was utilized for the concentration reduction calculation. The formula is a follows:

$$\left[\frac{\text{[01/06/03 Sample Concentration Above SSTL]} - \text{[Current Sample Concentration Above SSTL]}}{\text{[01/06/03 Sample Concentration Above SSTL]}}\right] * 100 = \%\ \text{Reduction}$$

Using the current analytical results, the concentration reduction is %.

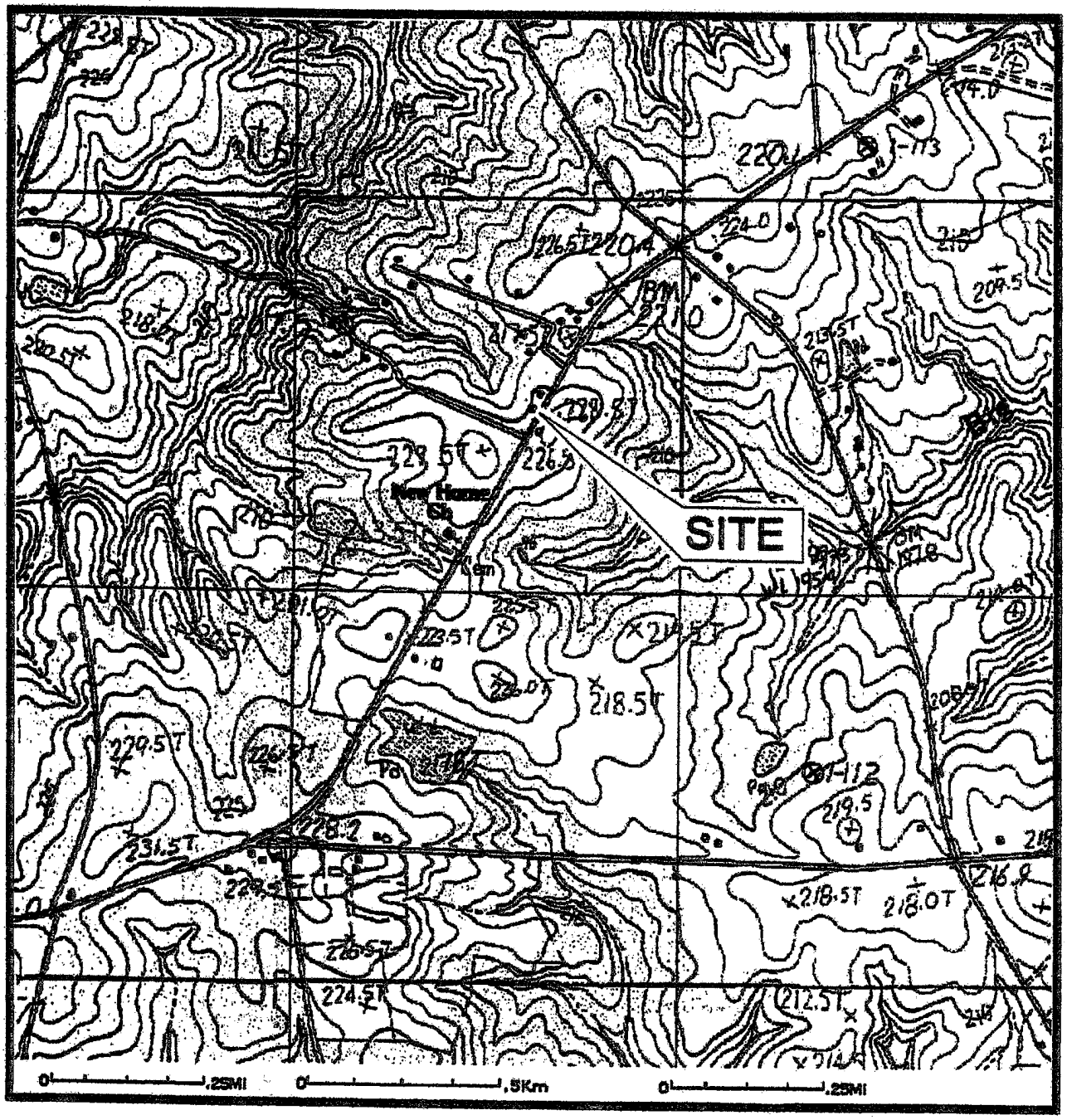
5.0 CONCLUSIONS

Free product was not detected. CoC were detected in eight monitoring wells and two water supply wells above their respective SSTLs. The percent concentration reduction has been calculated at 29.23%.

SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. The next sampling event will occur in June 2007. SEI is currently evaluating alternative methods of active corrective action to be implemented at the site in order to proceed with the remediation effort.

APPENDIX A
FIGURES

7.5 MINUTE SERIES(TOPOGRAPHIC)

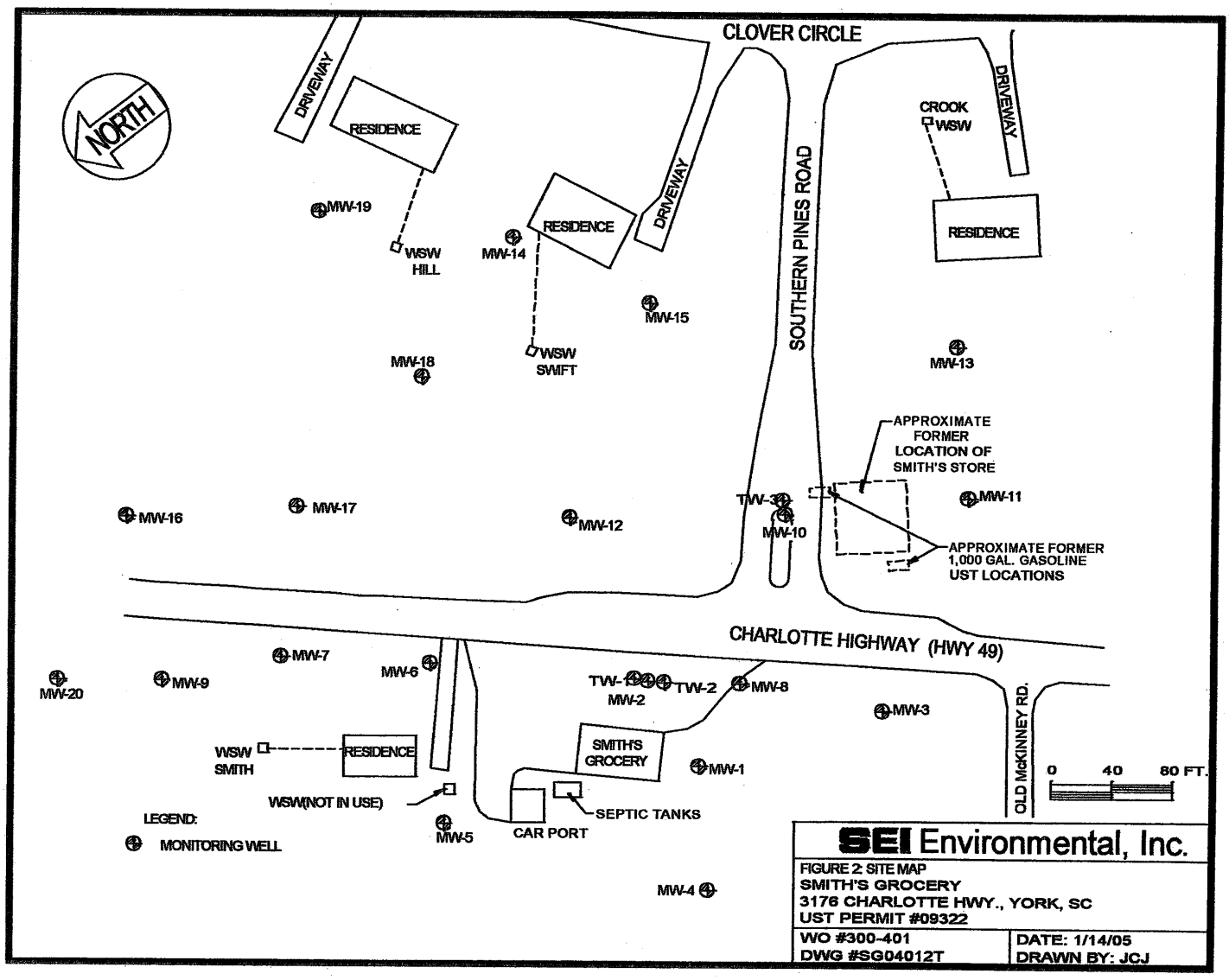


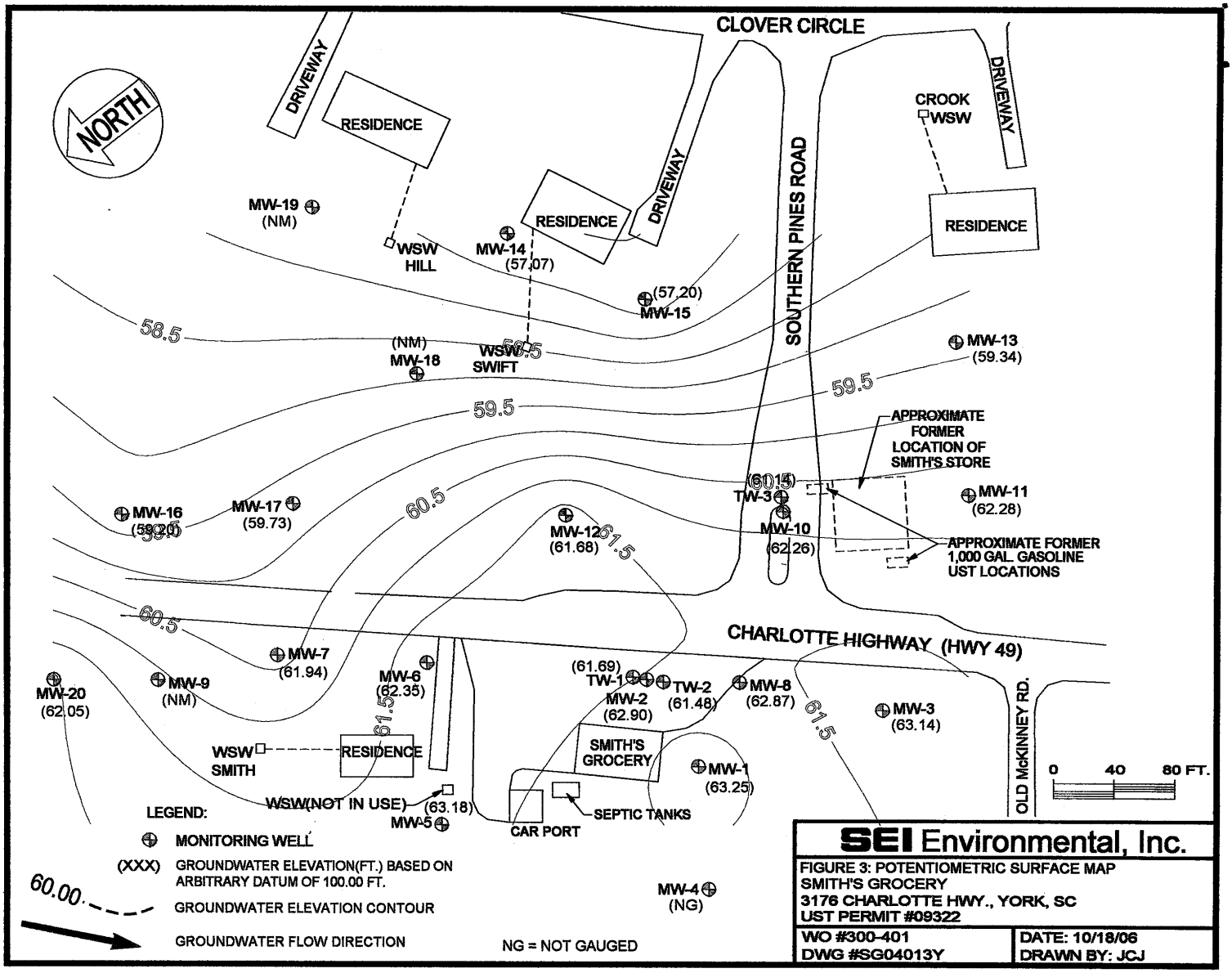
NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP(U.S.G.S. TOPO)
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

W.O. #: 300-401	DATE: 9/8/05
DWG #	DRAWN BY: JCJ

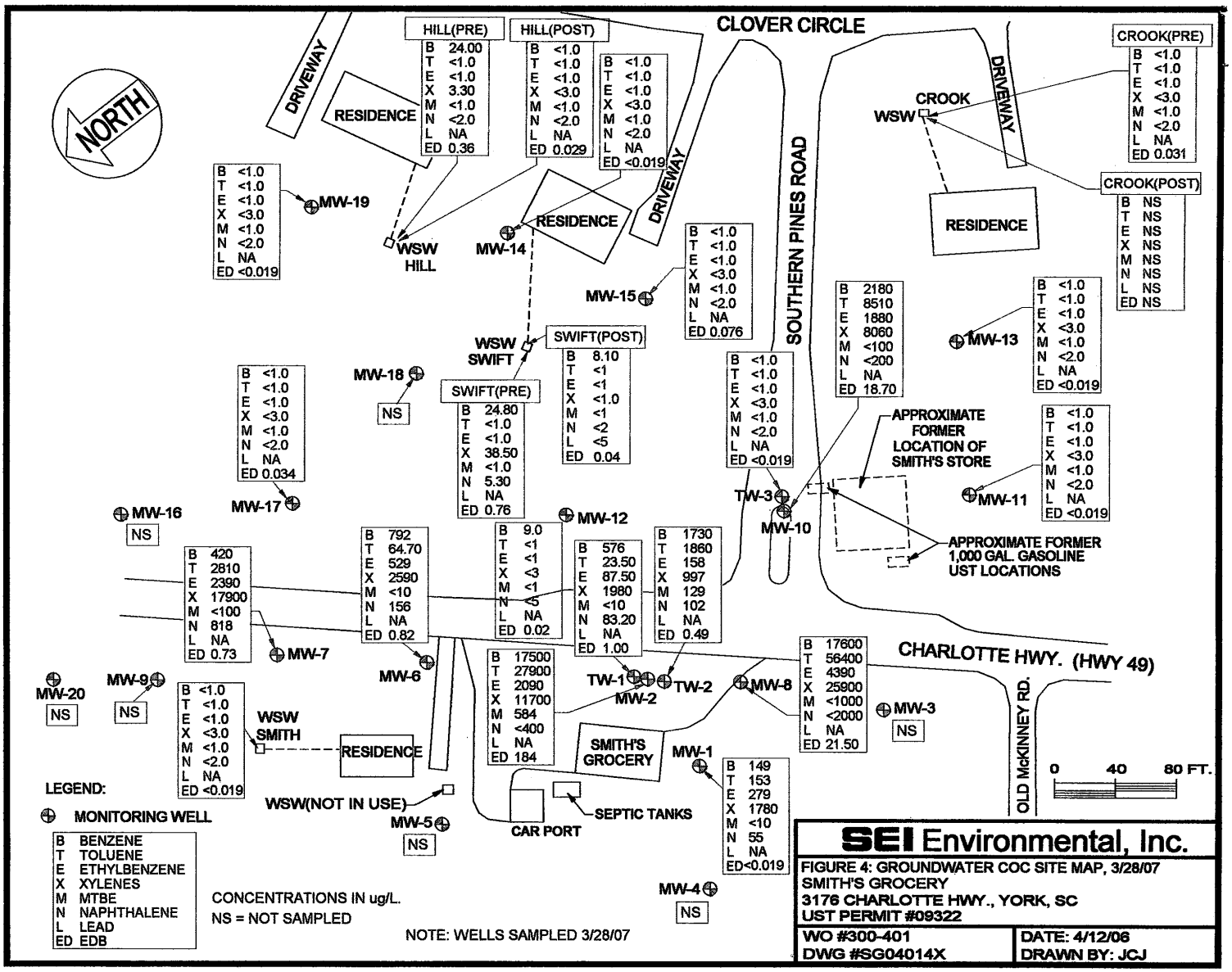

CLOVER CIRCLE
NORTH
DRIVEWAY
RESIDENCE
MW-19
WSW HILL
MW-14
RESIDENCE
DRIVEWAY
SOUTHERN PINES ROAD
CROOK WSW
DRIVEWAY
RESIDENCE
MW-15
MW-18
WSW SWIFT
MW-13
APPROXIMATE FORMER LOCATION OF SMITH'S STORE
MW-16
MW-17
MW-12
TW-3
MW-10
MW-11
APPROXIMATE FORMER 1,000 GAL. GASOLINE UST LOCATIONS
CHARLOTTE HIGHWAY (HWY 49)
MW-7
MW-6
MW-20
MW-9
TW-1
MW-2
TW-2
MW-8
MW-3
WSW SMITH
RESIDENCE
SMITH'S GROCERY
MW-1
OLD McKINNEY RD.
0 40 80 FT.
WSW(NOT IN USE)
SEPTIC TANKS
LEGEND:
MONITORING WELL
MW-5
CAR PORT
MW-4
SEI Environmental, Inc.
FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322
WO #300-401
DWG #SG04012T
DATE: 1/14/05
DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: POTENTIOMETRIC SURFACE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 10/18/06
DWG #SG04013Y	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP, 3/28/07
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 4/12/06
DWG #SG04014X	DRAWN BY: JCJ

APPENDIX B
TABLES

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-1	01/06/03	29.88			91.16	61.28
	04/02/03	28.05				63.11
	08/26/03	24.07				67.09
	01/08/04	25.46				65.70
	05/10/04	26.90				64.26
	08/17/04	27.03				64.13
	01/14/05	27.06				64.10
	06/29/05	25.67				65.49
	09/16/05	28.10				63.06
	02/28/06	Well Not Located				N/A
	06/21/06	29.16				62.00
	10/04/06	30.24				60.92
	12/04/06	30.51				60.65
	03/28/07	27.91				63.25
MW-2	01/06/03	33.76			94.57	60.81
	04/02/03	31.92				62.65
	08/26/03	27.81				66.76
	01/08/04	29.40				65.17
	05/10/04	26.68				67.89
	08/17/04	30.71				63.86
	01/14/05	30.78				63.79
	06/29/05	29.35				65.22
	09/16/05	30.61				63.96
	02/28/06	31.19				63.38
	06/21/06	31.67				62.90
	10/04/06	32.76				61.81
	12/04/06	33.08				61.49
	03/28/07	31.67				62.90
MW-3	01/06/03	30.87			91.91	61.04
	04/02/03	29.02				62.89
	08/26/03	25.98				65.93
	01/08/04	26.46				65.45
	05/10/04	28.83				63.08
	08/17/04	27.76				64.15
	01/14/05	27.86				64.05
	06/29/05	26.39				65.52
	09/16/05	27.67				64.24
	02/28/06	29.10				62.81
	06/21/06	28.79				63.12
	10/04/06	29.85				62.06
	12/04/06	30.19				61.72
	03/28/07	28.77				63.14

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-4	01/06/03	24.58			86.20	61.62
	04/02/03	22.73				63.47
	08/26/03	15.07				71.13
	01/08/04	20.73				65.47
	05/10/04	25.94				60.26
	08/17/04	Well Not Located				N/A
	01/14/05	21.83				64.37
	06/29/05	20.51				65.69
	09/16/05	Well Not Located				N/A
	02/28/06	Well Not Located				N/A
	06/21/06	Well Not Located				N/A
	10/04/06	Well Not Located				N/A
	12/04/06	Well Not Located				N/A
	03/28/07	Well Destroyed				N/A
MW-5	01/06/03	27.96			89.29	61.33
	04/02/03	25.00				64.29
	08/26/03	22.70				66.59
	01/08/04	24.49				64.80
	05/10/04	25.57				63.72
	08/17/04	25.75				63.54
	01/14/05	25.44				63.85
	06/29/05	24.30				64.99
	09/16/05	25.86				63.43
	02/28/06	27.63				61.66
	06/21/06	26.64				62.65
	10/04/06	27.75				61.54
	12/04/06	27.73				61.56
	03/28/07	26.11				63.18
MW-6	01/06/03	33.57			93.91	60.34
	04/02/03	31.66				62.25
	08/26/03	27.51				66.40
	01/08/04	29.58				64.33
	05/10/04	29.91				64.00
	08/17/04	29.50				64.41
	01/14/05	30.77				63.14
	06/29/05	29.74				64.17
	09/16/05	30.81				63.10
	02/28/06	31.07				62.84
	06/21/06	31.72				62.19
	10/04/06	32.86				61.05
	12/04/06	32.06				61.85
	03/28/07	31.56				62.35

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-7	01/06/03	31.57			91.68	60.11
	04/02/03	29.40				62.28
	08/26/03	26.88				64.80
	01/08/04	28.40				63.28
	05/10/04	27.78				63.90
	08/17/04	29.85				61.83
	01/14/05	29.28				62.40
	06/29/05	28.17				63.51
	09/16/05	29.66				62.02
	02/28/06	29.50				62.18
	06/21/06	30.48				61.20
	10/04/06	31.47				60.21
	12/04/06	31.34				60.34
	03/28/07	29.74				61.94
MW-8	01/06/03	33.84			94.72	60.88
	04/02/03	32.02				62.70
	08/26/03	27.58				67.14
	01/08/04	29.47				65.25
	05/10/04	29.90				64.82
	08/17/04	30.88				63.84
	01/14/05	30.85				63.87
	06/29/05	29.50				65.22
	09/16/05	30.76				63.96
	02/28/06	31.30				63.42
	06/21/06	31.84				62.88
	10/04/06	32.93				61.79
	12/04/06	33.24				61.48
	03/28/07	31.85				62.87
MW-9	01/06/03	30.41			90.54	60.13
	04/02/03	28.20				62.34
	08/26/03	26.10				64.44
	01/08/04	27.33				63.21
	05/10/04	28.69				61.85
	08/17/04	29.50				61.04
	01/14/05	28.14				62.40
	06/29/05	26.97				63.57
	09/16/05	26.38				64.16
	02/28/06	Well Not Located				N/A
	06/21/06	27.13				63.41
	10/04/06	Well Not Located				NA
	12/04/06	Well Not Located				NA
	03/28/07	Well Destroyed				NA

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-10	01/06/03	39.71			99.77	60.06
	04/02/03	37.77				62.00
	08/26/03	33.36				66.41
	01/08/04	35.04				64.73
	05/10/04	35.50				64.27
	08/17/04	36.49				63.28
	01/14/05	36.66				63.11
	06/29/05	35.04				64.73
	09/16/05	36.34				63.43
	02/28/06	37.02				62.75
	06/21/06	37.40				62.37
	10/04/06	38.56				61.21
	12/04/06	38.94				60.83
	03/28/07	37.51				62.26
MW-11	01/06/03	40.37			100.46	60.09
	04/02/03	38.36				62.10
	08/26/03	33.88				66.58
	01/08/04	35.70				64.76
	05/10/04	36.19				64.27
	08/17/04	37.17				63.29
	01/14/05	36.79				63.67
	06/29/05	35.68				64.78
	09/16/05	37.11				63.35
	02/28/06	37.75				62.71
	06/21/06	38.10				62.36
	10/04/06	39.35				61.11
	12/04/06	39.69				60.77
	03/28/07	38.18				62.28
MW-12	01/06/03	39.64			99.61	59.97
	04/02/03	37.78				61.83
	08/26/03	33.78				65.83
	01/08/04	35.44				64.17
	05/10/04	35.75				63.86
	08/17/04	36.72				62.89
	01/14/05	37.18				62.43
	06/29/05	35.34				64.27
	09/16/05	Well Not Located				N/A
	02/28/06	37.12				62.49
	06/21/06	37.68				61.93
	10/04/06	38.79				60.82
	12/04/06	Not Measured				
	03/28/07	37.93				61.68

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-13	01/06/03	42.87			100.39	57.52
	04/02/03	41.13				59.26
	08/26/03	37.20				63.19
	01/08/04	38.70				61.69
	05/10/04	39.27				61.12
	08/17/04	40.27				60.12
	01/14/05	40.12				60.27
	06/29/05	37.96				62.43
	09/16/05	40.11				60.28
	02/28/06	40.76				59.63
	10/04/06	40.91				59.48
	06/21/06	42.05				58.34
	12/04/06	Not Measured				
	12/04/06	41.05				59.34
MW-14	01/06/03	43.66			98.89	55.23
	04/02/03	42.10				56.79
	08/26/03	38.39				60.50
	01/08/04	39.40				59.49
	05/10/04	40.06				58.83
	08/17/04	41.12				57.77
	01/14/05	40.75				58.14
	06/29/05	39.77				59.12
	09/16/05	40.65				58.24
	02/28/06	41.42				57.47
	06/21/06	41.52				57.37
	10/04/06	42.74				56.15
	12/04/06	Not Measured				
	12/04/06	41.82				57.07
MW-15	01/06/03	44.97			100.18	55.21
	04/02/03	43.24				56.94
	08/26/03	39.58				60.60
	01/08/04	46.55				53.63
	05/10/04	41.19				58.99
	08/17/04	42.11				58.07
	01/14/05	43.06				57.12
	06/29/05	40.92				59.26
	09/16/05	41.80				58.38
	02/28/06	42.54				57.64
	06/21/06	42.64				57.54
	10/04/06	43.61				56.57
	12/04/06	Not Measured				
	12/04/06	42.98				57.20

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-16	01/06/03	31.07			89.91	58.84
	04/02/03	29.00				60.91
	08/26/03	27.54				62.37
	01/08/04	28.03				61.88
	05/10/04	27.83				62.08
	08/17/04	29.23				60.68
	01/14/05	28.92				60.99
	06/29/05	27.86				62.05
	09/16/05	29.23				60.68
	02/28/06	28.35				61.56
	06/21/06	29.89				60.02
	10/04/06	31.18				58.73
	12/04/06	Not Measured				
	12/04/06	30.71				59.20
MW-17	01/06/03	36.81			94.46	57.65
	04/02/03	34.63				59.83
	08/26/03	37.08				57.38
	01/08/04	32.56				61.90
	05/10/04	32.93				61.53
	08/17/04	34.87				59.59
	01/14/05	33.83				60.63
	06/29/05	32.60				61.86
	09/16/05	33.84				60.62
	02/28/06	34.21				60.25
	06/21/06	34.73				59.73
	10/04/06	35.78				58.68
	12/04/06	Not Measured				
	12/04/06	34.73				59.73
MW-18	01/06/03	42.83			98.14	55.31
	04/02/03	41.26				56.88
	08/26/03	37.47				60.67
	01/08/04	38.14				60.00
	05/10/04	39.09				59.05
	08/17/04	35.43				62.71
	01/14/05	40.04				58.10
	06/29/05	38.93				59.21
	09/16/05	39.77				58.37
	02/28/06	40.54				57.60
	06/21/06	40.69				57.45
	10/04/06	41.64				56.50
	12/04/06	Not Located				
	03/28/07	Not Located				

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-19	01/06/03	45.14			98.27	53.13
	04/02/03	43.31				54.96
	08/26/03	39.24				59.03
	01/08/04	40.83				57.44
	05/10/04	41.47				56.80
	08/17/04	42.01				56.26
	01/14/05	42.18				56.09
	06/29/05	41.17				57.10
	09/16/05	42.25				56.02
	02/28/06	42.76				55.51
	06/21/06	42.97				55.30
	10/04/06	44.12				54.15
	12/04/06	Not Measured				
	03/28/07	Dry				
MW-20	01/06/03	28.09			88.35	60.26
	04/02/03	25.79				62.56
	08/26/03	24.98				63.37
	01/08/04	25.10				63.25
	05/10/04	28.41				59.94
	08/17/04	Well Not Located				N/A
	01/14/05	25.85				62.50
	06/29/05	24.63				63.72
	09/16/05	Well Not Located				N/A
	02/28/06	25.88				62.47
	06/21/06	Well Not Located				N/A
	10/04/06	Well Not Located				N/A
	12/04/06	Well Not Located				N/A
	03/28/07	26.30				62.05
TW-1	01/06/03	34.33			94.72	60.39
	04/02/03	31.86				62.86
	08/26/03	27.96				66.76
	01/08/04	29.48				65.24
	05/10/04	30.31				64.41
	08/17/04	30.40				64.32
	01/14/05	30.75				63.97
	06/29/05	29.56				65.16
	09/16/05	30.76				63.96
	02/28/06	31.46				63.26
	06/21/06	31.64				63.08
	10/04/06	32.89				61.83
	12/04/06	33.03				61.69
	03/28/07	31.92				62.80

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
TW-2	01/06/03	33.91			94.72	60.81
	04/02/03	32.04				62.68
	08/26/03	27.54				67.18
	01/08/04	29.45				65.27
	05/10/04	29.89				64.83
	08/17/04	30.87				63.85
	01/14/05	30.94				63.78
	06/29/05	29.52				65.20
	09/16/05	30.67				64.05
	02/28/06	31.36				63.36
	06/21/06	31.86				62.86
	10/04/06	32.94				61.78
	12/04/06	33.24				61.48
	03/28/07	31.82				62.90
TW-3	01/06/03	38.81			99.21	60.40
	04/02/03	36.97				62.24
	08/26/03	32.80				66.41
	01/08/04	34.40				64.81
	05/10/04	34.79				64.42
	08/17/04	35.75				63.46
	01/14/05	38.75				60.46
	06/29/05	34.33				64.88
	09/16/05	30.59				68.62
	02/28/06	36.26				62.95
	06/21/06	36.68				62.53
	10/04/06	37.77				61.44
	12/04/06	38.07				61.14
	03/28/07	36.73				62.48

N/A = Not Applicable

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-1*	01/06/03	911.00	9,810.00	2,660.00	18,650.00	250.00	743.00	56.00	<0.010	33,080.00
	04/02/03	590.00	2,900.00	960.00	7,400.00	27.00	200.00	10.00	<0.010	12,087.00
	08/26/03	610.00	1,200.00	640.00	4,800.00	100.00	500.00	33.00	<0.010	7,883.00
	01/08/04	620.00	850.00	340.00	3,800.00	100.00	500.00	5.00	0.17	6,215.17
	05/10/04	330.00	1,100.00	459.00	3,700.00	25.00	130.00	40.00	<0.010	5,784.00
	08/17/04	380.00	970.00	670.00	3,600.00	<25	120.00	63.00	<0.010	5,803.00
	01/14/05	270.00	1,440.00	900.00	5,620.00	<1.0	268.00	<5.0	0.09	8,498.09
	06/29/05	273.00	1,200.00	601.00	3,640.00	<20	136.00	29.50	<0.019	5,879.50
	09/16/05	23,300.00	59,100.00	4,700.00	28,400.00	<500	<1,000	NA	27.20	115,527.20
	02/28/06	Well Not Located								0.00
	06/21/06	19,500.00	59,800.00	4,070.00	24,400.00	<1,000	<2,000	47.60	17.70	107,870.00
	10/04/06	22,400.00	64,600.00	4,100.00	22,000.00	<1,000	<2,000	41.40	27.60	113,000.00
	12/04/06	18,900.00	60,700.00	3,830.00	22,000.00	<1,000	<2,000	NA	29.50	105,430.00
	03/28/07	149.00	153.00	279.00	1,780.00	<10	55.00	NA	<0.019	2,416.00
	SSTL	11.00	2,223.00	1,658.00	10,000.00	90.00	56.00	2.00	0.32	
	> SSTL	138.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-2	01/06/03	18,400.00	31,100.00	3,180.00	18,920.00	395.00	614.00	28.00	0.02	72,537.02
	04/02/03	13,000.00	1,800.00	1,600.00	9,500.00	480.00	500.00	190.00	160.00	27,230.00
	08/26/03	16,000.00	26,000.00	2,200.00	13,000.00	480.00	540.00	190.00	120.00	58,530.00
	01/08/04	18,000.00	33,000.00	2,200.00	12,000.00	880.00	1,200.00	1,000.00	150.00	68,430.00
	05/10/04	17,000.00	24,000.00	2,000.00	11,000.00	760.00	2,600.00	1,200.00	260.00	58,710.00
	08/17/04	19,000.00	29,000.00	2,900.00	14,000.00	1,200.00	2,500.00	2,100.00	600.00	71,200.00
	01/14/05	20,600.00	36,400.00	2,960.00	17,200.00	940.00	862.00	1,230.00	186.00	80,378.00
	06/29/05	16,500.00	27,300.00	2,600.00	14,400.00	952.00	<500	792.00	161.00	64,695.00
	09/16/05	24,300.00	34,500.00	2,870.00	16,500.00	1,130.00	645.00	NA	0.083	78,945.083
	02/28/06	24,400.00	36,200.00	2,700.00	12,400.00	847.00	<500	NA	310.00	76,857.00
	06/21/06	19,500.00	26,300.00	2,420.00	12,600.00	859.00	<1,000	1,010.00	320.00	63,009.00
	10/04/06	18,100.00	25,600.00	2,010.00	9,820.00	1,020.00	<1,000	1,480.00	664.00	58,694.00
	12/04/06	8,530.00	12,300.00	895.00	4,980.00	584.00	<1,000	NA	318.00	27,607.00
	03/28/07	17,500.00	27,900.00	2,090.00	11,700.00	534.00	<400	NA	184.00	59,908.00
	SSTL	10.00	2,021.00	1,416.00	15,000.00	81.00	51.00	30.00	10.00	
	> SSTL	17,490.00	25,879.00	674.00	0.00	453.00	0.00	0.00	174.00	
MW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	350.00	<0.020	350.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	8.50	0.00	8.50
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
MW-4	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	12.00	<0.020	12.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-6	01/06/03	<1.0	<1.0	<1.0	5.40	<1.0	<1.0	12.00	<0.020	17.40
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	5.40	<0.010	5.40
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	0.00
MW-6	01/06/03	**4,840.00**	**20,400.00**	**3,540.00**	**19,020.00**	25.00	**640.00**	11.00	**7.00**	48,483.00
	04/02/03	**2,600.00**	**11,000.00**	**1,800.00**	**9,000.00**	**250.00**	**1,200.00**	**64.00**	2.60	25,906.60
	08/26/03	**1,400.00**	**6,800.00**	**1,100.00**	6,600.00	**250.00**	**1,200.00**	**37.00**	<0.010	16,387.00
	01/08/04	**350.00**	1,200.00	240.00	1,300.00	<1.0	**77.00**	<5.0	1.20	3,168.20
	05/10/04	**640.00**	**2,200.00**	300.00	1,900.00	<5.0	**150.00**	**36.00**	1.80	5,227.80
	08/17/04	**1,100.00**	**2,200.00**	730.00	3,400.00	<50	<250	13.00	<0.010	7,443.00
	01/14/05	**1,070.00**	**2,960.00**	718.00	3,990.00	<1.0	**116.00**	**107.00**	1.67	8,962.67
	06/29/05	**413.00**	500.00	290.00	1,480.00	<10	**77.30**	<5.0	0.55	2,760.85
	09/16/05	**323.00**	273.00	194.00	1,010.00	<10	**63.60**	NA	0.76	1,864.36
	02/28/06	**1,020.00**	1,150.00	619.00	2,980.00	<10	**141.00**	NA	1.00	5,911.00
	06/21/06	**316.00**	109.00	200.00	1,020.00	<10	**81.20**	15.50	0.42	1,742.12
	10/04/06	**585.00**	76.30	327.00	1,510.00	<10	**75.80**	26.70	0.75	2,601.55
	12/04/06	**332.00**	**3,340.00**	**2,940.00**	**19,900.00**	<10	**937.00**	NA	1.10	27,450.10
	03/28/07	**792.00**	64.70	529.00	2,590.00	<10	**156.00**	NA	0.82	4,132.52
	SSTL	6.00	1,212.00	860.00	8,000.00	48.00	31.00	15.00	4.83	
	> SSTL	786.00	0.00	0.00	0.00	0.00	125.00	0.00	0.00	
MW-7	01/06/03	**1,020.00**	1.00	**2,280.00**	**16,940.00**	1.00	**826.00**	5.00	**1.70**	21,084.70
	04/02/03	**240.00**	110.00	120.00	38.00	**210.00**	**120.00**	**240.00**	**1.70**	1,079.70
	08/26/03	**740.00**	250.00	110.00	1,600.00	**50.00**	**250.00**	**160.00**	0.09	3,160.09
	01/08/04	**630.00**	**13,000.00**	**2,400.00**	**25,000.00**	**100.00**	**1,000.00**	5.00	**3.50**	42,138.50
	05/10/04	**700.00**	**10,000.00**	**3,400.00**	**23,000.00**	**200.00**	**1,000.00**	5.00	**6.80**	38,311.80
	08/17/04	**23.00**	49.00	21.00	140.00	<5.0	<25	**19.00**	<0.010	252.00
	01/14/05	**565.00**	**9,180.00**	**3,570.00**	**24,400.00**	<1.0	**1,370.00**	**24.00**	**1.75**	39,110.75
	06/29/05	**582.00**	**7,030.00**	**3,480.00**	**23,100.00**	<100	**890.00**	<5.0	**1.70**	35,083.70
	09/16/05	**610.00**	**5,770.00**	**3,280.00**	**21,600.00**	<50	**1,040.00**	NA	**1.90**	32,301.90
	02/28/06	**178.00**	**4,760.00**	**2,480.00**	**19,300.00**	<100	**562.00**	NA	**1.20**	27,281.20
	06/21/06	**500.00**	**3,890.00**	**3,190.00**	**23,200.00**	<100	**916.00**	**23.90**	**0.86**	31,720.76
	10/04/06	**415.00**	**4,640.00**	**3,360.00**	**21,200.00**	<100	**781.00**	**22.60**	**1.60**	30,420.20
	12/04/06	**91.30**	**8.20**	**55.00**	**294.00**	<5.0	**16.30**	NA	0.25	465.05
	03/28/07	**420.00**	**2,810.00**	**2,390.00**	**17,900.00**	<100	**818.00**	NA	0.73	24,338.73
	SSTL	6.00	1,212.00	860.00	12,123.00	48.00	31.00	15.00	0.66	
	> SSTL	414.00	1,598.00	1,540.00	5,777.00	0.00	787.00	0.00	0.07	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-8	01/06/03	6,770.00	84,600.00	3,660.00	24,740.00	7.30	362.00	24.00	1.90	120,065.20
	04/02/03	8,600.00	46,000.00	3,600.00	23,000.00	200.00	1,000.00	49.00	190.00	82,539.00
	08/26/03	3,800.00	10,000.00	1,200.00	6,800.00	100.00	500.00	81.00	58.00	22,539.00
	01/08/04	5,600.00	22,000.00	3,400.00	20,000.00	100.00	1,300.00	18.00	4.70	52,422.70
	05/10/04	4,500.00	18,000.00	1,600.00	18,000.00	200.00	1,000.00	67.00	6.30	43,373.30
	08/17/04	10,000.00	37,000.00	2,900.00	20,000.00	<1,000	<5,000	27.00	63.00	69,990.00
	01/14/05	6,780.00	38,200.00	4,340.00	28,200.00	<1.0	1,600.00	<5.0	2.33	79,122.33
	06/29/05	6,490.00	31,000.00	4,320.00	27,500.00	<500	<1,000	<5.0	2.60	69,312.60
	09/16/05	14,300.00	50,000.00	4,640.00	28,000.00	54.60	1,040.00	NA	22.20	98,056.80
	02/28/06	17,100.00	52,500.00	3,950.00	21,800.00	<500	<1000	NA	17.00	95,367.00
	06/21/06	11,600.00	44,300.00	3,860.00	22,000.00	<1,000	<2,000	<10	6.70	81,766.70
	10/04/06	18,500.00	56,900.00	4,480.00	24,900.00	<1,000	<2000	33.50	16.50	104,830.00
	12/04/06	15,900.00	51,800.00	3,690.00	22,400.00	<1,000	<2000	NA	16.60	93,805.60
	03/28/07	17,600.00	56,400.00	4,390.00	25,900.00	<1,000	<2000	NA	21.50	104,311.50
	SSTL	12.00	2,424.00	1,700.00	16,000.00	96.00	62.00	4.00	0.48	
	> SSTL	17,588.00	53,976.00	2,690.00	9,900.00	0.00	0.00	0.00	21.02	
MW-9	01/06/03	<1.0	2.20	5.70	579.00	<1.0	109.00	24.00	<0.020	719.90
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	36.00	<0.010	36.00
	05/10/04	Well Not Located								0.00
	08/17/04	540.00	12,000.00	2,800.00	23,000.00	<500	<2,500	19.00	8.40	38,367.40
	01/14/05	Removed from Sampling Schedule								0.00
	RBSL	5.00	1,000.00	700.00	10,000.00	40.00	25.00	15.00	0.05	
MW-10	01/06/03	7,980.00	24,900.00	3,540.00	18,180.00	25.00	299.00	36.00	78.00	55,037.00
	04/02/03	11,000.00	23,000.00	2,400.00	13,000.00	200.00	1,000.00	49.00	190.00	50,839.00
	08/26/03	12,000.00	33,000.00	3,200.00	17,000.00	260.00	1,200.00	210.00	450.00	67,310.00
	01/08/04	4,200.00	14,000.00	2,400.00	12,000.00	100.00	500.00	6.30	100.00	33,306.30
	05/10/04	8,600.00	21,000.00	2,400.00	14,000.00	<250	<1,200	5.70	210.00	46,215.70
	08/17/04	3,500.00	16,000.00	2,200.00	14,000.00	<500	<2,500	25.00	67.00	35,792.00
	01/14/05	10,200.00	34,600.00	3,160.00	18,400.00	<1.0	38.00	20.00	152.00	66,560.00
	06/29/05	9,040.00	26,000.00	3,040.00	16,600.00	<500	<1,000	6.30	116.00	54,801.30
	09/16/05	8,120.00	25,900.00	3,130.00	17,000.00	<200	<400	NA	143.00	54,293.00
	02/28/06	2,410.00	9,780.00	1,840.00	7,910.00	<200	<400	NA	15.90	21,955.90
	06/21/06	2,700.00	11,800.00	2,060.00	10,000.00	<200	<400	11.10	23.60	26,594.70
	10/04/06	3,400.00	13,900.00	2,130.00	10,500.00	<250	<500	50.90	43.40	30,024.30
	12/04/06	2,950.00	11,800.00	2,130.00	10,100.00	<250	<500	NA	38.00	27,118.00
	03/28/07	2,180.00	8,510.00	1,880.00	8,060.00	<100	<200	NA	18.70	20,648.70
	SSTL	9.00	1,819.00	1,274.00	18,185.00	73.00	46.00	21.00	9.00	
	> SSTL	2,171.00	6,691.00	606.00	0.00	0.00	0.00	0.00	9.70	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-11	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	**7.80**	**6.00**	<0.020	13.80
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26.00**	<0.010	26.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**33.00**	**0.29**	33.29
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**46.00**	<0.010	46.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17.00**	<0.010	17.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**10.00**	<0.010	10.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**37.10**	<0.019	37.10
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.07**	0.07
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**30.10**	<0.019	30.10
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**12.40**	<0.019	12.40
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	5.00	6.00	6.00	10.00	6.00	5.00	6.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-12	01/06/03	**720.00**	**17.20**	13.40	**1,550.00**	<1.0	**113.00**	6.00	**12.00**	2,431.60
	04/02/03	**12.00**	<5.0	<1.0	1.80	<1.0	<5.0	**38.00**	0.24	52.04
	08/26/03	**51.00**	<5.0	<1.0	72.00	<1.0	5.50	**37.00**	0.37	165.87
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	0.015	0.015
	05/10/04	**23.00**	<5.0	<1.0	43.00	<1.0	<5.0	6.80	0.11	72.91
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**12.00**	0.11	12.11
	01/14/05	**74.20**	<1.0	<1.0	67.60	<1.0	<5.0	6.00	0.23	148.03
	06/29/05	**28.40**	<1.0	<1.0	10.80	<1.0	<2.0	<5.0	0.027	39.227
	09/16/05	Well Not Located								0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	NA	0.018	0.018
	06/21/06	**7.20**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	7.20
	10/04/06	**17.70**	<1.0	<1.0	<3.0	<1.0	<2.0	**12.10**	0.02	29.82
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.03	0.03
	03/28/07	9.00	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.02	9.02
	SSTL	7.00	6.00	68.00	730.00	6.00	36.00	7.00	7.00	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-13	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	1.30	<5.0	<0.020	1.30
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**40.00**	<0.010	40.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45.00**	<0.010	45.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**10.90**	<0.018	10.90
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	21.00	<0.019	21.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	5.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-14	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**39.00**	<0.010	39.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100.00**	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45.00**	<0.010	45.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**19.00**	<0.010	19.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**15.00**	<0.020	15.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**6.40**	<0.018	6.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**5.10**	<0.019	5.10
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**NA**	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**NA**	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	5.00	0.510	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-15	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	9.00	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120.00**	<0.010	120.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**48.00**	<0.010	48.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26.00**	<0.010	26.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	8.00	<0.020	8.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	7.50	<0.018	7.50
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.038	0.038
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.032	0.032
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.046	0.046
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.50	**0.900**	9.400
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.110**	0.110
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.076**	0.076
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.050	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-16	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	18.00	<0.020	18.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	140.00	<0.010	140.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	13.00	<0.010	13.00
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
MW-17	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	**44.00**	<0.020	44.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17.00**	<0.010	17.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**42.00**	<0.010	42.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.020	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	7.30	<0.010	7.30
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	9.00	<0.020	9.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.40	<0.019	5.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.024**	0.024
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	**0.021**	0.021
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	12.00	**0.026**	12.026
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.031**	0.031
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.034**	0.034
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.011	
MW-18	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**50.00**	<0.010	50.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100.00**	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**97.00**	<0.010	97.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.90	<0.010	9.90
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**17.00**	<0.020	17.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.70	<0.018	8.70
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	9.10	<0.019	9.10
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	11.50	<0.019	11.50
	12/04/06	Well Not Located								
	03/28/07	Well Not Located								
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.120	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-19	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	6.00	<0.020	6.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18.00**	<0.010	18.00
	01/08/04	<1.0	<5.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18.00**	<0.010	18.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
	08/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	Well Dry								0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-20	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	11.00	<0.020	11.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	130.00	<0.010	130.00
	05/10/04	Removed from Sampling Schedule								
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
TW-1	01/06/03	3,380.00	1,510.00	1,860.00	9,370.00	25.00	160.00	6.00	5.20	16,316.20
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	2,000.00	2,500.00	1,100.00	5,800.00	50.00	250.00	5.00	0.38	11,705.38
	05/10/04	Well Not Located								0.00
	08/17/04	67.00	<50	<10	59.00	<10	<50	30.00	0.52	156.52
	01/14/05	700.00	7.80	82.90	1,700.00	8.10	79.80	<5.0	0.47	2,579.07
	08/29/05	400.00	5.30	22.60	759.00	8.60	72.80	<5.0	0.41	1,268.71
	09/16/05	457.00	13.20	13.20	989.00	<10	60.80	NA	0.77	1,533.97
	02/28/06	95.60	13.30	<2.0	19.20	41.60	<4.0	NA	1.30	171.00
	06/21/06	986.00	11.80	105.00	1,980.00	14.20	153.00	<5.0	0.56	3,250.56
	10/04/06	1,090.00	23.30	174.00	2,530.00	<20	83.20	<5.0	1.20	3,901.70
	12/04/06	502.00	<20	67.00	1,540.00	<20	54.00	NA	0.90	2,163.90
	03/28/07	576.00	23.50	87.50	1,980.00	<10	83.20	NA	1.00	2,751.20
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
TW-2	01/06/03	6,620.00	6,860.00	620.00	4,110.00	50.20	160.00	6.00	5.20	18,431.40
	04/02/03	3,300.00	1,600.00	220.00	2,000.00	60.00	250.00	10.00	1.10	7,331.10
	08/26/03	3,000.00	460.00	79.00	1,700.00	10.00	160.00	6.80	0.35	5,406.15
	01/08/04	2,800.00	460.00	14.00	1,000.00	22.00	34.00	5.40	1.10	4,336.50
	05/10/04	3,700.00	640.00	160.00	1,800.00	5.00	170.00	<5.0	1.20	6,476.20
	08/17/04	1,400.00	<500	<100	300.00	<100	<500	5.40	2.20	1,707.60
	01/14/05	3,100.00	606.00	175.00	1,490.00	31.90	172.00	<5.0	0.59	5,574.49
	06/29/05	3,670.00	241.00	148.00	1,710.00	16.10	228.00	<5.0	0.40	6,013.50
	09/16/05	3,540.00	876.00	237.00	1,010.00	36.90	160.00	NA	0.86	5,860.76
	02/28/06	529.00	17.20	22.00	1,130.00	<10	31.10	NA	0.34	1,729.64
	06/21/06	4,050.00	1,430.00	320.00	1,890.00	51.20	258.00	<5.0	1.00	8,000.20
	10/04/06	2,390.00	778.00	116.00	581.00	59.80	<100	<5.0	1.30	3,926.10
	12/04/06	1,680.00	1,040.00	76.00	463.00	66.00	<100	NA	0.85	3,225.85
	03/28/07	1,730.00	1,860.00	158.00	997.00	129.00	102.00	NA	0.49	4,976.49
	SSTL	5.00	5.00	5.00	180.00	5.00	18.00	2.00	0.05	
	> SSTL	1,725.00	1,852.00	153.00	817.00	124.00	0.00	0.00	1.25	
TW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	8.90	<5.0	0.13	9.03
	04/02/03	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<5.0	0.03	0.031
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<0.010	0.00
	05/10/04	2.90	11.00	1.80	12.00	<1.0	<5.0	<5.0	0.05	27.75
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	0.04	0.04
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.08	0.077
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.04	0.044
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	2.00	0.230	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
Crook WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	10.00	<0.020	10.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	23.00	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.80	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	12.00	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	400.00	<1.0	<1.0	110.00	<1.0	12.00	<5.0	2.24	524.24
post		22.00	<1.0	<1.0	3.20	<1.0	<5.0	<5.0	0.09	25.29
pre	06/29/05	193.00	BDL	BDL	69.90	BDL	9.60	NA	NA	272.50
post		4.20	BDL	BDL	3.70	BDL	BDL	NA	NA	7.90
pre	09/16/05	12.60	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	12.646
post		342.00	<10	<10	<30	<10	<20	NA	3.80	345.80
pre	02/28/06	Not Sampled								0.00
post										0.00
pre	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.041	0.041
post		Not Sampled								0.00
pre	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.053	0.053
post		Not Sampled								0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.041	0.041
		Not Sampled								
pre	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.031	0.031
post		Not Sampled								
	SSTL	5.00	2.00	2.00	26.00	2.00	6.00	5.00	5.00	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Swift WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	10.00	<0.020	10.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	23.00	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.80	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	12.00	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	400.00	<1.0	<1.0	110.00	<1.0	12.00	<5.0	2.24	524.24
post		22.00	<1.0	<1.0	3.20	<1.0	<5.0	<5.0	0.09	25.29
pre	06/29/05	193.00	BDL	BDL	69.90	BDL	9.60	NA	NA	272.50
post		4.20	BDL	BDL	3.70	BDL	ND	NA	NA	7.90
pre	09/16/05	12.60	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.046	12.646
post		342.00	<10	<10	<30	<10	<20	NA	3.80	345.80
pre	02/28/06	169.00	<1.0	<1.0	88.60	<1.0	9.30	NA	NA	266.90
post		7.20	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	7.20
pre	06/21/06	182.00	<1.0	<1.0	114.00	<1.0	13.80	<5.0	1.30	311.10
post		9.30	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.049	9.349
pre	10/04/06	86.40	<1.0	<1.0	62.20	<2.0	6.00	<5.0	1.90	156.50
post		30.10	<1.0	<1.0	10.40	<1.0	<2.0	<5.0	0.180	40.680
pre	12/04/06	81.20	<1.0	<1.0	100.00	<1.0	11.30	NA	2.800	195.300
post		9.20	<1.0	<1.0	<1.0	<1.0	<1.0	NA	0.07	9.272
pre	03/28/07	24.80	<1.0	<1.0	38.60	<1.0	5.30	NA	0.760	69.360
post		8.10	<1.0	<1.0	<1.0	<1.0	<1.0	NA	0.04	8.144
	SSTL	2.00	2.00	2.00	2.00	6.00	6.00	6.00	6.00	
	> SSTL	28.10	0.00	0.00	8.40	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
Hill WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**9.00**	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**22.00**	<0.010	22.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**6.10**	<0.010	6.10
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
	01/14/05 pre	**2.80**	<1.0	<1.0	<1.0	<1.0	<5.0	**10.00**	0.11	12.91
	01/14/05 post	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
	06/29/05 pre	**2.40**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.19	2.59
	06/29/05 post	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.06	0.063
	09/16/05 pre	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	0.051
	09/16/05 post	**2.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.16	2.76
	02/28/06 pre	**9.40**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	9.40
	02/28/06 post	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	0.00
	06/21/06 pre	**11.10**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.35	11.45
	06/21/06 post	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.019	0.019
	10/04/06 pre	**68.10**	<1.0	<1.0	8.50	<1.0	<2.0	<5.0	0.43	77.03
	10/04/06 post	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.020	0.000
	12/04/06 pre	**25.10**	<1.0	<1.0	3.30	<1.0	<2.0	NA	0.36	28.76
	12/04/06 post	1.40	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.029	1.429
	03/28/07 pre	**24.00**	<1.0	<1.0	3.50	<1.0	<2.0	NA	0.36	27.86
	03/28/07 post	04/02/07 <1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.000
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Smith WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**5.20**	<0.010	5.20
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120.00**	<0.010	120.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**41.00**	<0.010	41.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**51.00**	<0.020	51.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**57.40**	<0.018	57.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	Not Sampled								0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	03/28/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL MASS										220,781.749
TOTAL SSTL MASS		117.00	10,972.00	7,769.00	80,330.00	503.00	391.00	199.00	63.33	100,082.00
INITIAL MASS ABOVE SSTL										217,876.56
CURRENT MASS ABOVE SSTL										154,196.611
PERCENT TOTAL MASS REDUCTION ABOVE SSTL										29.228

µg/l - micrograms per liter
ND = Not Detected
NE = Not Established
NA = Not Analyzed
RBSL = Risk Based Screen Level
SSTL = Site Specific Target Levels
Bold denotes concentrations over their respective SSTL or RBSL
* = 09/16/05 Sampling Event SSTL Data Utilized For Reduction Calculation

- Concentration Reduction Calculation is as follows:

$$\frac{\text{[Initial Sample Concentration Above SSTL]} - \text{[Subsequent Sample Concentration Above SSTL]}}{\text{[Initial Sample Concentration Above SSTL]}} \times 100 = \%\ \text{Reduction}$$

APPENDIX C
Field Data Sheets

SEI Environmental

SC Monitoring Well Gauging Data Sheet

Site Name: Smith Grocery WO# 300401

Date 3-28-07

Well ID	Total Depth (feet)	Well Dia. (in.)	Depth to Product (feet)	Product Thickness (feet)	Depth to Water (feet)	Notes
MW-1	35.00				27.91	1647
MW-2	38.00				31.67	1648
MW-3	35.00				28.77	Gauge Only
MW-4	27.00				Destroyed	Gauge Only
MW-5	30.00				26.11	Gauge Only
MW-6	37.00				31.56	16.34
MW-7	36.00				29.74	1625
MW-8	38.00				31.85	16:26
MW-9	36.00				Destroyed	Gauge Only DESTROYED
MW-10	44.00				37.51	1425
MW-11	44.00				38.18	1436
MW-12	44.00				37.93	1326
MW-13	47.00				41.05	1443
MW-14	50.00				41.85	1340
MW-15	50.00				42.98	1320
MW-16	37.00				30.71	Gauge Only
MW-17	40.00				34.73	1252
MW-18	46.00				17.00	Can't find
MW-19	50.00	2			49.28	NS (DRY)
MW-20	35.00				26.30	Gauge Only
TW-1	61.00				31.92	1700
TW-2	88.00				31.82	1634
TW-3	71.00				36.73	1430 Smith has no system ?

WSW Samples: Crook (Pre/Post), Hill (Pre/Post), Swift (Pre/~~Post~~), & Smith (Pre/Post)

Analysis: EPA Method 8260B for BTEX, MTBE, and Naphthalene
EPA Method 8011 for EDB
~~LEAD~~

WSW-Smith 1730
WSW-Hill Pre Carbon 1250 HCl/Na2S2O3
WSW-Swift Post 1400 WSW-Smith 1405
WSW-Crook 1800

2-inch diameter well: Well Volume = (water column) x (0.163 gallon/foot)
4-inch diameter well: Well Volume = (water column) x (0.652 gallon/foot)
Purge amount = Well Volume x 3

APPENDIX D
Laboratory Analytical Results and Chain-of-Custody

Sample Summary

SEI-Columbia, SC

Smith's Grocery; York, SC
Project No: 300401

Job No: F48436

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F48436-1	03/28/07	16:47	DCHP	04/04/07	AQ	Ground Water	MW-1
F48436-2	03/28/07	16:48	DCHP	04/04/07	AQ	Ground Water	MW-2
F48436-3	03/28/07	16:34	DCHP	04/04/07	AQ	Ground Water	MW-6
F48436-4	03/28/07	16:25	DCHP	04/04/07	AQ	Ground Water	MW-7
F48436-5	03/28/07	16:20	DCHP	04/04/07	AQ	Ground Water	MW-8
F48436-6	03/28/07	14:25	DCHP	04/04/07	AQ	Ground Water	MW-10
F48436-7	03/28/07	14:36	DCHP	04/04/07	AQ	Ground Water	MW-11
F48436-8	03/28/07	13:26	DCHP	04/04/07	AQ	Ground Water	MW-12
F48436-9	03/28/07	14:43	DCHP	04/04/07	AQ	Ground Water	MW-13
F48436-10	03/28/07	13:40	DCHP	04/04/07	AQ	Ground Water	MW-14
F48436-11	03/28/07	13:20	DCHP	04/04/07	AQ	Ground Water	MW-15
F48436-12	03/28/07	12:52	DCHP	04/04/07	AQ	Ground Water	MW-17
F48436-13	03/28/07	17:00	DCHP	04/04/07	AQ	Ground Water	TW-1

Sample Summary
(continued)

SEI-Columbia, SC

Smith's Grocery; York, SC
Project No: 300401

Job No: F48436

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F48436-14	03/28/07	16:34	DCHP	04/04/07	AQ	Ground Water	TW-2
F48436-15	03/28/07	14:30	DCHP	04/04/07	AQ	Ground Water	TW-3
F48436-16	03/28/07	12:50	DCHP	04/04/07	AQ	Ground Water	WSW-HILL PRE CARBON
F48436-17	03/28/07	14:04	DCHP	04/04/07	AQ	Ground Water	WSW-SMITH PRE CARBON
F48436-18	03/28/07	14:00	DCHP	04/04/07	AQ	Ground Water	WSW-SMITH POST CARBON
F48436-19	03/28/07	17:30	DCHP	04/04/07	AQ	Ground Water	WSW-SMITH
F48436-20	03/28/07	18:00	DCHP	04/04/07	AQ	Ground Water	WSW-CROOK

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- **Chain of Custody**

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F48436
ACCUTEST QUOTE #:

CLIENT INFORMATION
NAME: SET Environmental
ADDRESS: 5100 Regent Blvd. Suite 5
CITY: Charlotte STATE: NC ZIP: 28206
SEND REPORT TO: Chris
PHONE #: 704-556-8605

FACILITY INFORMATION
PROJECT NAME: Smith Grocery
LOCATION: York, SC
PROJECT NO.: 300401
FAX #: 704-596-8605

ANALYTICAL INFORMATION
EPA 8260B (BTEX, MTBE & Naphthalene)
EPA 8011 (EDB)

MATRIX CODES
DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OL - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION	LAB USE ONLY
1	MW-1	3-28-07	1647	DC/HP	WT	6	✓	
2	MW-2		1648			6	✓	
3	MW-6		1634			6	✓	
4	MW-7		1625			6	✓	
5	MW-8		1620			6	✓	
6	MW-10		1125			6	✓	
7	MW-11		1136			6	✓	
8	MW-12		1326			6	✓	
9	MW-13		1147			6	✓	
10	MW-14		1340			6	✓	
11	MW-15		1320			6	✓	

DATA TURNAROUND INFORMATION
☒ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER
APPROVED BY:
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION
☐ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☐ OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. [signature]	3-29-07	1. ALSE	2. ALSE	4-2-07	2. [signature] 09:00
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.	4-2-07	4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE 4.4 °C
5.		5.	SC			

F48436: Chain of Custody
Page 1 of 4

ACCUTEST. Laboratories

CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F48436
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: SEI Environmental
ADDRESS: 5100 Regen Drive Suite 5
CITY, STATE, ZIP: Charlotte NC 28206
SEND REPORT TO: Chris
PHONE #: 704-596-8625

FACILITY INFORMATION

PROJECT NAME: Smith Grocery
LOCATION: York, SC
PROJECT NO.: 300401
FAX #: 704-596-8605

ANALYTICAL INFORMATION: EPA 8260B (BTEX MTBE ...), EPA 8011 (EDB)

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	DATE	TIME	SAMPLED BY	MATRIX	# OF BOTTLES	HCl	NaOH	HNO3	H2SO4	NONE	[illegible]	LAB USE ONLY
12	MW-17	3-28-07	1252	[illegible]	GW	6	✓						
13	TW-1		~~3~~ 1700			6	✓						
14	TW-2		1634			6	✓						
15	TW-3		1430			6	✓			✓			
16	WSW-Hill Pre Carbon		1250		DW	6	✓			~~✓~~		✓	
17	WSW-Smith Pre Carbon		1405		DW	6	✓			~~✓~~		✓	
18	WSW-Smith Post Carbon		1400		DW	6	✓			~~✓~~		✓	
19	WSW-Smith		1730		DW	6	✓			~~✓~~		✓	
20	WSW-Crook		1800		DW	6	✓			~~✓~~		✓	

MATRIX CODES: DW - DRINKING WATER; GW - GROUND WATER; WW - WASTE WATER; SO - SOIL; SL - SLUDGE; OI - OIL; LIQ - OTHER LIQUID; SOL - OTHER SOLID

DATA TURNAROUND INFORMATION

- ☑ STANDARD
- ☐ 48 HOUR RUSH
- ☐ 24 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☐ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

Report to Chris Boggs

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY	DATE TIME	RECEIVED BY	RELINQUISHED BY	DATE TIME	RECEIVED BY
SAMPLER: [signature]	3-30-07	1. ALSE	2. ALSE	~~[illegible]~~	2. [signature] 09:00
3.		3.	4.	4-2-07	4.
5.		5.	SEAL #		

PRESERVE WHERE APPLICABLE ☐ ON ICE ☐ TEMPERATURE 2.4 C

F48436: Chain of Custody
Page 2 of 4

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F48436 CLIENT: SEI PROJECT: SMITH GROCERY

DATE/TIME RECEIVED: 4-2-07 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 2/4

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS:

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [X] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 0

NUMBER OF 5035 FIELD KITS ? 0

NUMBER OR LAB FILTERED METALS ? 0

SAMPLE INFORMATION

- [ ] SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] TIMES ON COC DOES NOT MATCH LABEL(S)
- [ ] ID'S ON COC DOES NOT MATCH LABEL(S)
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE: JC 4-2-07 TECHNICIAN SIGNATURE/DATE: ASBD 10/03/06

F48436: Chain of Custody
Page 3 of 4

Job Change Order: F48436_4/4/2007

Requested Date:	4/4/2007	**Received Date:**	4/4/2007
Account Name:	SEI-Columbia, SC	**Due Date:**	4/11/2007
Project Description:	Smith's Grocery; York, SC	**Deliverable:**	COMMB
CSR:	HW	**TAT (Days):**	7

Sample #: F48436-all

Change: Per Chris Boggs@SEI 04.03.07 please proceed with samples even though cooler received at 21.4degC.

Above Changes Per: Chris Boggs@SEI 04.03.07 **Date:** 4/4/2007

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

F48436: Chain of Custody
Page 4 of 4

ACCUTEST Laboratories

CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F48475
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: SEI Environmental
ADDRESS: 5100 North I-85 Suite 7
CITY, STATE ZIP: Charlotte, NC 28206
SEND REPORT TO: Chris Boggs
PHONE #: 704-596-8624

FACILITY INFORMATION

PROJECT NAME: Smiths Grocery
LOCATION: York, SC
PROJECT NO.: 300401
FAX #: 704-596-8605

ANALYTICAL INFORMATION: EPD 8260 (BTEX, MTBE, naphthalene); EPD 8011 (EDB)

MATRIX CODES
DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	DATE	TIME	SAMPLED BY	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	EPD 8260	EPD 8011	LAB USE ONLY
1	WSW-Hill Post Carbon	4-2-07	1700	DC	DW	5	✓					✓	✓	

DATA TURNAROUND INFORMATION
☑ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER
APPROVED BY:
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION
☑ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☐ OTHER (SPECIFY)

COMMENTS/REMARKS
Ran POE system 10 minutes prior to sample collection

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. [signature]	800 4/3/07	1. FX	2. FX	4-5-07 900	2. Jorge Coral
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐ ON ICE ☐	TEMPERATURE 2.8 C

F48475: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F48475 CLIENT: SEL PROJECT: Smiths Grocery

DATE/TIME RECEIVED: 4-5-07 9:00 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 0.8

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 8536 3067 9932

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [x] TRIP BLANK NOT PROVIDED
- [x] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? Ø

NUMBER OF 5035 FIELD KITS ? Ø

NUMBER OR LAB FILTERED METALS ? Ø

SAMPLE INFORMATION

- [ ] SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] TIMES ON COC DOES NOT MATCH LABEL(S)
- [ ] ID'S ON COC DOES NOT MATCH LABEL(S)
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE Jmc 4-5-07 TECHNICIAN SIGNATURE/DATE JC 04-05-07 ASBD 10/03/06

F48475: Chain of Custody
Page 2 of 2

SEI
Environmental, Inc.

130 Penmarc Drive, Suite 108
Raleigh, NC 27603
919.832.2535
Fax 919.832.5914

RECEIVED
JAN 16 2007
UNDERGROUND STORAGE
TANK PROGRAM

January 10, 2007

Debra Thoma, Hydrogeologist
South Carolina Department of Health and Environmental Control
Underground Storage Tank Program
2600 Bull Street
Columbia, South Carolina 29201-1708

Re: **CORECTIVE ACTION PLAN ADDENDUM**
Smith Grocery
SC Highway 49
York, York County, South Carolina
Facility ID: 09322

Dear Ms Thoma;

SEI proposes changing the reagent in the injection system for the above referenced site from hydrogen peroxide to Potassium Triple Salt (PTS). This will be a gravity fed system. The system will utilize the existing injection wells at the site. Below is a summary of properties and nature of the PTS injection solution.

Chemistry Overview

Chemical oxidation as a groundwater remediation methodology has been in use for several years at sites across the country, and is an accepted technology. In-situ chemical oxidation is based on the delivery of a chemical oxidant to contaminated soil and/or groundwater to effectively remove contaminants by converting them to innocuous compounds commonly found in nature – in this case water, carbon dioxide, and low-level potassium salts. The primary oxidants that have been used historically are hydrogen peroxide and potassium permanganate.

SEI believes that the proprietary oxidant PTS provided by Arrius Environmental Inc. has both the effective oxidation strength and residence time to saturate and effectively remediate the site.

RECEIVED
JAN 16 2007
UNDERGROUND STORAGE
TANK PROGRAM

A chemical comparison of the proprietary oxidizer, PTS, to potassium permanganate is included in Appendix A. Briefly, PTS is an oxidizer that is 10 times more effective than potassium permanganate, has a solubility of 26%, and most importantly lasts for 14 months in a groundwater environment.

Should you need additional information or have any questions, please feel free to call us at (919) 832-2535.

Sincerely,

SEI ENVIRONMENTAL, INC.

Chris L. Boggs, P.G.
Geologist

Enclosures

Cc: SEI File

RECEIVED
JAN 16 2007
UNDERGROUND STORAGE
TANK PROGRAM

ATTACHMENT A

COMPARISON OF OXIDANT CHEMICAL PROPERTIES

During the past 15 years there have only been two widely available in-situ chemical oxidation treatment (groundwater chemical injection remediation) options:

- Hydrogen Peroxide (commonly in the form of Fenton's Reagent)
- Potassium Permanganate

Potassium Triple Salt (PTS) is a potassium based oxidizer that has superior chemical properties to either of the above oxidants. PTS is a patent pending, proprietary technology developed by and Mark Martin. A comparison of PTS to potassium permanganate and hydrogen peroxide is provided in the following sections.

Potassium Permanganate vs. PTS

Potassium permanganate is currently the most widely used material for chemical oxidation. In comparing the solubility of potassium permanganate to Potassium Triple Salt (PTS), potassium permanganate has a maximum solubility of 6% and PTS has a solubility of 25% at 20°C. PTS delivers 4.1 times more oxidizing agent to the contamination than potassium permanganate. A summary table of key chemical properties is provided below.

Chemical / Physical Properties	Potassium Permanganate	Potassium Triple Salt
Density (g/cm^3)	2.7	1.15
Solubility at (20°C g/l)	65	256
Standard Electrode Potential (E^o) V	+0.59	-1.44
Thermal Conductivity (Btu ft/h ft^2 F)	0.0782	0.093

The most important difference between PTS and potassium permanganate is the Standard Electrode Potential. The Standard Electrode Potential is the ability of an oxidizer / reducing agent to decompose organic or inorganic matter. The strength of potassium permanganate is 0.59 and the strength of PTS is 1.44. When we compare the decomposition strength of PTS to potassium permanganate, PTS is 2.44 times more reactive than potassium permanganate.

When comparing the actual strength of reactive agent that can be delivered by PTS relative to potassium permanganate, the superior solubility and reaction strength of PTS means that PTS delivers **10** times more reactive strength to the contamination. PTS lasts

RECEIVED
JAN 16 20
UNDERGROUND STORAGE
TANK PROGRAM

for 14 months in a groundwater environment. Potassium permanganate last for approximately 6 months in a groundwater environment. This means that PTS can travel farther distances than potassium permanganates, thereby requiring fewer wells and less expense. PTS will not clog fractures in groundwater. Potassium permanganate produces manganese dioxide. Manganese dioxide adheres to rock and can clog fractures, thereby trapping contaminants and failing to decompose them.

PTS has other advantages; it has specific gravity that is almost the same as groundwater, while potassium permanganate is nearly three times heavier than groundwater. This means that PTS will track with the groundwater and contaminant plume better than potassium permanganate.

Another advantage is that PTS has a low thermal conductivity and therefore just like potassium permanganate does not pose a risk for surface failure due to violent reactivity.

Equally important is the fact that PTS will not violate either the primary or secondary drinking water standards. Whereas potassium permanganate is likely to violate the secondary drinking water standard for manganese.

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

JAN 05 2007

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received December 27, 2006
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the report submitted by SEI Environmental, Inc. SEI Environmental received Corrective Action Plan approval in September 2001. The Corrective Action Solicitation Response estimated a cleanup time frame of 30 months. The corrective action has been ongoing for 60 months and the documented CoC concentration reduction to date is at –0.676%. The UST Program is extremely concerned about the lack of progress at the site and requests that SEI Environmental, Inc. submit a CAP addendum outlining proposed remedial actions that will be taken to expedite closure of this site. The UST Program requests a CAP addendum be submitted before **February 28, 2006**. The next corrective action monitoring report is due on or before **April 30, 2007**.

Please remember that SEI is responsible for maintaining the granulated activated carbon units. For any well that has detection in post-GAC samples, the GAC filter should be changed immediately and such work documented in the submitted reports. SEI should establish a GAC filter change schedule such that the breakthrough is minimized. Documentation of all GAC filter changes should be documented in future CASE Reports.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Chris Boggs, SEI Environmental, 130 Penmarc Dr., Ste 108, Raleigh, NC, 27603
Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

FRONTIS HEMPHILL
2146 OLD MCKINNEY RD
YORK SC 29745

JAN 05 2007

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received December 27, 2006
York County

Dear Mr. Hemphill

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

JAN 05 2007

GARY WIGGAM
3043 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received December 27, 2006
York County

Dear Mr. Wiggam:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

JAN 05 2007

EVERETTE & JANET CROOK
3035 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received December 27, 2006
York County

Dear Mr. & Mrs. Crook:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

JAN 05 2007

TONY & SUSAN HILL
3049 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received December 27, 2006
York County

Dear Mr. & Mrs. Hill:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

OCT 3 1 2006

LOUIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received October 23, 2006
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the report submitted by SEI Environmental, Inc. SEI Environmental received Corrective Action Plan approval in September 2001. Based on the proposed time frame of 30 months, corrective action activities were estimated to have been completed by March 2004. SEI should evaluate the current remediation methodology and propose any necessary modifications in order to expedite the remediation.

The Corrective Action Solicitation Response estimated a cleanup time frame of 30 months. The corrective action has been ongoing for 60 months and the documented CoC concentration reduction to date is at –22%. The UST Program is extremely concerned about the lack of progress at the site and requests that SEI Environmental, Inc. submit a CAP addendum outlining proposed remedial actions that will be taken to expedite closure of this site. The CAP addendum must be submitted before **November 30, 2006**. The next corrective action monitoring report is due on or before **January 31, 2007**.

Please remember that SEI is responsible for maintaining the granulated activated carbon units. For any well that has detection in post-GAC samples, the GAC filter should be changed immediately and such work documented in the submitted reports. SEI should establish a GAC filter change schedule such that the breakthrough is minimized. Documentation of all GAC filter changes should be documented in future CASE Reports.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Chris Boggs, SEI Environmental, 130 Penmarc Dr., Ste 108, Raleigh, NC, 27603
Technical file

CORRECTIVE ACTION SYSTEM EVALUATION REPORT
September 2006 through December 2006

Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

RECEIVED
DEC 27 2006
UNDERGROUND STORAGE TANK PROGRAM

PREPARED FOR:

Ms. Louis Smith
Smith's Grocery
3176 Charlotte Highway
York, South Carolina 29745

PREPARED BY:

SEI ENVIRONMENTAL, INC.
130 Penmarc Drive, Suite 108
Raleigh, North Carolina 27603-2434
UST Site Rehabilitation Contractor No. 354

December 21, 2006

RECEIVED
DEC 27 2006
UNDERGROUND STORAGE
TANK PROGRAM

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: December 21, 2006
Monitoring Report Number: 11
For Period Covering: October 4, 2006 to December 4, 2006
Facility Name : Smith's Grocery
Street Address: 176 Charlotte Highway (49)
UST Permit Number: 09322
City: York, South Carolina
County: York
Zip Code: 29745
Latitude: N 35°02'30.59"
Longitude: W 81°08'47.98"

Submitted by UST Owner/Operator:	Prepared by Consultant/Contractor:
Name: Louis Smith	Name: Chris L. Boggs, P.G.
Company: Smith's Grocery	Company: SEI Environmental, Inc.
Address: 3176 Charlotte Highway	Address: 130 Penmarc Drive, Suite 108
City: York State: SC	City: Raleigh State: NC
Zip Code: 29745	Zip Code: 27603
Telephone: (803) 684-6289	Telephone: (919) 832-2535
SEI Project Number: 300401	UST Site Rehabilitation Contractor No. 354

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: Chris L. Boggs, P.G.
SC Reg. No. 2101
Signature:
Date: 12/21/06

TABLE OF CONTENTS

LIMITATIONS iii
1.0 INTRODUCTION 1
2.0 FIELD MEASUREMENTS AND SAMPLING 1
2.1 GROUNDWATER SAMPLING 1, 2
2.2 WATER SUPPLY WELL SAMPLING 2, 3
3.0 LABORATORY ANALYTICAL RESULTS 3
3.1 GROUNDWATER ANALYTICAL RESULTS 3
3.2 WATER SUPPLY WELL ANALYTICAL RESULTS 3
3.3 SITE SPECIFIC TARGET LEVELS 3, 4
4.0 REMEDIATION SYSTEM EFFECTIVENESS 4
5.0 CONCLUSIONS AND RECOMMENDATIONS 4, 5

LIST OF TABLES

TABLE 1 Historical Groundwater Elevation and Product Thickness Data
TABLE 2 Historical Groundwater Analytical Results

LIST OF FIGURES

FIGURE 1 USGS Quadrangle Map
FIGURE 2 Site Map
FIGURE 3 Potentiometric Surface Map, December 4, 2006
FIGURE 4 Groundwater Chemicals of Concern Site Map, December 4, 2006

LIST OF APPENDICES

APPENDIX A Figures
APPENDIX B Tables
APPENDIX C Field Data Information Sheets for Groundwater Sampling
APPENDIX D Laboratory Reports and Chain-of-Custody Forms
APPENDIX E Disposal Manifest for Purged Groundwater

LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Geologist registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by AccuTest Laboratories.

1.0 INTRODUCTION

Smith's Grocery is a convenience and retail fuel store located at 3176 Charlotte Highway (SC Highway 49) in York, York County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- May 10, 2004 – Groundwater Sampling Event
- August 17, 2004 – Groundwater Sampling Event
- January 14, 2005 – Groundwater Sampling Event
- June 29, 2005 – Groundwater Sampling Event
- September 16, 2005 – Groundwater Sampling Event
- February 28, 2006 – Groundwater Sampling Event
- June 21, 2006 – Groundwater Sampling Event
- October 4, 2006 – Groundwater Sampling Event
- December 4, 2006 – Groundwater Sampling Event

On Decemberber 4, 2006, seventeen groundwater monitoring wells and four water supply wells were sampled in accordance with the requirements of the PFP contract. This report provides details of the groundwater sampling event.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On December 4, 2006, groundwater samples were collected from seventeen (MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-17 ~~through~~ MW-19, and TW-1 through TW-3) of twenty-three existing groundwater monitoring wells. Six (MW-3 through MW-5, MW-9, MW-16, and MW-20) have been removed from the sampling schedule.

Prior to sampling, groundwater monitoring wells were gauged utilizing an oil-water interface probe to measure depth to groundwater, and to detect any free product present. The depth to

groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction. Figure 2 in Appendix A is a site map depicting monitoring well locations.

Free product was not currently and has not historically been detected in any of the monitoring wells. Figure 3 in Appendix A presents a groundwater potentiometric map for the current sampling event. Table 1 in Appendix B summarizes groundwater measurement data.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead. Appendix C contains Field Data Information Sheets for Groundwater Sampling.

2.2 Water Supply Well Sampling

On December 4, 2006, groundwater samples were collected from four (Crook, Smith, Swift and Hill) water supply wells. Three water supply wells (Crook, Hill, and Swift) are fitted with granular activated carbon (GAC) filters. As such, samples were collected from the Swift and Hill wells before (pre) and after (post) the GAC filters. The Crook well was not sampled in this manner during the current sampling event. Prior to sampling, the water was allowed to run for at least ten minutes. The samples were placed into laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

Chemicals of Concern (CoC) were detected in ten (MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, MW-17 and TW-2) of the seventeen monitoring wells sampled at concentrations exceeding their respective SSTL. Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.2 Water Supply Well Analytical Results

CoC were detected in two (Swift and Hill) of the pre-GAC filter samples collected at concentrations exceeding their respective SSTLs. The post-GAC filter sample for the Swift water supply well exceeded SSTLs for benzene. Figure 4 in Appendix A is a site map presenting water supply well locations and their CoC concentrations. Table 2 in Appendix B summarizes historical water supply well analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.3 Site Specific Target Levels

Site Specific Target Levels (SSTLs) have been designated for sixteen (MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-17 through MW-19, TW-2, and TW-3) monitoring wells and all four (Crook, Swift, Hill, and Smith) water supply wells. For three (Crook, Swift, and Hill) water supply wells with GAC filters, the SSTLs apply to the pre-GAC filter samples. Table 4 in Appendix B summarizes SSTL information.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target concentrations for seven (benzene, toluene, ethylbenzene, xylenes, MTBE, naphthalene, lead, and EDB) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial January 6, 2003, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. Monitoring well MW-1 was not located during the current sampling event. Consequently, SSTL data for monitoring well MW-1 from the September 16, 2005, groundwater sampling event was utilized for the concentration reduction calculation. The formula is a follows:

$$\left[\frac{\text{[01/06/03 Sample Concentration Above SSTL]} - \text{[Current Sample Concentration Above SSTL]}}{\text{[01/06/03 Sample Concentration Above SSTL]}}\right] * 100 = \% \text{ Reduction}$$

Using the current analytical results, the concentration reduction is -0.676%.

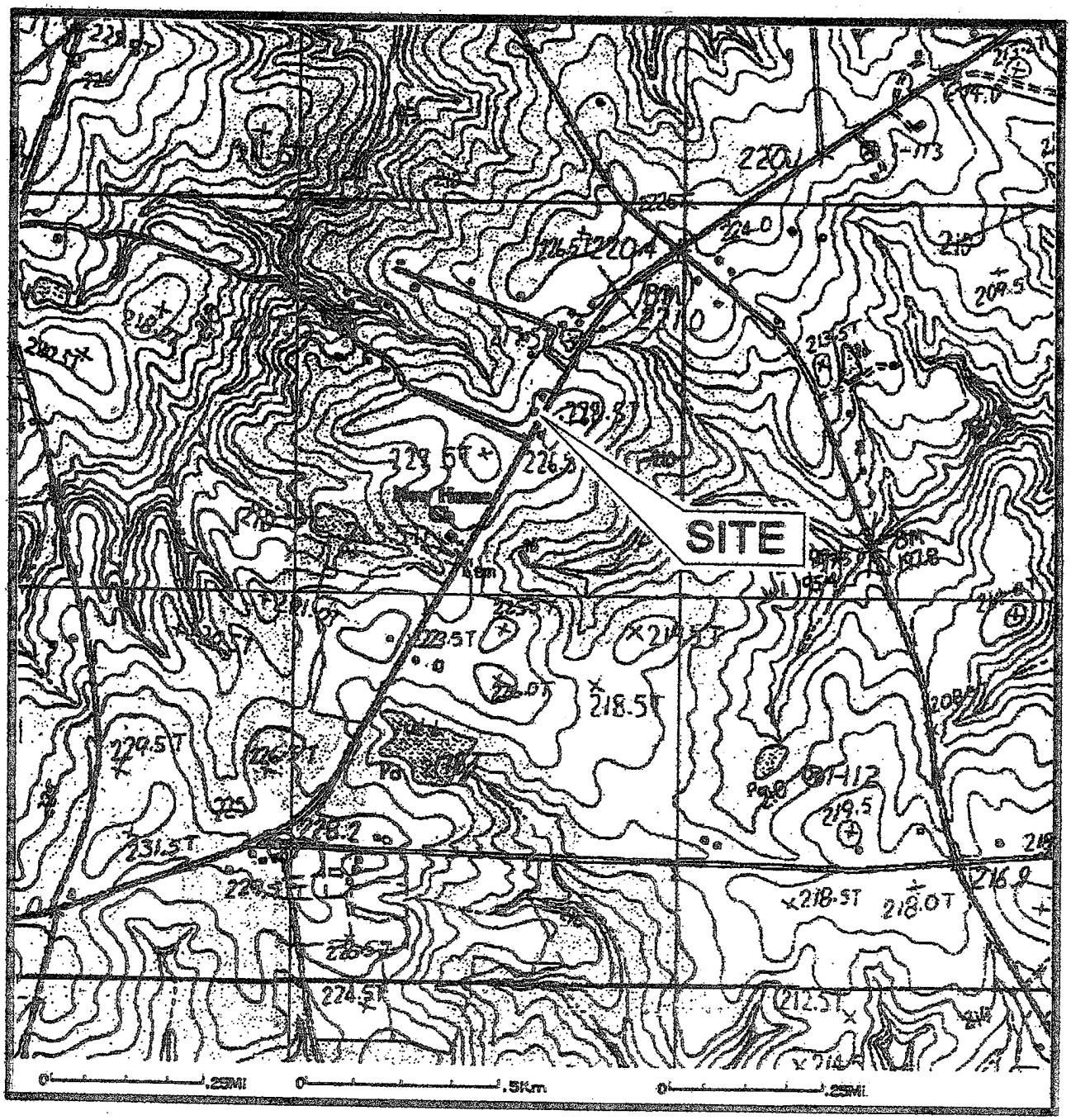
5.0 CONCLUSIONS

Free product was not detected. CoC were detected in eight monitoring wells and two water supply wells above their respective SSTLs. The percent concentration reduction has been calculated at -0.676%.

SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. The next sampling event will occur in March 2007. SEI is currently evaluating alternative methods of active corrective action to be implemented at the site in order to proceed with the remediation effort.

APPENDIX A
FIGURES

7.5 MINUTE SERIES(TOPOGRAPHIC)

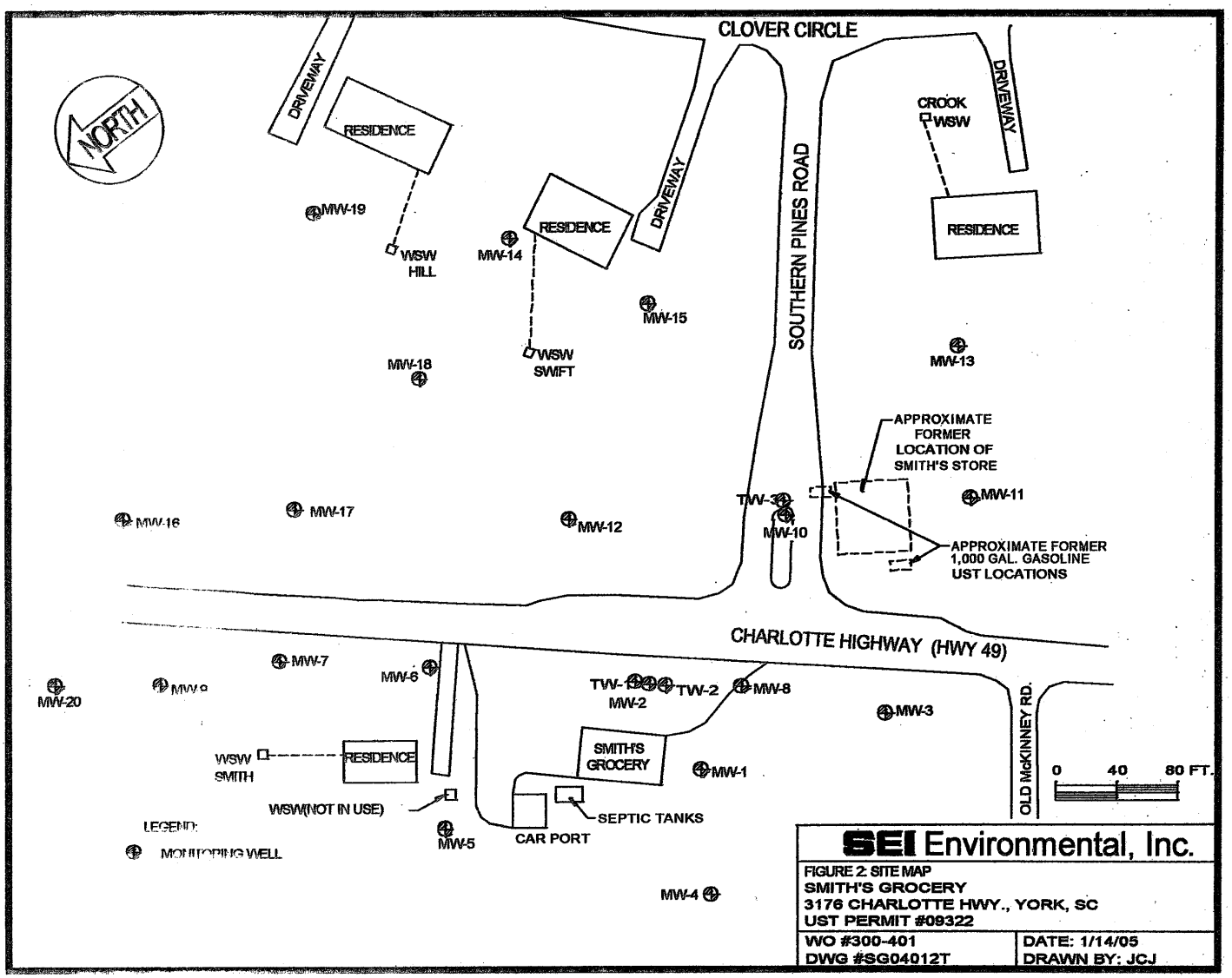


NORTH

SEI Environmental, Inc.

FIGURE 1; SITE LOCATION MAP(U.S.G.S. TOPO)
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

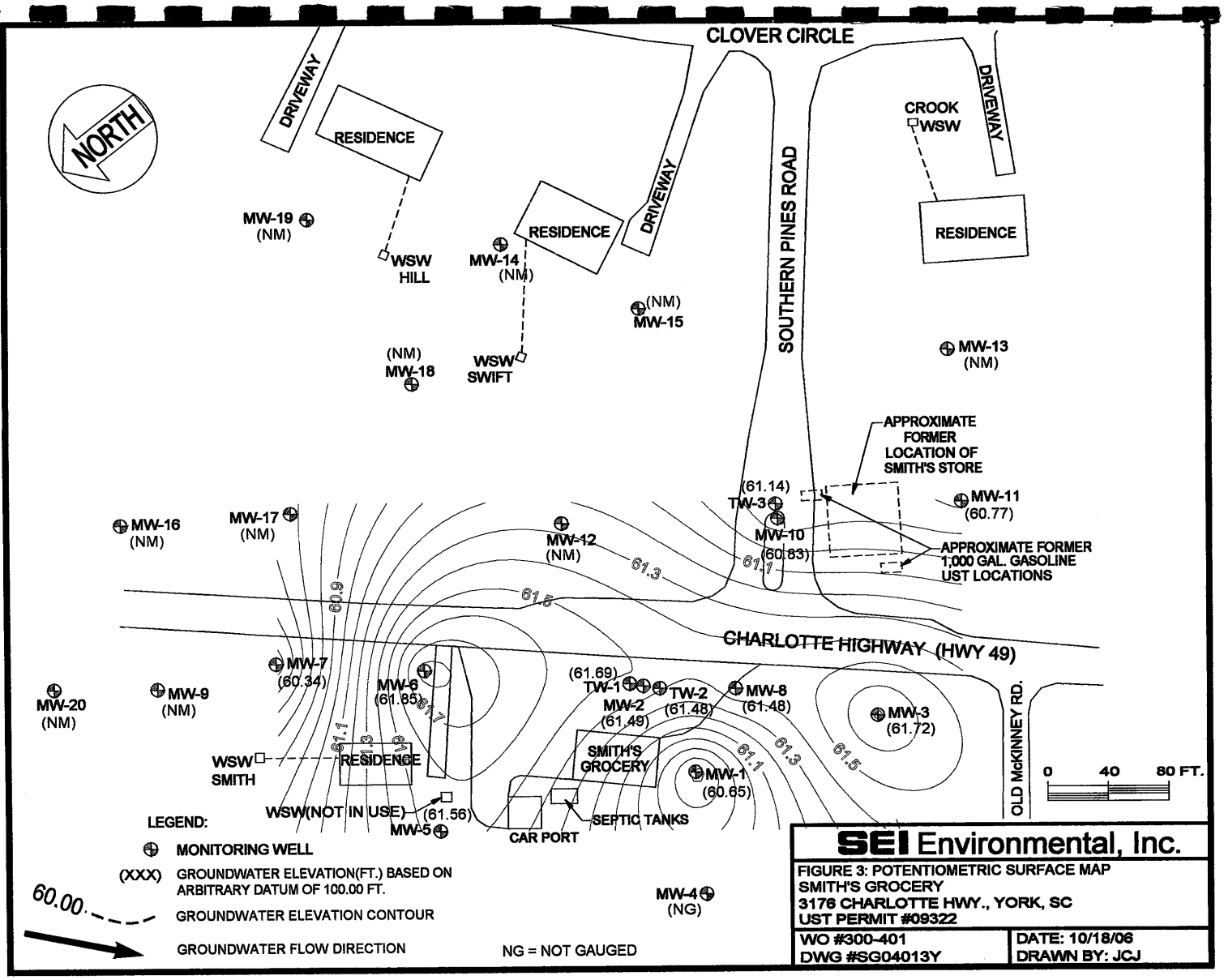
W.O. #: 300-401	DATE: 9/8/05
DWG.#	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

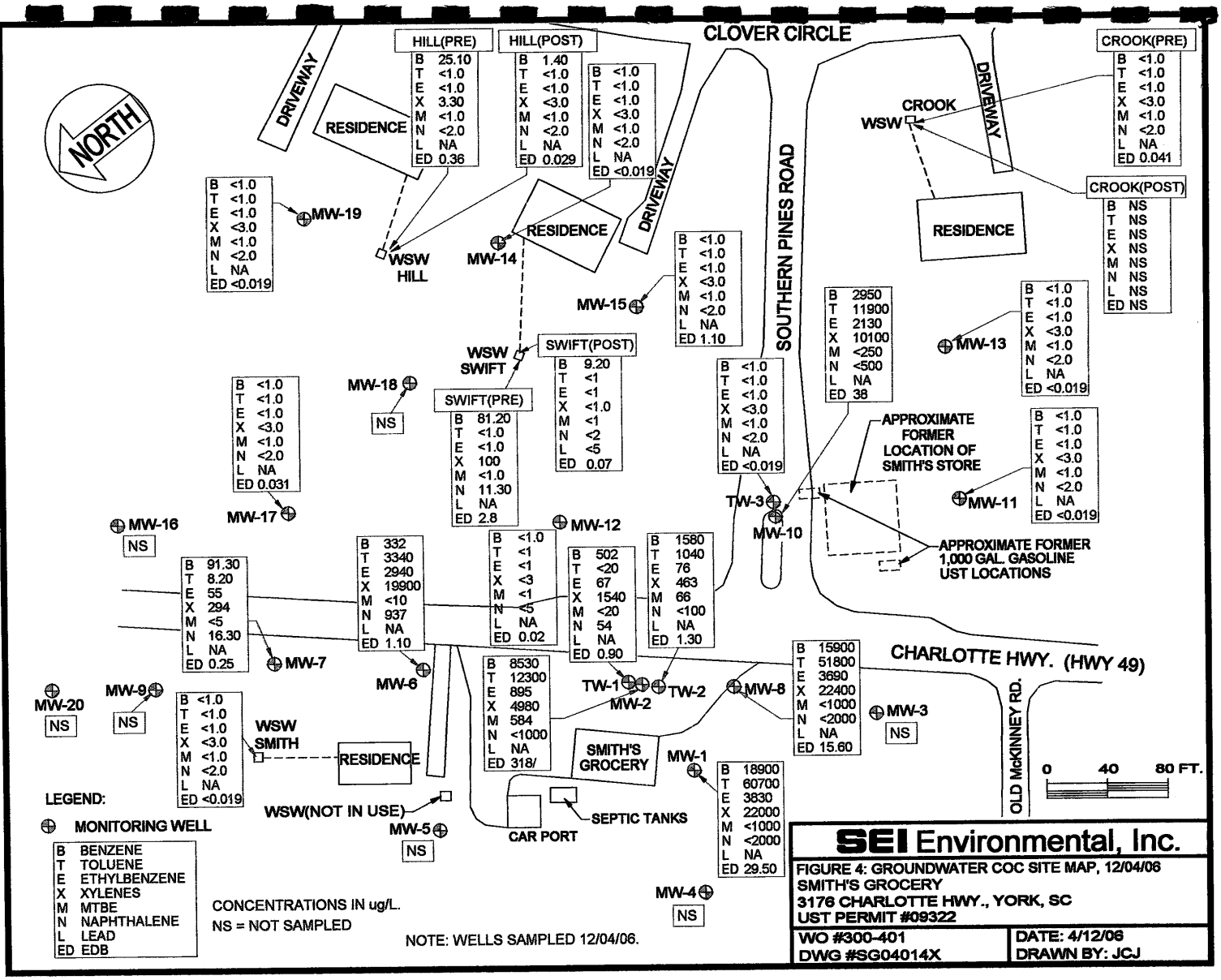
WO #300-401	DATE: 1/14/05
DWG #SG04012T	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: POTENTIOMETRIC SURFACE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 10/18/06
DWG #SG04013Y	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP, 12/04/06
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 4/12/06
DWG #SG04014X	DRAWN BY: JCJ

APPENDIX B
TABLES

Table 1

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery

3176 Charlotte Highway (Highway 49)

York, York County, South Carolina

UST Permit Number: 09322

SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-1	01/06/03	29.88			91.16	61.28
	04/02/03	28.05				63.11
	08/26/03	24.07				67.09
	01/08/04	25.46				65.70
	05/10/04	26.90				64.26
	08/17/04	27.03				64.13
	01/14/05	27.06				64.10
	06/29/05	25.67				65.49
	09/16/05	28.10				63.06
	02/28/06	Well Not Located				N/A
	06/21/06	29.16				62.00
	10/04/06	30.24				60.92
	12/04/06	30.51				60.65
MW-2	01/06/03	33.76			94.57	60.81
	04/02/03	31.92				62.65
	08/26/03	27.81				66.76
	01/08/04	29.40				65.17
	05/10/04	26.68				67.89
	08/17/04	30.71				63.86
	01/14/05	30.78				63.79
	06/29/05	29.35				65.22
	09/16/05	30.61				63.96
	02/28/06	31.19				63.38
	06/21/06	31.67				62.90
	10/04/06	32.76				61.81
	12/04/06	33.08				61.49
MW-3	01/06/03	30.87			91.91	61.04
	04/02/03	29.02				62.89
	08/26/03	25.98				65.93
	01/08/04	26.46				65.45
	05/10/04	28.83				63.08
	08/17/04	27.76				64.15
	01/14/05	27.86				64.05
	06/29/05	26.39				65.52
	09/16/05	27.67				64.24
	02/28/06	29.10				62.81
	06/21/06	28.79				63.12
	10/04/06	29.85				62.06
	12/04/06	30.19				61.72
MW-4	01/06/03	24.58			86.20	61.62
	04/02/03	22.73				63.47
	08/26/03	15.07				71.13
	01/08/04	20.73				65.47
	05/10/04	25.94				60.26
	08/17/04	Well Not Located				N/A
	01/14/05	21.83				64.37
	06/29/05	20.51				65.69
	09/16/05	Well Not Located				N/A
	02/28/06	Well Not Located				N/A
	06/21/06	Well Not Located				N/A
	10/04/06	Well Not Located				N/A
	12/04/06	Well Not Located				N/A

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-5	01/06/03	27.96			89.29	61.33
	04/02/03	25.00				64.29
	08/26/03	22.70				66.59
	01/08/04	24.49				64.80
	05/10/04	25.57				63.72
	08/17/04	25.75				63.54
	01/14/05	25.44				63.85
	06/29/05	24.30				64.99
	09/16/05	25.86				63.43
	02/28/06	27.63				61.66
	06/21/06	26.64				62.65
	10/04/06	27.75				61.54
	12/04/06	27.73				61.56
MW-6	01/06/03	33.57			93.91	60.34
	04/02/03	31.66				62.25
	08/26/03	27.51				66.40
	01/08/04	29.58				64.33
	05/10/04	29.91				64.00
	08/17/04	29.50				64.41
	01/14/05	30.77				63.14
	06/29/05	29.74				64.17
	09/16/05	30.81				63.10
	02/28/06	31.07				62.84
	06/21/06	31.72				62.19
	10/04/06	32.86				61.05
	12/04/06	32.06				61.85
MW-7	01/06/03	31.57			91.68	60.11
	04/02/03	29.40				62.28
	08/26/03	26.88				64.80
	01/08/04	28.40				63.28
	05/10/04	27.78				63.90
	08/17/04	29.85				61.83
	01/14/05	29.28				62.40
	06/29/05	28.17				63.51
	09/16/05	29.66				62.02
	02/28/06	29.50				62.18
	06/21/06	30.48				61.20
	10/04/06	31.47				60.21
	12/04/06	31.34				60.34
MW-8	01/06/03	33.84			94.72	60.88
	04/02/03	32.02				62.70
	08/26/03	27.58				67.14
	01/08/04	29.47				65.25
	05/10/04	29.90				64.82
	08/17/04	30.88				63.84
	01/14/05	30.85				63.87
	06/29/05	29.50				65.22
	09/16/05	30.76				63.96
	02/28/06	31.30				63.42
	06/21/06	31.84				62.88
	10/04/06	32.93				61.79
	12/04/06	33.24				61.48

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-9	01/06/03	30.41			90.54	60.13
	04/02/03	28.20				62.34
	08/26/03	26.10				64.44
	01/08/04	27.33				63.21
	05/10/04	28.69				61.85
	08/17/04	29.50				61.04
	01/14/05	28.14				62.40
	06/29/05	26.97				63.57
	09/16/05	26.38				64.16
	02/28/06	Well Not Located				N/A
	06/21/06	27.13				63.41
	10/04/06	Well Not Located				NA
	12/04/06	Well Not Located				NA
MW-10	01/06/03	39.71			99.77	60.06
	04/02/03	37.77				62.00
	08/26/03	33.36				66.41
	01/08/04	35.04				64.73
	05/10/04	35.50				64.27
	08/17/04	36.49				63.28
	01/14/05	36.66				63.11
	06/29/05	35.04				64.73
	09/16/05	36.34				63.43
	02/28/06	37.02				62.75
	06/21/06	37.40				62.37
	10/04/06	38.56				61.21
	12/04/06	38.94				60.83
MW-11	01/06/03	40.37			100.46	60.09
	04/02/03	38.36				62.10
	08/26/03	33.88				66.58
	01/08/04	35.70				64.76
	05/10/04	36.19				64.27
	08/17/04	37.17				63.29
	01/14/05	36.79				63.67
	06/29/05	35.68				64.78
	09/16/05	37.11				63.35
	02/28/06	37.75				62.71
	06/21/06	38.10				62.36
	10/04/06	39.35				61.11
	12/04/06	39.69				60.77
MW-12	01/06/03	39.64			99.61	59.97
	04/02/03	37.78				61.83
	08/26/03	33.78				65.83
	01/08/04	35.44				64.17
	05/10/04	35.75				63.86
	08/17/04	36.72				62.89
	01/14/05	37.18				62.43
	06/29/05	35.34				64.27
	09/16/05	Well Not Located				N/A
	02/28/06	37.12				62.49
	06/21/06	37.68				61.93
	10/04/06	38.79				60.82
	12/04/06	Not Measured				

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-13	01/06/03	42.87			100.39	57.52
	04/02/03	41.13				59.26
	08/26/03	37.20				63.19
	01/08/04	38.70				61.69
	05/10/04	39.27				61.12
	08/17/04	40.27				60.12
	01/14/05	40.12				60.27
	06/29/05	37.96				62.43
	09/16/05	40.11				60.28
	02/28/06	40.76				59.63
	10/04/06	40.91				59.48
	06/21/06	42.05				58.34
	12/04/06	Not Measured				
MW-14	01/06/03	43.66			98.89	55.23
	04/02/03	42.10				56.79
	08/26/03	38.39				60.50
	01/08/04	39.40				59.49
	05/10/04	40.06				58.83
	08/17/04	41.12				57.77
	01/14/05	40.75				58.14
	06/29/05	39.77				59.12
	09/16/05	40.65				58.24
	02/28/06	41.42				57.47
	06/21/06	41.52				57.37
	10/04/06	42.74				56.15
	12/04/06	Not Measured				
MW-15	01/06/03	44.97			100.18	55.21
	04/02/03	43.24				56.94
	08/26/03	39.58				60.60
	01/08/04	46.55				53.63
	05/10/04	41.19				58.99
	08/17/04	42.11				58.07
	01/14/05	43.06				57.12
	06/29/05	40.92				59.26
	09/16/05	41.80				58.38
	02/28/06	42.54				57.64
	06/21/06	42.64				57.54
	10/04/06	43.61				56.57
	12/04/06	Not Measured				
MW-16	01/06/03	31.07			89.91	58.84
	04/02/03	29.00				60.91
	08/26/03	27.54				62.37
	01/08/04	28.03				61.88
	05/10/04	27.83				62.08
	08/17/04	29.23				60.68
	01/14/05	28.92				60.99
	06/29/05	27.86				62.05
	09/16/05	29.23				60.68
	02/28/06	28.35				61.56
	06/21/06	29.89				60.02
	10/04/06	31.18				58.73
	12/04/06	Not Measured				

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-17	01/06/03	36.81			94.46	57.65
	04/02/03	34.63				59.83
	08/26/03	37.08				57.38
	01/08/04	32.56				61.90
	05/10/04	32.93				61.53
	08/17/04	34.87				59.59
	01/14/05	33.83				60.63
	06/29/05	32.60				61.86
	09/16/05	33.84				60.62
	02/28/06	34.21				60.25
	06/21/06	34.73				59.73
	10/04/06	35.78				58.68
	12/04/06	Not Measured				
MW-18	01/06/03	42.83			98.14	55.31
	04/02/03	41.26				56.88
	08/26/03	37.47				60.67
	01/08/04	38.14				60.00
	05/10/04	39.09				59.05
	08/17/04	35.43				62.71
	01/14/05	40.04				58.10
	06/29/05	38.93				59.21
	09/16/05	39.77				58.37
	02/28/06	40.54				57.60
	06/21/06	40.69				57.45
	10/04/06	41.64				56.50
	12/04/06	Not Located				
MW-19	01/06/03	45.14			98.27	53.13
	04/02/03	43.31				54.96
	08/26/03	39.24				59.03
	01/08/04	40.83				57.44
	05/10/04	41.47				56.80
	08/17/04	42.01				56.26
	01/14/05	42.18				56.09
	06/29/05	41.17				57.10
	09/16/05	42.25				56.02
	02/28/06	42.76				55.51
	06/21/06	42.97				55.30
	10/04/06	44.12				54.15
	12/04/06	Not Measured				
MW-20	01/06/03	28.09			88.35	60.26
	04/02/03	25.79				62.56
	08/26/03	24.98				63.37
	01/08/04	25.10				63.25
	05/10/04	28.41				59.94
	08/17/04	Well Not Located				N/A
	01/14/05	25.85				62.50
	06/29/05	24.63				63.72
	09/16/05	Well Not Located				N/A
	02/28/06	25.88				62.47
	06/21/06	Well Not Located				N/A
	10/04/06	Well Not Located				N/A
	12/04/06	Well Not Located				N/A

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
TW-1	01/06/03	34.33			94.72	60.39
	04/02/03	31.86				62.86
	08/26/03	27.96				66.76
	01/08/04	29.48				65.24
	05/10/04	30.31				64.41
	08/17/04	30.40				64.32
	01/14/05	30.75				63.97
	06/29/05	29.56				65.16
	09/16/05	30.76				63.96
	02/28/06	31.46				63.26
	06/21/06	31.64				63.08
	10/04/06	32.89				61.83
	12/04/06	33.03				61.69
TW-2	01/06/03	33.91			94.72	60.81
	04/02/03	32.04				62.68
	08/26/03	27.54				67.18
	01/08/04	29.45				65.27
	05/10/04	29.89				64.83
	08/17/04	30.87				63.85
	01/14/05	30.94				63.78
	06/29/05	29.52				65.20
	09/16/05	30.67				64.05
	02/28/06	31.36				63.36
	06/21/06	31.86				62.86
	10/04/06	32.94				61.78
	12/04/06	33.24				61.48
TW-3	01/06/03	38.81			99.21	60.40
	04/02/03	36.97				62.24
	08/26/03	32.80				66.41
	01/08/04	34.40				64.81
	05/10/04	34.79				64.42
	08/17/04	35.75				63.46
	01/14/05	38.75				60.46
	06/29/05	34.33				64.88
	09/16/05	30.59				68.62
	02/28/06	36.26				62.95
	06/21/06	36.68				62.53
	10/04/06	37.77				61.44
	12/04/06	38.07				61.14

N/A = Not Applicable

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphth-alene	Lead	EDB	Current Mass
MW-1*	01/06/03	911.00	9,810.00	2,660.00	18,650.00	250.00	743.00	56.00	<0.010	33,080.00
	04/02/03	590.00	2,900.00	960.00	7,400.00	27.00	200.00	10.00	<0.010	12,087.00
	08/26/03	610.00	1,200.00	640.00	4,800.00	100.00	500.00	33.00	<0.010	7,883.00
	01/08/04	620.00	850.00	340.00	3,600.00	100.00	500.00	5.00	0.17	6,215.17
	05/10/04	330.00	1,100.00	459.00	3,700.00	25.00	130.00	40.00	<0.010	5,784.00
	08/17/04	380.00	970.00	670.00	3,600.00	<25	120.00	63.00	<0.010	5,803.00
	01/14/05	270.00	1,440.00	900.00	5,620.00	<1.0	268.00	<5.0	0.09	8,498.09
	06/29/05	273.00	1,200.00	601.00	3,640.00	<20	136.00	29.50	<0.019	5,879.50
	09/16/05	23,300.00	59,100.00	4,700.00	28,400.00	<500	<1,000	NA	27.20 -	115,527.20
	02/28/06	Well Not Located								0.00
	06/21/06	19,500.00	59,900.00	4,070.00	24,400.00	<1,000	<2,000	47.60	17.70	107,870.00
	10/04/06	22,400.00	64,500.00	4,100.00	22,000.00	<1,000	<2,000	41.40	27.60	113,000.00
	12/04/06	18,900.00	60,700.00	3,830.00	22,000.00	<1,000	<2,000	NA	29.50	105,430.00
	SSTL	11.00	2,223.00	1,568.00	10,000.00	90.00	56.00	2.00	0.32	
	> SSTL	18,889.00	58,477.00	2,272.00	12,000.00	0.00	0.00	0.00	29.18	
MW-2	01/06/03	18,400.00	31,100.00	3,180.00	18,920.00	395.00	514.00	28.00	0.02	72,537.02
	04/02/03	13,000.00	1,800.00	1,600.00	9,500.00	480.00	500.00	190.00	160.00	27,230.00
	08/26/03	16,000.00	26,000.00	2,200.00	13,000.00	480.00	540.00	190.00	120.00	58,530.00
	01/08/04	18,000.00	33,000.00	2,200.00	12,000.00	880.00	1,200.00	1,000.00	150.00	68,430.00
	05/10/04	17,000.00	24,000.00	2,000.00	11,000.00	760.00	2,500.00	1,200.00	260.00	58,710.00
	08/17/04	19,000.00	29,000.00	2,900.00	14,000.00	1,200.00	2,500.00	2,100.00	500.00	71,200.00
	01/14/05	20,600.00	36,400.00	2,960.00	17,200.00	940.00	862.00	1,230.00	186.00	80,378.00
	06/29/05	18,500.00	27,300.00	2,600.00	14,400.00	952.00	<500	792.00	151.00	64,695.00
	09/16/05	24,300.00	34,500.00	2,870.00	16,500.00	1,130.00	645.00	NA	0.083	78,945.083
	02/28/06	24,400.00	36,200.00	2,700.00	12,400.00	847.00	<500	NA	310.00	76,857.00
	06/21/06	19,500.00	26,300.00	2,420.00	12,600.00	859.00	<1,000	1,010.00	320.00	63,009.00
	10/04/06	18,100.00	25,600.00	2,010.00	9,820.00	1,020.00	<1,000	1,480.00	684.00	58,694.00
	12/04/06	8,530.00	12,300.00	895.00	4,980.00	584.00	<1,000	NA	318.00	27,607.00
	SSTL	10.00	2,021.00	1,416.00	15,000.00	81.00	51.00	30.00	10.00	
	> SSTL	8,520.00	10,279.00	0.00	0.00	503.00	0.00	0.00	308.00	
MW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	350.00	<0.020	350.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	8.50	0.00	8.50
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
MW-4	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	12.00	<0.020	12.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
MW-5	01/06/03	<1.0	<1.0	<1.0	5.40	<1.0	<1.0	12.00	<0.020	17.40
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	5.40	<0.010	5.40
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	0.00

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-6	01/06/03	4,840.00	20,400.00	3,540.00	19,020.00	25.00	640.00	11.00	7.00	48,483.00
	04/02/03	2,600.00	11,000.00	1,800.00	9,000.00	250.00	1,200.00	54.00	2.60	25,906.60
	08/26/03	1,400.00	5,800.00	1,100.00	6,600.00	250.00	1,200.00	37.00	<0.010	16,387.00
	01/08/04	360.00	1,200.00	240.00	1,300.00	<1.0	77.00	<5.0	1.20	3,168.20
	05/10/04	640.00	2,200.00	300.00	1,900.00	<5.0	160.00	36.00	1.80	5,227.80
	08/17/04	1,100.00	2,200.00	730.00	3,400.00	<50	<250	13.00	<0.010	7,443.00
	01/14/05	1,070.00	2,960.00	718.00	3,990.00	<1.0	116.00	107.00	1.67	8,962.67
	06/29/05	413.00	500.00	290.00	1,480.00	<10	77.30	<5.0	0.55	2,760.85
	09/16/05	323.00	273.00	194.00	1,010.00	<10	63.60	NA	0.76	1,864.36
	02/28/06	1,020.00	1,150.00	619.00	2,980.00	<10	141.00	NA	1.00	5,911.00
	06/21/06	316.00	109.00	200.00	1,020.00	<10	81.20	15.50	0.42	1,742.12
	10/04/06	585.00	76.30	327.00	1,510.00	<10	75.80	26.70	0.75	2,601.55
	12/04/06	332.00	3,340.00	2,940.00	19,900.00	<10	937.00	NA	1.10	27,450.10
	SSTL	6.00	1,212.00	960.00	8,000.00	46.00	31.00	18.00	4.83	
	> SSTL	326.00	2,128.00	2,090.00	11,900.00	0.00	906.00	0.00	0.00	
MW-7	01/06/03	1,020.00	1.00	2,290.00	16,940.00	1.00	826.00	5.00	1.70	21,084.70
	04/02/03	240.00	110.00	120.00	38.00	210.00	120.00	240.00	1.70	1,079.70
	08/26/03	740.00	250.00	110.00	1,600.00	50.00	250.00	160.00	0.09	3,160.09
	01/08/04	630.00	13,000.00	2,400.00	25,000.00	100.00	1,000.00	5.00	3.50	42,138.50
	05/10/04	700.00	10,000.00	3,400.00	23,000.00	200.00	1,000.00	5.00	6.80	38,311.80
	08/17/04	23.00	49.00	21.00	140.00	<5.0	<25	19.00	<0.010	252.00
	01/14/05	565.00	9,180.00	3,570.00	24,400.00	<1.0	1,370.00	24.00	1.75	39,110.75
	06/29/05	582.00	7,030.00	3,480.00	23,100.00	<100	890.00	<5.0	1.70	35,083.70
	09/16/05	610.00	6,770.00	3,280.00	21,600.00	<50	1,040.00	NA	1.90	32,301.90
	02/28/06	178.00	4,760.00	2,480.00	19,300.00	<100	562.00	NA	1.20	27,281.20
	06/21/06	500.00	3,890.00	3,190.00	23,200.00	<100	916.00	23.90	0.86	31,720.76
	10/04/06	415.00	4,640.00	3,360.00	21,200.00	<100	781.00	22.60	1.60	30,420.20
	12/04/06	91.30	8.20	65.00	294.00	<5.0	16.30	NA	0.25	465.05
	SSTL	6.00	1,212.00	960.00	12,123.00	46.00	31.00	18.00	0.66	
	> SSTL	85.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-8	01/06/03	6,770.00	84,600.00	3,560.00	24,740.00	7.30	362.00	24.00	1.90	120,065.20
	04/02/03	8,600.00	46,000.00	3,500.00	23,000.00	200.00	1,000.00	49.00	190.00	82,539.00
	08/26/03	3,800.00	10,000.00	1,200.00	6,800.00	100.00	500.00	81.00	58.00	22,539.00
	01/08/04	5,600.00	22,000.00	3,400.00	20,000.00	100.00	1,300.00	18.00	4.70	52,422.70
	05/10/04	4,600.00	18,000.00	1,600.00	18,000.00	200.00	1,000.00	67.00	6.30	43,373.30
	08/17/04	10,000.00	37,000.00	2,900.00	20,000.00	<1,000	<5,000	27.00	63.00	69,990.00
	01/14/05	6,780.00	38,200.00	4,340.00	28,200.00	<1.0	1,600.00	<5.0	2.33	79,122.33
	06/29/05	6,490.00	31,000.00	4,320.00	27,500.00	<500	<1,000	<5.0	2.60	69,312.60
	09/16/05	14,300.00	50,000.00	4,640.00	28,000.00	54.60	1,040.00	NA	22.20	98,056.80
	02/28/06	17,100.00	52,500.00	3,950.00	21,800.00	<500	<1000	NA	17.00	95,367.00
	06/21/06	11,600.00	44,300.00	3,860.00	22,000.00	<1,000	<2,000	<10	6.70	81,766.70
	10/04/06	18,500.00	56,900.00	4,480.00	24,900.00	<1,000	<2000	33.50	16.50	104,830.00
	12/04/06	16,900.00	51,800.00	3,690.00	22,400.00	<1,000	<2000	NA	15.60	93,805.60
	SSTL	12.00	2,424.00	1,700.00	16,000.00	96.00	62.00	4.00	0.48	
	> SSTL	15,888.00	49,376.00	1,990.00	6,400.00	0.00	0.00	0.00	15.12	
MW-9	01/06/03	<1.0	2.20	5.70	579.00	<1.0	109.00	24.00	<0.020	719.90
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	36.00	<0.010	36.00
	05/10/04	Well Not Located								0.00
	08/17/04	540.00	12,000.00	2,800.00	23,000.00	<500	<2,500	19.00	8.40	38,367.40
	01/14/05	Removed from Sampling Schedule								0.00
	RBSL	5.00	4,000.00	700.00	10,000.00	40.00	25.00	15.00	0.05	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-10	01/08/03	7,980.00	24,900.00	3,540.00	18,180.00	25.00	299.00	36.00	78.00	55,037.00
	04/02/03	11,000.00	23,000.00	2,400.00	13,000.00	200.00	1,000.00	49.00	190.00	50,839.00
	08/26/03	12,000.00	33,000.00	3,200.00	17,000.00	250.00	1,200.00	210.00	450.00	67,310.00
	01/08/04	4,200.00	14,000.00	2,400.00	12,000.00	100.00	600.00	6.30	100.00	33,306.30
	05/10/04	8,600.00	21,000.00	2,400.00	14,000.00	<250	<1,200	5.70	210.00	46,215.70
	08/17/04	3,500.00	16,000.00	2,200.00	14,000.00	<500	<2,500	25.00	67.00	35,792.00
	01/14/05	10,200.00	34,600.00	3,160.00	18,400.00	<1.0	38.00	20.00	152.00	66,560.00
	06/29/05	9,040.00	26,000.00	3,040.00	16,600.00	<500	<1,000	6.30	116.00	54,801.30
	09/16/05	8,120.00	25,900.00	3,130.00	17,000.00	<200	<400	NA	143.00	54,293.00
	02/28/06	2,410.00	9,780.00	1,840.00	7,910.00	<200	<400	NA	15.90	21,955.90
	06/21/06	2,700.00	11,800.00	2,060.00	10,000.00	<200	<400	11.10	23.60	26,594.70
	10/04/06	3,400.00	13,900.00	2,130.00	10,500.00	<250	<500	50.90	43.40	30,024.30
	12/04/06	2,950.00	11,900.00	2,130.00	10,100.00	<250	<500	NA	38.00	27,118.00
	SSTL	5.00	1,819.00	1,274.00	18,185.00	73.00	46.00	21.00	9.00	
	> SSTL	2,941.00	10,021.00	856.00	0.00	0.00	0.00	0.00	29.00	
MW-11	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	7.80	6.00	<0.020	13.80
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	26.00	<0.010	26.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	33.00	0.29	33.29
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	46.00	<0.010	46.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	17.00	<0.010	17.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	10.00	<0.010	10.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	37.10	<0.019	37.10
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.07	0.07
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	30.10	<0.019	30.10
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	12.40	<0.019	12.40
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	5.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-12	01/06/03	720.00	17.20	13.40	1,550.00	<1.0	113.00	6.00	12.00	2,431.60
	04/02/03	12.00	<5.0	<1.0	1.80	<1.0	<5.0	38.00	0.24	52.04
	08/26/03	61.00	<5.0	<1.0	72.00	<1.0	5.50	37.00	0.37	165.87
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	0.015	0.015
	05/10/04	23.00	<5.0	<1.0	43.00	<1.0	<5.0	6.80	0.11	72.91
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	12.00	0.11	12.11
	01/14/05	74.20	<1.0	<1.0	67.60	<1.0	<5.0	6.00	0.23	148.03
	06/29/05	28.40	<1.0	<1.0	10.80	<1.0	<2.0	<5.0	0.027	39.227
	09/16/05	Well Not Located								0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	NA	0.018	0.018
	06/21/06	7.20	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	7.20
	10/04/06	17.70	<1.0	<1.0	<3.0	<1.0	<2.0	12.10	0.02	29.82
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.03	0.03
	SSTL	7.00	5.00	68.00	730.00	5.00	36.00	7.00	7.00	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-13	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	1.30	<5.0	<0.020	1.30
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	40.00	<0.010	40.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	45.00	<0.010	45.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	36.00	<0.010	36.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	10.90	<0.018	10.90
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	21.00	<0.019	21.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	5.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-14	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	39.00	<0.010	39.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	100.00	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	45.00	<0.010	45.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	19.00	<0.010	19.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	15.00	<0.020	15.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	6.40	<0.018	6.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.10	<0.019	5.10
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	5.00	0.510	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-15	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	9.00	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	36.00	<0.010	36.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	120.00	<0.010	120.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	48.00	<0.010	48.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	26.00	<0.010	26.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	8.00	<0.020	8.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	7.50	<0.018	7.50
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.038	0.038
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.032	0.032
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.046	0.046
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.50	9.400	9.400
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.110	0.110
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.050	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	
MW-16	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	18.00	<0.020	18.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	140.00	<0.010	140.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	13.00	<0.010	13.00
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-17	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	44.00	<0.020	44.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	17.00	<0.010	17.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	42.00	<0.010	42.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.020	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	7.30	<0.010	7.30
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	9.00	<0.020	9.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.40	<0.019	5.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.024	0.024
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.021	0.021
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	12.00	0.026	12.026
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.031	0.031
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.011	
MW-18	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	50.00	<0.010	50.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	100.00	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	97.00	<0.010	97.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.90	<0.010	9.90
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	17.00	<0.020	17.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.70	<0.018	8.70
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	9.10	<0.019	9.10
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	11.50	<0.019	11.50
	12/04/06	Well Not Located								
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-19	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	6.00	<0.020	6.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	18.00	<0.010	18.00
	01/08/04	<1.0	<5.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	18.00	<0.010	18.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-20	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	11.00	<0.020	11.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	130.00	<0.010	130.00
	05/10/04	Removed from Sampling Schedule								
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
TW-1	01/06/03	3,380.00	1,510.00	1,860.00	9,370.00	25.00	160.00	6.00	5.20	16,316.20
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	2,000.00	2,500.00	1,100.00	5,800.00	50.00	250.00	5.00	0.38	11,705.38
	05/10/04	Well Not Located								0.00
	08/17/04	67.00	<50	<10	59.00	<10	<50	30.00	0.52	156.52
	01/14/05	700.00	7.80	82.90	1,700.00	8.10	79.80	<5.0	0.47	2,579.07
	06/29/05	400.00	5.30	22.60	759.00	8.60	72.80	<5.0	0.41	1,268.71
	09/16/05	457.00	13.20	13.20	989.00	<10	60.80	NA	0.77	1,533.97
	02/28/06	95.60	13.30	<2.0	19.20	41.60	<4.0	NA	1.30	171.00
	06/21/06	986.00	11.80	105.00	1,980.00	14.20	153.00	<5.0	0.56	3,250.56
	10/04/06	1,090.00	23.30	174.00	2,530.00	<20	83.20	<5.0	1.20	3,901.70
	12/04/06	502.00	<20	67.00	1,540.00	<20	54.00	NA	0.90	2,163.90
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
TW-2	01/06/03	6,620.00	6,860.00	620.00	4,110.00	50.20	160.00	6.00	5.20	18,431.40
	04/02/03	3,300.00	1,600.00	220.00	2,000.00	50.00	250.00	10.00	1.10	7,331.10
	08/26/03	3,000.00	450.00	79.00	1,700.00	10.00	160.00	6.80	0.35	5,406.15
	01/08/04	2,800.00	460.00	14.00	1,000.00	22.00	34.00	5.40	1.10	4,336.50
	05/10/04	3,700.00	640.00	160.00	1,800.00	5.00	170.00	<5.0	1.20	6,476.20
	08/17/04	1,400.00	<500	<100	300.00	<100	<500	5.40	2.20	1,707.60
	01/14/05	3,100.00	605.00	175.00	1,490.00	31.90	172.00	<5.0	0.69	5,574.49
	06/29/05	3,670.00	241.00	148.00	1,710.00	16.10	228.00	<5.0	0.40	6,013.50
	09/16/05	3,540.00	876.00	237.00	1,010.00	36.90	160.00	NA	0.86	5,860.76
	02/28/06	629.00	17.20	22.00	1,130.00	<10	31.10	NA	0.34	1,729.64
	06/21/06	4,050.00	1,430.00	320.00	1,890.00	51.20	268.00	<5.0	1.00	8,000.20
	10/04/06	2,390.00	778.00	116.00	581.00	59.80	<100	<5.0	1.30	3,926.10
	12/04/06	1,580.00	1,040.00	76.00	463.00	66.00	<100	NA	0.85	3,225.85
	SSTL	5.00	6.00	5.00	180.00	5.00	18.00	2.00	0.05	
	> SSTL	1,575.00	1,032.00	71.00	283.00	61.00	0.00	0.00	1.25	
TW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	8.90	<5.0	0.13	9.03
	04/02/03	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<5.0	0.03	0.031
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<0.010	0.00
	05/10/04	2.90	11.00	1.80	12.00	<1.0	<5.0	<5.0	0.05	27.75
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	0.04	0.04
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.08	0.077
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.04	0.044
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	2.00	0.230	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Napth-thalene	Lead	EDB	Current Mass
Crook WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	10.00	<0.020	10.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	23.00	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.80	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	12.00	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	400.00	<1.0	<1.0	110.00	<1.0	12.00	<5.0	2.24	524.24
post		22.00	<1.0	<1.0	3.20	<1.0	<5.0	<5.0	0.09	25.29
pre	06/29/05	193.00	BDL	BDL	69.90	BDL	9.60	NA	NA	272.50
post		4.20	BDL	BDL	3.70	BDL	BDL	NA	NA	7.90
pre	09/16/05	12.60	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	12.646
post		342.00	<10	<10	<30	<10	<20	NA	3.80	345.80
pre	02/28/06	Not Sampled								0.00
post										0.00
pre	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.041	0.041
post		Not Sampled								0.00
pre	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.053	0.053
post		Not Sampled								0.00
pre	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.041	0.041
post		Not Sampled								
	SSTL	5.00	2.00	2.00	26.00	2.00	5.00	5.00	5.00	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Swift WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	10.00	<0.020	10.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	23.00	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.80	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	12.00	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	400.00	<1.0	<1.0	110.00	<1.0	12.00	<5.0	2.24	524.24
post		22.00	<1.0	<1.0	3.20	<1.0	<5.0	<5.0	0.09	25.29
pre	06/29/05	193.00	BDL	BDL	69.90	BDL	9.60	NA	NA	272.50
post		4.20	BDL	BDL	3.70	BDL	ND	NA	NA	7.90
pre	09/16/05	12.60	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.046	12.646
post		342.00	<10	<10	<30	<10	<20	NA	3.80	345.80
pre	02/28/06	169.00	<1.0	<1.0	88.60	<1.0	9.30	NA	NA	266.90
post		7.20	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	7.20
pre	06/21/06	182.00	<1.0	<1.0	114.00	<1.0	13.80	<5.0	1.30	311.10
post		9.30	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.049	9.349
pre	10/04/06	86.40	<1.0	<1.0	62.20	<2.0	6.00	<5.0	1.90	156.50
post		30.10	<1.0	<1.0	10.40	<1.0	<2.0	<5.0	0.180	40.680
pre	12/04/06	81.20	<1.0	<1.0	100.00	<1.0	11.30	NA	2.800	195.300
post		9.20	<1.0	<1.0	<1.0	<1.0	<1.0	NA	0.07	9.272
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	> SSTL	28.10	0.00	0.00	8.40	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naphth-alene	Lead	EDB	Current Mass
Hill WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	9.00	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	23.00	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	22.00	<0.010	22.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	6.10	<0.010	6.10
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
pre	01/14/05	2.80	<1.0	<1.0	<1.0	<1.0	<5.0	10.00	0.11	12.91
post		<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
pre	08/29/05	2.40	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.19	2.59
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.06	0.063
pre	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	0.051
post		2.60	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.16	2.76
pre	02/28/06	9.40	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	9.40
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	0.00
	06/21/06	11.10	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.35	11.45
		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.019	0.019
pre	10/04/06	68.10	<1.0	<1.0	8.50	<1.0	<2.0	<5.0	0.43	77.03
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.020	0.000
pre	12/04/06	25.10	<1.0	<1.0	3.30	<1.0	<2.0	NA	0.36	28.76
post		1.40	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.029	1.429
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Smith WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	5.20	<0.010	5.20
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	120.00	<0.010	120.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	41.00	<0.010	41.00
	01/14/05	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
	08/29/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	51.00	<0.020	51.00
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	57.40	<0.018	57.40
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	06/21/06	Not Sampled								0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	12/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	NA	<0.019	0.00
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	5.00	5.00	
TOTAL MASS								0.00	0.00	
TOTAL SSTL MASS		117.00	10,972.00	7,769.00	80,330.00	503.00	391.00	199.00	53.33	285,142.452
INITIAL MASS ABOVE SSTL										100,082.00
CURRENT MASS ABOVE SSTL										217,876.56
PERCENT TOTAL MASS REDUCTION ABOVE SSTL										219,348.421
										-0.676

µg/l - micrograms per liter
ND = Not Detected
NE = Not Established
NA = Not Analyzed
RBSL = Risk Based Screen Level
SSTL = Site Specific Target Levels
Bold denotes concentrations over their respective SSTL or RBSL.
* = 09/16/05 Sampling Event SSTL Data Utilized For Reduction Calculation.

- Concentration Reduction Calculation is as follows:

$$\frac{\text{[Initial Sample Concentration Above SSTL] - [Subsequent Sample Concentration Above SSTL]}}{\text{[Initial Sample Concentration Above SSTL]}} \times 100 = \%\ \text{Reduction}$$

APPENDIX C
Field Data Sheets

SEI Environmental

SC Monitoring Well Gauging Data Sheet

Site Name: Smith Grocery WO# 300401

Date 12.4.06

Well ID	Total Depth (feet)	Well Dia. (in.)	Depth to Product (feet)	Product Thickness (feet)	Depth to Water (feet)	Notes
MW-1	35.00				30.51	1130 12.4.06
MW-2	38.00				33.08	1205
MW-3	35.00				30.19	Gauge Only
MW-4	27.00		Cant find		—	Gauge Only
MW-5	30.00				27.73	Gauge Only
MW-6	37.00				32.06	1250
MW-7	36.00				31.84	1310 12.4.06
MW-8	38.00				33.24	1105 12.4.06
MW-9	36.00		Cant Find		—	Gauge Only —
MW-10	44.00				38.94	1046
MW-11	44.00				39.69	1102
MW-12	44.00					1152
MW-13	47.00					1122
MW-14	50.00					1240
MW-15	50.00					1313
MW-16	37.00					Gauge Only
MW-17	40.00					1225
MW-18	46.00		CANT	FND		
MW-19	50.00					1249
MW-20	35.00		Cant Find		—	Gauge Only —
TW-1	61.00				35.03	1225 12.4.06
TW-2	88.00				33.24	1145 12.4.06
TW-3	71.00				38.07	1030 12/5

WSW Samples: Crook (Pre/Post), Hill (Pre/Post), Swift (Pre/Post), & Smith (Pre/Post)

Analysis: EPA Method 8260B for BTEX, MTBE, and Naphthalene
EPA Method 8011 for EDB
LEAD

2-inch diameter well: Well Volume = (water column) x (0.163 gallon/foot)
4-inch diameter well: Well Volume = (water column) x (0.652 gallon/foot)
Purge amount = Well Volume x 3

Smith Pre @ 1350 12.4.06

SWIFT POST - 1500
PRE - 1505

HILL POST - 1415

CROOK PRE - 1530

APPENDIX D
Laboratory Analytical Results and Chain-of-Custody

Sample Summary

SEI-Columbia, SC

Smith's Grocery; York, SC
Project No: 300401

Job No: F45784

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F45784-1	12/04/06	11:30	ZS	12/07/06	AQ	Ground Water	MW-1
F45784-2	12/04/06	12:05	ZS	12/07/06	AQ	Ground Water	MW-2
F45784-3	12/04/06	12:50	ZS	12/07/06	AQ	Ground Water	MW-6
F45784-4	12/04/06	13:10	ZS	12/07/06	AQ	Ground Water	MW-7
F45784-5	12/04/06	11:05	ZS	12/07/06	AQ	Ground Water	MW-8
F45784-6	12/04/06	12:25	ZS	12/07/06	AQ	Ground Water	TW-1
F45784-7	12/04/06	11:45	ZS	12/07/06	AQ	Ground Water	TW-2
F45784-8	12/04/06	13:50	ZS	12/07/06	AQ	Ground Water	SMITH PRE
F45784-9	12/05/06	15:30	ZS	12/07/06	AQ	Ground Water	CROOK PRE
F45784-10	12/05/06	15:05	ZS	12/07/06	AQ	Ground Water	SWIFT PRE
F45784-11	12/05/06	15:00	ZS	12/07/06	AQ	Ground Water	SWIFT POST
F45784-12	12/05/06	14:20	ZS	12/07/06	AQ	Ground Water	HILL PRE
F45784-13	12/05/06	14:15	ZS	12/07/06	AQ	Ground Water	HILL POST

Sample Summary
(continued)

SEI-Columbia, SC

Smith's Grocery; York, SC
Project No: 300401

Job No: F45784

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F45784-14	12/05/06	12:49	ZS	12/07/06	AQ	Ground Water	MW-19
F45784-15	12/05/06	12:25	ZS	12/07/06	AQ	Ground Water	MW-17
F45784-16	12/05/06	12:40	ZS	12/07/06	AQ	Ground Water	MW-14
F45784-17	12/05/06	13:13	ZS	12/07/06	AQ	Ground Water	MW-15
F45784-18	12/05/06	11:52	ZS	12/07/06	AQ	Ground Water	MW-12
F45784-19	12/05/06	10:30	ZS	12/07/06	AQ	Ground Water	TW-3
F45784-20	12/05/06	10:46	ZS	12/07/06	AQ	Ground Water	MW-10
F45784-21	12/05/06	11:22	ZS	12/07/06	AQ	Ground Water	MW-13
F45784-22	12/05/06	11:02	ZS	12/07/06	AQ	Ground Water	MW-11

003/013
SEI ENVIRONMENTAL INC. → RAL SEI
12/06/06 16:00 FAX 704 596 8605

CHAIN OF CUSTODY

ACCUTEST.

4405 Vineland Rd., Suite C15
Orlando, FL 32811
407.425.6700, fax 407.425.0707

Accutest Job #:

Accutest Control #:

Client Information

Name: SEI Environmental
Address: 5100 Reagan Dr., Suite 7
City: Charlotte State: NC Zip: 28206
Send Report to:
Phone #: 704-596-8624

Facility Information

Project Name: Smith Grocery
Location:
Project No.:
FAX #:

Analytical Information

Field ID / Point of Collection	Collection: Date	Collection: Time	Sampled By	Matrix	# of bottles	Preservation: HNO3	Preservation: NaOH	Preservation: HCl	Preservation: H2SO4	Preservation: Other	EPA method 8260B for BTEX, MTBE, & Naphthalene	EPA method 504.1 for EDB
MW-1	12.4.6	1150	ZS	GW	6	3				3	X	X
MW-2		1205									X	X
MW-6		1250									X	X
MW-7		1310									X	X
MW-8		1105									X	X
TW-1		1225									X	X
TW-2		1145									X	X
Smith Pre	12.4.6	1350	ZS	GW	6	3				3	X	X

Turnaround Information

- [x] 21 Day Standard
- [ ] 14 Day
- [ ] 7 Days *EMERGENCY*
- [ ] Other _____ (Days)

Approved By:

RUSH TAT is for FAX data
Data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Zeph C Smith	12.6.6/1500	1	2		2
3			3	4		4
5			5	Seal #	Preserved where applica ☐	On Ice: ☐

Revised 09/2005 RS

005/013
SEI ENVIRONMENTAL, INC. → RAL SEI
12/06/06 16:00 FAX 704 596 8605

CHAIN OF CUSTODY

ACCUTEST
4405 Vineland Rd., Suite C15
Orlando, FL 32811
407.425.6700, fax 407.425.0707

Accutest Job #:

Accutest Control #:

Client Information

Name: SEI Environmental
Address: 5100 Reagan Dr., Suite 7
City: Charlotte State: NC Zip: 28206
Send Report to:
Phone #: 704-596-8624

Facility Information

Project Name: Smith Grocery
Location: 3176 Charlotte Hwy York, SC
Project No.:
FAX #:

Analytical Information

Field ID / Point of Collection	Collection: Date	Time	Sampled By	Matrix	# of bottles	Preservation: HCl	NaOH	HNO3	H2SO4	Soil Kit	EPA method 8260B for BTEX, MTBE, & Naphthalene	EPA method 8011 for EDB
Crook Pre	12.5.06	1530	RR	GW	6	3				3	X	X
Swift Pre		1505									X	X
Swift Post		1500									X	X
Hill Pre		1420									X	X
Hill Post	↓	1415	↓	↓	↓	↓				↓	X	X

Turnaround Information

- [x] 7 Day Standard — Approved By:
- [ ] 14 Day
- [ ] 7 Days EMERGENCY
- [ ] Other 1 (Days)

RUSH TAT is for FAX data
Data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By: 1	Relinquished By: 2	Date Time:	Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by Sampler: 5	Date Time:	Received By: 5	Seal #	Preserved where applic. ☐	On Ice: ☐

Revised 09/2005 RS

CHAIN OF CUSTODY

ACCUTEST

4405 Vineland Rd., Suite C15
Orlando, FL 32811
407.425.6700, fax 407.425.0707

Accutest Job #:

Accutest Control #:

Client Information

Name: SEI Environmental
Address: 5100 Reagan Dr., Suite 7
City: Charlotte State: NC Zip: 28206
Send Report to:
Phone #: 704-896-8624

Facility Information

Project Name: Smith Grocery
Location: 8176 Charlotte Hwy York, SC
Project No.:
FAX #:

Analytical Information

Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Preservation: HCL	NaOH	HNO3	H2SO4	Other	EPA method 8260B for BTEX, MTBE, & Naphthalene	EPA method 8011 for EDB
MW-19	12-5-06	1249	RR	GW	6	3				3	X	X
MW-17		1225									X	X
MW-14		1240									X	X
MW-15		1313									X	X
MW-12		1152									X	X
TW-3		1030									X	X
MW-10		1046									X	X
MW-13		1122									X	X
MW-11		1102									X	X

Turnaround Information

- [x] 7 Day Standard
- [ ] 14 Day
- [ ] 7 Days EMERGENCY
- [ ] Other 1 (Days)

Approved By:

RUSH TAT is for FAX data
Data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		1	2		2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by Sampler:	Date Time:	Received By:	Seal #	Preserved where applic	On Ice:
5		5		☐	☐

Revised 09/2005 RS

12/06/06 16:00 FAX 704 896 8606 SEI ENVIRONMENTAL INC. → KAL SEI 004/013

CORRECTIVE ACTION SYSTEM EVALUATION REPORT
June through September 2006

Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

PREPARED FOR:

Ms. Louis Smith
Smith's Grocery
3176 Charlotte Highway
York, South Carolina 29745

RECEIVED
OCT 23 2006
UNDERGROUND STORAGE
TANK PROGRAM

PREPARED BY:

SEI ENVIRONMENTAL, INC.
130 Penmarc Drive, Suite 108
Raleigh, North Carolina 27603-2434
UST Site Rehabilitation Contractor No. 354

October 19, 2006

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: August 18, 2006
For Period Covering: June 21, 2006
Facility Name : Smith's Grocery
UST Permit Number: 09322
County: York
Latitude: N 35°02'30.59"

Monitoring Report Number: 10
to October 4, 2006
Street Address: 176 Charlotte Highway (49)
City: York, South Carolina
Zip Code: 29745
Longitude: W 81°08'47.98"

Submitted by UST Owner/Operator:

Name: Louis Smith
Company: Smith's Grocery
Address: 3176 Charlotte Highway
City: York State: SC
Zip Code: 29745
Telephone: (803) 684-6289
SEI Project Number: 300401

Prepared by Consultant/Contractor:

Name: Chris L. Boggs, P.G.
Company: SEI Environmental, Inc.
Address: 130 Penmarc Drive, Suite 108
City: Raleigh State: NC
Zip Code: 27603
Telephone: (919) 832-2535
UST Site Rehabilitation Contractor No. 354

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: Chris L. Boggs, P.G.
SC Reg. No. 2101
Signature:
Date: 10/19/06

TABLE OF CONTENTS

LIMITATIONS iii
1.0 INTRODUCTION 1
2.0 FIELD MEASUREMENTS AND SAMPLING 1
2.1 GROUNDWATER SAMPLING 1, 2
2.2 WATER SUPPLY WELL SAMPLING 2, 3
3.0 LABORATORY ANALYTICAL RESULTS 3
3.1 GROUNDWATER ANALYTICAL RESULTS 3
3.2 WATER SUPPLY WELL ANALYTICAL RESULTS 3
3.3 SITE SPECIFIC TARGET LEVELS 3, 4
4.0 REMEDIATION SYSTEM EFFECTIVENESS 4
5.0 CONCLUSIONS AND RECOMMENDATIONS 4, 5

LIST OF TABLES

TABLE 1 Historical Groundwater Elevation and Product Thickness Data
TABLE 2 Historical Groundwater Analytical Results

LIST OF FIGURES

FIGURE 1 USGS Quadrangle Map
FIGURE 2 Site Map
FIGURE 3 Potentiometric Surface Map, October 4, 2006
FIGURE 4 Groundwater Chemicals of Concern Site Map, October 4, 2006

LIST OF APPENDICES

APPENDIX A Figures
APPENDIX B Tables
APPENDIX C Field Data Information Sheets for Groundwater Sampling
APPENDIX D Laboratory Reports and Chain-of-Custody Forms
APPENDIX E Disposal Manifest for Purged Groundwater

LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Geologist registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by AccuTest Laboratories.

1.0 INTRODUCTION

Smith's Grocery is a convenience and retail fuel store located at 3176 Charlotte Highway (SC Highway 49) in York, York County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- May 10, 2004 – Groundwater Sampling Event
- August 17, 2004 – Groundwater Sampling Event
- January 14, 2005 – Groundwater Sampling Event
- June 29, 2005 – Groundwater Sampling Event
- September 16, 2005 – Groundwater Sampling Event
- February 28, 2006 – Groundwater Sampling Event
- June 21, 2006 – Groundwater Sampling Event
- October 4, 2006 – Groundwater Sampling Event

On October 4, 2006, seventeen groundwater monitoring wells and four water supply wells were sampled in accordance with the requirements of the PFP contract. This report provides details of the groundwater sampling event.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On June 21, 2006, groundwater samples were collected from seventeen (MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-17 through MW-19, and TW-1 through TW-3) of twenty-three existing groundwater monitoring wells. Six (MW-3 through MW-5, MW-9, MW-16, and MW-20) have been removed from the sampling schedule.

Prior to sampling, twenty-one (MW-1 through MW-3, MW-5 through MW-19, and TW-1 throughTW-3) of the twenty-three groundwater monitoring wells were gauged utilizing an oil-water interface probe to measure depth to groundwater, and to detect any free product present.

Three (MW-4, MW-9, and MW-20) monitoring wells were not gauged because they could not be located. The depth to groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction. Figure 2 in Appendix A is a site map depicting monitoring well locations.

Free product was not currently and has not historically been detected in any of the monitoring wells. Figure 3 in Appendix A presents a groundwater potentiometric map for the current sampling event. The latest groundwater data indicate that groundwater flow at the site is predominately east to southeast with a hydraulic gradient of 0.0202 feet per foot between monitoring wells MW-7 and MW-19. This flow direction is consistent with previous determinations of groundwater movement. Table 1 in Appendix B summarizes groundwater measurement data.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead. Appendix C contains Field Data Information Sheets for Groundwater Sampling.

2.2 Water Supply Well Sampling

On October 4, 2006, groundwater samples were collected from four (Crook, Smith, Swift and Hill) water supply wells. Three water supply wells (Crook, Hill, and Swift) are fitted with granular activated carbon (GAC) filters. As such, samples were collected from the Swift and Hill wells before (pre) and after (post) the GAC filters. The Crook well was not sampled in this manner during the current sampling event. Prior to sampling, the water was allowed to run for at least ten minutes. The samples were placed into laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc.

Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

Chemicals of Concern (CoC) were detected in ten (MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, MW-17 and TW-2) of the seventeen monitoring wells sampled at concentrations exceeding their respective SSTL. Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.2 Water Supply Well Analytical Results

CoC were detected in two (Swift and Hill) of the pre-GAC filter samples collected at concentrations exceeding their respective SSTLs. The post-GAC filter sample for the Swift water supply well exceeded SSTLs for benzene and xylenes. Figure 4 in Appendix A is a site map presenting water supply well locations and their CoC concentrations. Table 2 in Appendix B summarizes historical water supply well analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.3 Site Specific Target Levels

Site Specific Target Levels (SSTLs) have been designated for sixteen (MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-17 through MW-19, TW-2, and TW-3) monitoring wells and all four (Crook, Swift, Hill, and Smith) water supply wells. For three (Crook, Swift, and Hill) water supply wells with GAC filters, the SSTLs apply to the pre-GAC filter samples. Table 4 in Appendix B summarizes SSTL information.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target concentrations for seven (benzene, toluene, ethylbenzene, xylenes, MTBE, naphthalene, lead, and EDB) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial January 6, 2003, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. Monitoring well MW-1 was not located during the current sampling event. Consequently, SSTL data for monitoring well MW-1 from the September 16, 2005, groundwater sampling event was utilized for the concentration reduction calculation. The formula is a follows:

$$\left[\frac{\text{[01/06/03 Sample Concentration Above SSTL]} - \text{[Current Sample Concentration Above SSTL]}}{\text{[01/06/03 Sample Concentration Above SSTL]}}\right] * 100 = \text{\% Reduction}$$

Using the current analytical results, the concentration reduction is -22.182%.

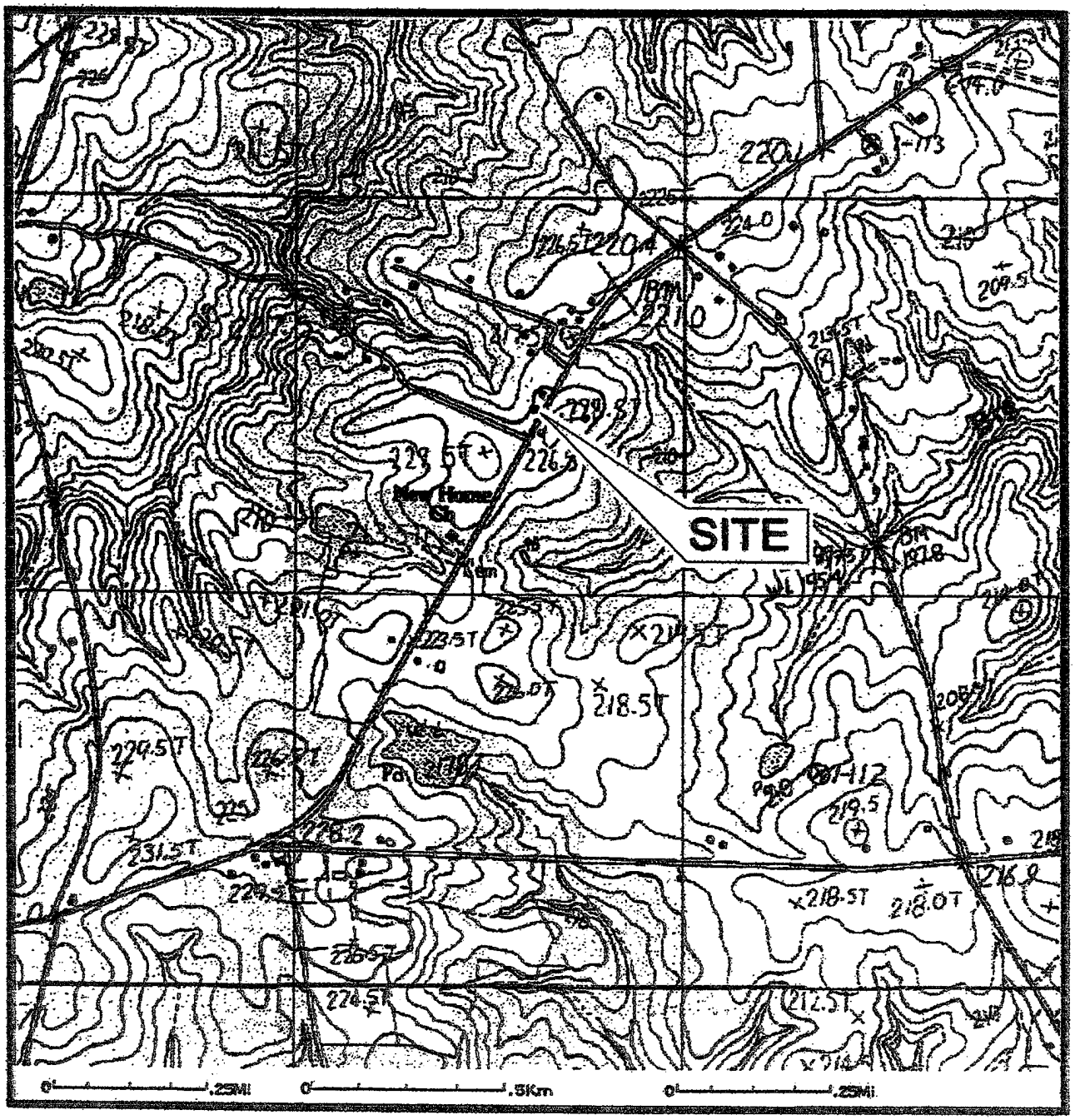
5.0 CONCLUSIONS

The groundwater flow direction at the time of the October 4, 2006 sampling event was towards the east, southeast with a hydraulic gradient of 0.0202 feet per foot. Free product was not detected. CoC were detected in eight monitoring wells and two water supply wells above their respective SSTLs. The percent concentration reduction has been calculated at -22.182%.

SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. The next sampling event will occur in September 2006. SEI is currently evaluating alternative methods of active corrective action to be implemented at the site in order to proceed with the remediation effort.

APPENDIX A
FIGURES

7.5 MINUTE SERIES(TOPOGRAPHIC)

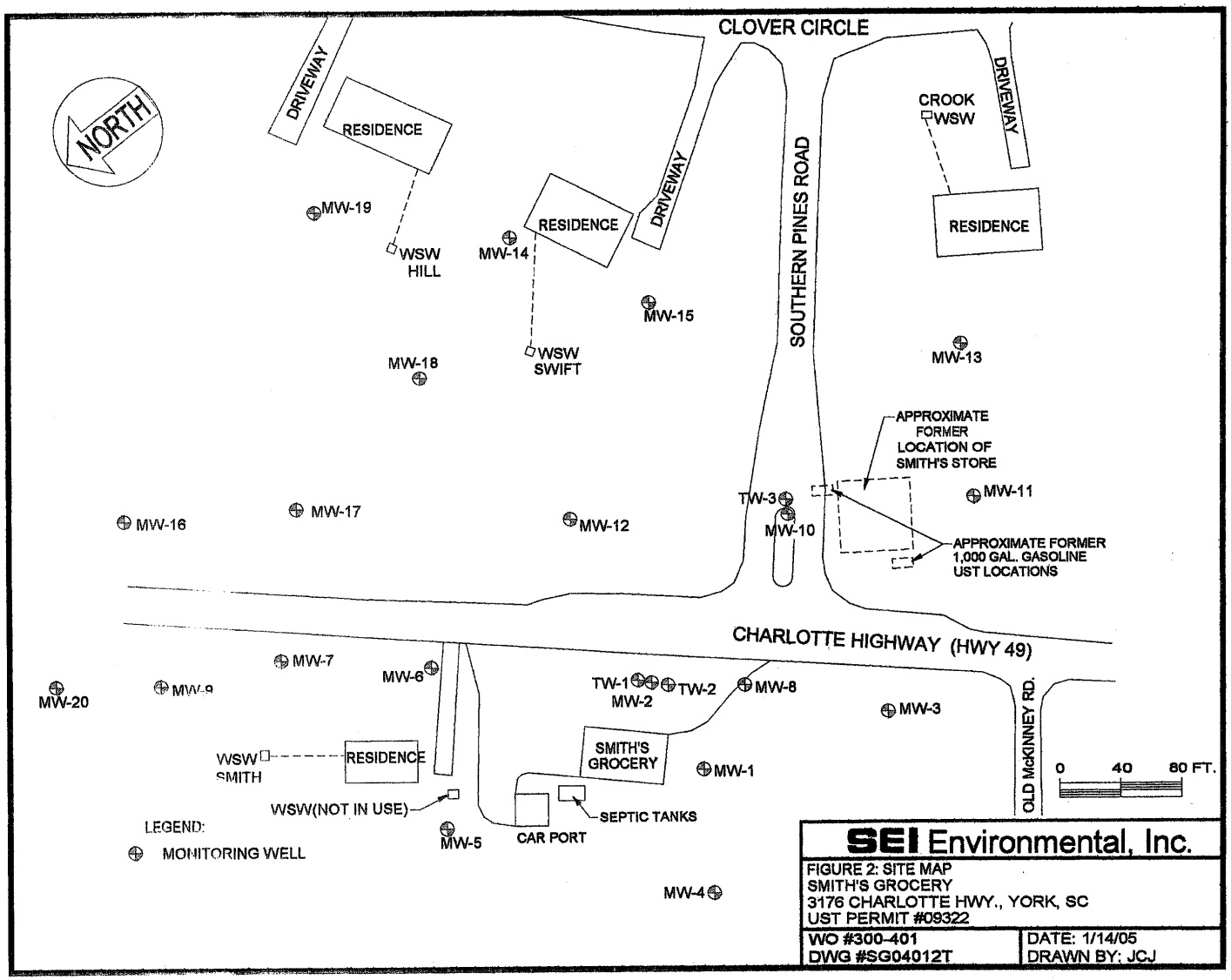


NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP(U.S.G.S. TOPO)
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

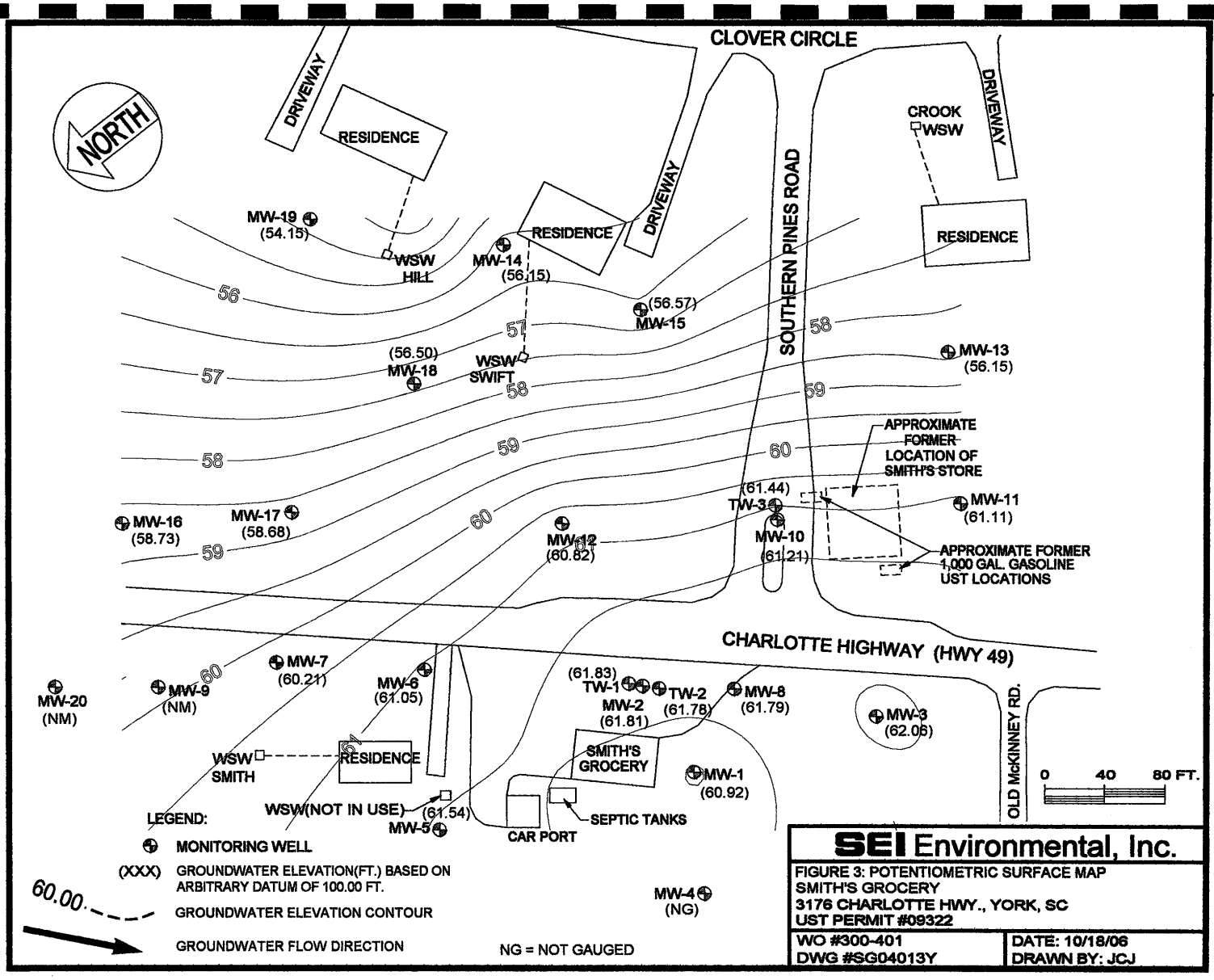
W.O. #: 300-401 DWG.#	DATE: 9/8/05 DRAWN BY: JCJ

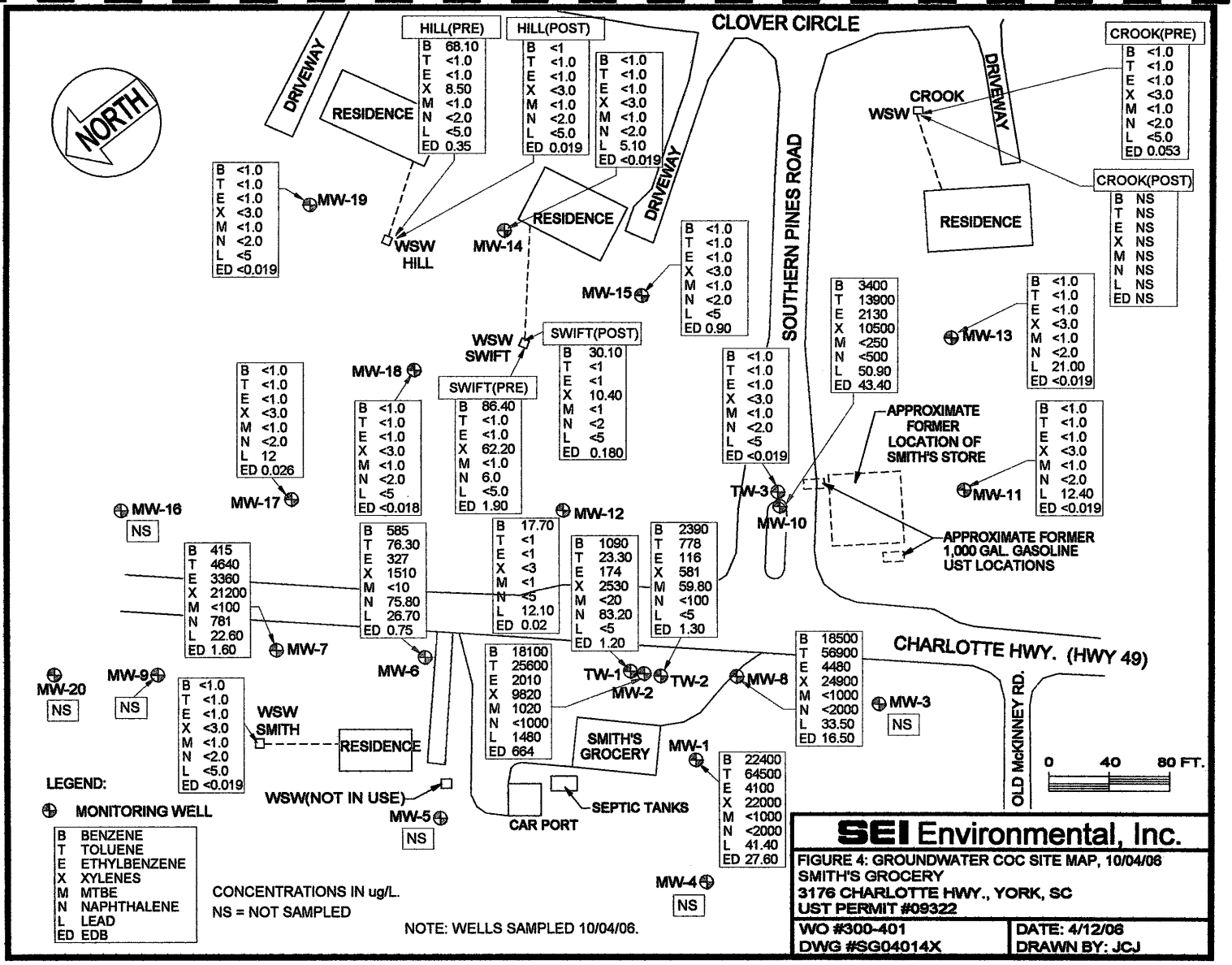


SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 1/14/05
DWG #SG04012T	DRAWN BY: JCJ


CLOVER CIRCLE
NORTH
DRIVEWAY
RESIDENCE
DRIVEWAY
SOUTHERN PINES ROAD
CROOK WSW
DRIVEWAY
RESIDENCE
MW-19 (54.15)
WSW HILL
MW-14 (56.15)
RESIDENCE
(56.57) MW-15
(56.50) MW-18
WSW SWIFT
MW-13 (56.15)
APPROXIMATE FORMER LOCATION OF SMITH'S STORE
(61.44) TW-3
MW-11 (61.11)
MW-10 (61.21)
MW-16 (58.73)
MW-17 (58.68)
MW-12 (60.82)
APPROXIMATE FORMER 1,000 GAL. GASOLINE UST LOCATIONS
CHARLOTTE HIGHWAY (HWY 49)
MW-20 (NM)
MW-9 (NM)
MW-7 (60.21)
MW-6 (61.05)
(61.83) TW-1
MW-2 (61.81)
TW-2 (61.78)
MW-8 (61.79)
MW-3 (62.06)
OLD McKINNEY RD.
WSW SMITH
RESIDENCE
SMITH'S GROCERY
MW-1 (60.92)
0 40 80 FT.
WSW(NOT IN USE)
(61.54) MW-5
SEPTIC TANKS
CAR PORT
LEGEND:
MONITORING WELL
(XXX) GROUNDWATER ELEVATION(FT.) BASED ON ARBITRARY DATUM OF 100.00 FT.
60.00 GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
NG = NOT GAUGED
MW-4 (NG)
SEI Environmental, Inc.
FIGURE 3: POTENTIOMETRIC SURFACE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322
WO #300-401
DWG #SG04013Y
DATE: 10/18/06
DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP, 10/04/06
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 4/12/06
DWG #SG04014X	DRAWN BY: JCJ

APPENDIX B
TABLES

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-1	01/06/03	29.88			91.16	61.28
	04/02/03	28.05				63.11
	08/26/03	24.07				67.09
	01/08/04	25.46				65.70
	05/10/04	26.90				64.26
	08/17/04	27.03				64.13
	01/14/05	27.06				64.10
	06/29/05	25.67				65.49
	09/16/05	28.10				63.06
	02/28/06	Well Not Located				N/A
	06/21/06	29.16				62.00
	10/04/06	30.24				60.92
MW-2	01/06/03	33.76			94.57	60.81
	04/02/03	31.92				62.65
	08/26/03	27.81				66.76
	01/08/04	29.40				65.17
	05/10/04	26.68				67.89
	08/17/04	30.71				63.86
	01/14/05	30.78				63.79
	06/29/05	29.35				65.22
	09/16/05	30.61				63.96
	02/28/06	31.19				63.38
	06/21/06	31.67				62.90
	10/04/06	32.76				61.81
MW-3	01/06/03	30.87			91.91	61.04
	04/02/03	29.02				62.89
	08/26/03	25.98				65.93
	01/08/04	26.46				65.45
	05/10/04	28.83				63.08
	08/17/04	27.76				64.15
	01/14/05	27.86				64.05
	06/29/05	26.39				65.52
	09/16/05	27.67				64.24
	02/28/06	29.10				62.81
	06/21/06	28.79				63.12
	10/04/06	29.85				62.06
MW-4	01/06/03	24.58			86.20	61.62
	04/02/03	22.73				63.47
	08/26/03	15.07				71.13
	01/08/04	20.73				65.47
	05/10/04	25.94				60.26
	08/17/04	Well Not Located				N/A
	01/14/05	21.83				64.37
	06/29/05	20.51				65.69
	09/16/05	Well Not Located				N/A
	02/28/06	Well Not Located				N/A
	06/21/06	Well Not Located				N/A
	10/04/06	Well Not Located				N/A

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-5	01/06/03	27.96			89.29	61.33
	04/02/03	25.00				64.29
	08/26/03	22.70				66.59
	01/08/04	24.49				64.80
	05/10/04	25.57				63.72
	08/17/04	25.75				63.54
	01/14/05	25.44				63.85
	06/29/05	24.30				64.99
	09/16/05	25.86				63.43
	02/28/06	27.63				61.66
	06/21/06	26.64				62.65
	10/04/06	27.75				61.54
MW-6	01/06/03	33.57			93.91	60.34
	04/02/03	31.66				62.25
	08/26/03	27.51				66.40
	01/08/04	29.58				64.33
	05/10/04	29.91				64.00
	08/17/04	29.50				64.41
	01/14/05	30.77				63.14
	06/29/05	29.74				64.17
	09/16/05	30.81				63.10
	02/28/06	31.07				62.84
	06/21/06	31.72				62.19
	10/04/06	32.86				61.05
MW-7	01/06/03	31.57			91.68	60.11
	04/02/03	29.40				62.28
	08/26/03	26.88				64.80
	01/08/04	28.40				63.28
	05/10/04	27.78				63.90
	08/17/04	29.85				61.83
	01/14/05	29.28				62.40
	06/29/05	28.17				63.51
	09/16/05	29.66				62.02
	02/28/06	29.50				62.18
	06/21/06	30.48				61.20
	10/04/06	31.47				60.21
MW-8	01/06/03	33.84			94.72	60.88
	04/02/03	32.02				62.70
	08/26/03	27.58				67.14
	01/08/04	29.47				65.25
	05/10/04	29.90				64.82
	08/17/04	30.86				63.84
	01/14/05	30.85				63.87
	06/29/05	29.50				65.22
	09/16/05	30.76				63.96
	02/28/06	31.30				63.42
	06/21/06	31.84				62.88
	10/04/06	32.93				61.79

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-9	01/06/03	30.41			90.54	60.13
	04/02/03	28.20				62.34
	08/26/03	26.10				64.44
	01/08/04	27.33				63.21
	05/10/04	28.69				61.85
	08/17/04	29.50				61.04
	01/14/05	28.14				62.40
	06/29/05	26.97				63.57
	09/16/05	26.38				64.16
	02/28/06	Well Not Located				N/A
	06/21/06	27.13				63.41
	10/04/06	Well Not Located				NA
MW-10	01/06/03	39.71			99.77	60.06
	04/02/03	37.77				62.00
	08/26/03	33.36				66.41
	01/08/04	35.04				64.73
	05/10/04	35.50				64.27
	08/17/04	36.49				63.28
	01/14/05	36.66				63.11
	06/29/05	35.04				64.73
	09/16/05	36.34				63.43
	02/28/06	37.02				62.75
	06/21/06	37.40				62.37
	10/04/06	38.56				61.21
MW-11	01/06/03	40.37			100.46	60.09
	04/02/03	38.36				62.10
	08/26/03	33.88				66.58
	01/08/04	35.70				64.76
	05/10/04	36.19				64.27
	08/17/04	37.17				63.29
	01/14/05	36.79				63.67
	06/29/05	35.68				64.78
	09/16/05	37.11				63.35
	02/28/06	37.75				62.71
	06/21/06	38.10				62.36
	10/04/06	39.35				61.11
MW-12	01/06/03	39.64			99.61	59.97
	04/02/03	37.78				61.83
	08/26/03	33.78				65.83
	01/08/04	35.44				64.17
	05/10/04	35.75				63.86
	08/17/04	36.72				62.89
	01/14/05	37.18				62.43
	06/29/05	35.34				64.27
	09/16/05	Well Not Located				N/A
	02/28/06	37.12				62.49
	06/21/06	37.68				61.93
	10/04/06	38.79				60.82

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-13	01/06/03	42.87			100.39	57.52
	04/02/03	41.13				59.26
	08/26/03	37.20				63.19
	01/08/04	38.70				61.69
	05/10/04	39.27				61.12
	08/17/04	40.27				60.12
	01/14/05	40.12				60.27
	06/29/05	37.96				62.43
	09/16/05	40.11				60.28
	02/28/06	40.76				59.63
	10/04/06	40.91				59.48
	06/21/06	42.05				58.34
MW-14	01/06/03	43.66			98.89	55.23
	04/02/03	42.10				56.79
	08/26/03	38.39				60.50
	01/08/04	39.40				59.49
	05/10/04	40.06				58.83
	08/17/04	41.12				57.77
	01/14/05	40.75				58.14
	06/29/05	39.77				59.12
	09/16/05	40.65				58.24
	02/28/06	41.42				57.47
	06/21/06	41.52				57.37
	10/04/06	42.74				56.15
MW-15	01/06/03	44.97			100.18	55.21
	04/02/03	43.24				56.94
	08/26/03	39.58				60.60
	01/08/04	46.55				53.63
	05/10/04	41.19				58.99
	08/17/04	42.11				58.07
	01/14/05	43.06				57.12
	06/29/05	40.92				59.26
	09/16/05	41.80				58.38
	02/28/06	42.54				57.64
	06/21/06	42.64				57.54
	10/04/06	43.61				56.57
MW-16	01/06/03	31.07			89.91	58.84
	04/02/03	29.00				60.91
	08/26/03	27.54				62.37
	01/08/04	28.03				61.88
	05/10/04	27.83				62.08
	08/17/04	29.23				60.68
	01/14/05	28.92				60.99
	06/29/05	27.86				62.05
	09/16/05	29.23				60.68
	02/28/06	28.35				61.56
	06/21/06	29.89				60.02
	10/04/06	31.18				58.73

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-17	01/06/03	36.81			94.46	57.65
	04/02/03	34.63				59.83
	08/26/03	37.08				57.38
	01/08/04	32.56				61.90
	05/10/04	32.93				61.53
	08/17/04	34.87				59.59
	01/14/05	33.83				60.63
	06/29/05	32.60				61.86
	09/16/05	33.84				60.62
	02/28/06	34.21				60.25
	06/21/06	34.73				59.73
	10/04/06	35.78				58.68
MW-18	01/06/03	42.83			98.14	55.31
	04/02/03	41.26				56.88
	08/26/03	37.47				60.67
	01/08/04	38.14				60.00
	05/10/04	39.09				59.05
	08/17/04	35.43				62.71
	01/14/05	40.04				58.10
	06/29/05	38.93				59.21
	09/16/05	39.77				58.37
	02/28/06	40.54				57.60
	06/21/06	40.69				57.45
	10/04/06	41.64				56.50
MW-19	01/06/03	45.14			98.27	53.13
	04/02/03	43.31				54.96
	08/26/03	39.24				59.03
	01/08/04	40.83				57.44
	05/10/04	41.47				56.80
	08/17/04	42.01				56.26
	01/14/05	42.18				56.09
	06/29/05	41.17				57.10
	09/16/05	42.25				56.02
	02/28/06	42.76				55.51
	06/21/06	42.97				55.30
	10/04/06	44.12				54.15
MW-20	01/06/03	28.09			88.35	60.26
	04/02/03	25.79				62.56
	08/26/03	24.98				63.37
	01/08/04	25.10				63.25
	05/10/04	28.41				59.94
	08/17/04	Well Not Located				N/A
	01/14/05	25.85				62.50
	06/29/05	24.63				63.72
	09/16/05	Well Not Located				N/A
	02/28/06	25.88				62.47
	06/21/06	Well Not Located				N/A
	10/04/06	Well Not Located				N/A

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
TW-1	01/06/03	34.33			94.72	60.39
	04/02/03	31.86				62.86
	08/26/03	27.96				66.76
	01/08/04	29.48				65.24
	05/10/04	30.31				64.41
	08/17/04	30.40				64.32
	01/14/05	30.75				63.97
	06/29/05	29.56				65.16
	09/16/05	30.76				63.96
	02/28/06	31.46				63.26
	06/21/06	31.64				63.08
	10/04/06	32.89				61.83
TW-2	01/06/03	33.91			94.72	60.81
	04/02/03	32.04				62.68
	08/26/03	27.54				67.18
	01/08/04	29.45				65.27
	05/10/04	29.89				64.83
	08/17/04	30.87				63.85
	01/14/05	30.94				63.78
	06/29/05	29.52				65.20
	09/16/05	30.67				64.05
	02/28/06	31.36				63.36
	06/21/06	31.86				62.86
	10/04/06	32.94				61.78
TW-3	01/06/03	38.81			99.21	60.40
	04/02/03	36.97				62.24
	08/26/03	32.80				66.41
	01/08/04	34.40				64.81
	05/10/04	34.79				64.42
	08/17/04	35.75				63.46
	01/14/05	38.75				60.46
	06/29/05	34.33				64.86
	09/16/05	30.59				68.62
	02/28/06	36.26				62.95
	06/21/06	36.68				62.53
	10/04/06	37.77				61.44

N/A = Not Applicable

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-1*	01/06/03	**911.00**	**9,810.00**	**2,660.00**	**18,650.00**	**250.00**	**743.00**	**56.00**	<0.010	33,080.00
	04/02/03	**590.00**	**2,900.00**	960.00	7,400.00	27.00	**200.00**	**10.00**	<0.010	12,087.00
	08/26/03	**610.00**	1,200.00	640.00	4,800.00	**100.00**	**500.00**	**33.00**	<0.010	7,883.00
	01/08/04	**620.00**	850.00	340.00	3,800.00	**100.00**	**500.00**	**5.00**	0.17	6,215.17
	05/10/04	**330.00**	1,100.00	459.00	3,700.00	25.00	**130.00**	**40.00**	<0.010	5,784.00
	08/17/04	**380.00**	970.00	670.00	3,600.00	<25	**120.00**	**63.00**	<0.010	5,803.00
	01/14/05	**270.00**	1,440.00	900.00	5,620.00	<1.0	**268.00**	<5.0	0.09	8,498.09
	06/29/05	**273.00**	1,200.00	601.00	3,640.00	<20	**136.00**	**29.50**	<0.019	5,879.50
	09/16/05	**23,300.00**	**59,100.00**	**4,700.00**	**28,400.00**	<500	<1,000	NA	**27.20**	115,527.20
	02/28/06	Well Not Located								0.00
	06/21/06	**19,500.00**	**59,900.00**	**4,070.00**	**24,400.00**	<1,000	<2,000	**47.60**	**17.70**	107,870.00
	10/04/06	**22,400.00**	**64,500.00**	**4,100.00**	**22,000.00**	<1,000	<2,000	**41.40**	**27.60**	113,000.00
	SSTL	11.00	2,223.00	1,558.00	10,000.00	90.00	56.00	2.00	0.32	
	> SSTL	22,389.00	62,277.00	2,542.00	12,000.00	0.00	0.00	39.40	27.28	
MW-2	01/06/03	**18,400.00**	**31,100.00**	**3,180.00**	**18,920.00**	**395.00**	**514.00**	28.00	0.02	72,537.02
	04/02/03	**13,000.00**	1,800.00	**1,600.00**	9,500.00	**480.00**	**500.00**	**190.00**	**160.00**	27,230.00
	08/26/03	**16,000.00**	**26,000.00**	**2,200.00**	13,000.00	**480.00**	**540.00**	**190.00**	**120.00**	58,530.00
	01/08/04	**18,000.00**	**33,000.00**	**2,200.00**	12,000.00	**880.00**	**1,200.00**	**1,000.00**	**150.00**	68,430.00
	05/10/04	**17,000.00**	**24,000.00**	**2,000.00**	11,000.00	**750.00**	**2,500.00**	**1,200.00**	**260.00**	58,710.00
	08/17/04	**19,000.00**	**29,000.00**	**2,900.00**	14,000.00	**1,200.00**	**2,500.00**	**2,100.00**	**500.00**	71,200.00
	01/14/05	**20,600.00**	**36,400.00**	**2,960.00**	**17,200.00**	**940.00**	**862.00**	**1,230.00**	**186.00**	80,378.00
	06/29/05	**18,500.00**	**27,300.00**	**2,600.00**	14,400.00	**952.00**	<500	**792.00**	**151.00**	64,695.00
	09/16/05	**24,300.00**	**34,500.00**	**2,870.00**	**15,500.00**	**1,130.00**	**645.00**	NA	0.083	78,945.083
	02/28/06	**24,400.00**	**36,200.00**	**2,700.00**	12,400.00	**847.00**	<500	NA	**310.00**	76,857.00
	06/21/06	**19,500.00**	**26,300.00**	**2,420.00**	12,600.00	**859.00**	<1,000	**1,010.00**	**320.00**	63,009.00
	10/04/06	**18,100.00**	**25,600.00**	**2,010.00**	9,820.00	**1,020.00**	<1,000	**1,480.00**	**664.00**	58,694.00
	SSTL	10.00	2,021.00	1,416.00	15,000.00	51.00	51.00	30.00	10.00	
	> SSTL	18,090.00	23,579.00	594.00	0.00	939.00	0.00	1,450.00	654.00	
MW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	350.00	<0.020	350.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	8.50	0.00	8.50
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
MW-4	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	12.00	<0.020	12.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
MW-5	01/06/03	<1.0	<1.0	<1.0	5.40	<1.0	<1.0	12.00	<0.020	17.40
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	5.40	<0.010	5.40
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	0.00

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-6	01/06/03	4,840.00	20,400.00	3,540.00	19,020.00	25.00	640.00	11.00	7.00	48,483.00
	04/02/03	2,600.00	11,000.00	1,800.00	9,000.00	250.00	1,200.00	54.00	2.60	25,906.60
	08/26/03	1,400.00	5,800.00	1,100.00	6,600.00	250.00	1,200.00	37.00	<0.010	16,387.00
	01/08/04	350.00	1,200.00	240.00	1,300.00	<1.0	77.00	<5.0	1.20	3,168.20
	05/10/04	640.00	2,200.00	300.00	1,900.00	<5.0	150.00	36.00	1.80	5,227.80
	08/17/04	1,100.00	2,200.00	730.00	3,400.00	<50	<250	13.00	<0.010	7,443.00
	01/14/05	1,070.00	2,960.00	718.00	3,990.00	<1.0	116.00	107.00	1.67	8,962.67
	06/29/05	413.00	500.00	290.00	1,480.00	<10	77.30	<5.0	0.55	2,760.85
	09/16/05	323.00	273.00	194.00	1,010.00	<10	63.60	NA	0.76	1,864.36
	02/28/06	1,020.00	1,150.00	619.00	2,980.00	<10	141.00	NA	1.00	5,911.00
	06/21/06	316.00	109.00	200.00	1,020.00	<10	81.20	15.50	0.42	1,742.12
	10/04/06	585.00	76.30	327.00	1,510.00	<10	75.80	26.70	0.75	2,601.55
	SSTL	6.00	1,212.00	850.00	8,000.00	48.00	31.00	18.00	4.83	
	> SSTL	579.00	0.00	0.00	0.00	0.00	44.80	0.00	0.00	
MW-7	01/06/03	1,020.00	1.00	2,290.00	16,940.00	1.00	826.00	5.00	1.70	21,084.70
	04/02/03	240.00	110.00	120.00	38.00	210.00	120.00	240.00	1.70	1,079.70
	08/26/03	740.00	250.00	110.00	1,600.00	50.00	250.00	160.00	0.09	3,160.09
	01/08/04	630.00	13,000.00	2,400.00	25,000.00	100.00	1,000.00	5.00	3.50	42,138.50
	05/10/04	700.00	10,000.00	3,400.00	23,000.00	200.00	1,000.00	5.00	6.80	38,311.80
	08/17/04	23.00	49.00	21.00	140.00	<5.0	<25	19.00	<0.010	252.00
	01/14/05	565.00	9,160.00	3,570.00	24,400.00	<1.0	1,370.00	24.00	1.75	39,110.75
	06/29/05	582.00	7,030.00	3,480.00	23,100.00	<100	890.00	<5.0	1.70	35,083.70
	09/16/05	610.00	5,770.00	3,280.00	21,600.00	<50	1,040.00	NA	1.90	32,301.90
	02/28/06	178.00	4,760.00	2,480.00	19,300.00	<100	562.00	NA	1.20	27,281.20
	06/21/06	500.00	3,890.00	3,190.00	23,200.00	<100	916.00	23.90	0.86	31,720.76
	10/04/06	415.00	4,640.00	3,360.00	21,200.00	<100	781.00	22.60	1.60	30,420.20
	SSTL	6.00	1,212.00	850.00	12,123.00	48.00	31.00	18.00	0.66	
	> SSTL	409.00	3,428.00	2,510.00	9,077.00	0.00	750.00	4.60	0.94	
MW-8	01/06/03	6,770.00	84,600.00	3,560.00	24,740.00	7.30	362.00	24.00	1.90	120,065.20
	04/02/03	8,600.00	46,000.00	3,500.00	23,000.00	200.00	1,000.00	49.00	190.00	82,539.00
	08/26/03	3,800.00	10,000.00	1,200.00	6,800.00	100.00	500.00	81.00	58.00	22,539.00
	01/08/04	5,600.00	22,000.00	3,400.00	20,000.00	100.00	1,300.00	18.00	4.70	52,422.70
	05/10/04	4,500.00	18,000.00	1,600.00	18,000.00	200.00	1,000.00	67.00	6.30	43,373.30
	08/17/04	10,000.00	37,000.00	2,900.00	20,000.00	<1,000	<5,000	27.00	63.00	69,990.00
	01/14/05	6,780.00	38,200.00	4,340.00	28,200.00	<1.0	1,600.00	<5.0	2.33	79,122.33
	06/29/05	6,490.00	31,000.00	4,320.00	27,500.00	<500	<1,000	<5.0	2.60	69,312.60
	09/16/05	14,300.00	50,000.00	4,640.00	26,000.00	54.60	1,040.00	NA	22.20	98,056.80
	02/28/06	17,100.00	52,500.00	3,950.00	21,800.00	<500	<1000	NA	17.00	95,367.00
	06/21/06	11,600.00	44,300.00	3,860.00	22,000.00	<1,000	<2,000	<10	6.70	81,766.70
	10/04/06	18,500.00	56,900.00	4,480.00	24,900.00	<1,000	<2000	33.50	16.50	104,830.00
	SSTL	12.00	2,424.00	1,700.00	16,000.00	96.00	62.00	4.00	0.46	
	> SSTL	18,488.00	54,476.00	2,780.00	8,900.00	0.00	0.00	0.00	16.02	
MW-9	01/06/03	<1.0	2.20	5.70	579.00	<1.0	109.00	24.00	<0.020	719.90
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	36.00	<0.010	36.00
	05/10/04	Well Not Located								0.00
	08/17/04	540.00	12,000.00	2,800.00	23,000.00	<500	<2,500	19.00	8.40	38,367.40
	01/14/05	Removed from Sampling Schedule								0.00
	RBSL	5.00	1,000.00	700.00	10,000.00	40.00	25.00	15.00	0.05	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-10	01/06/03	**7,980.00**	**24,900.00**	**3,540.00**	18,180.00	25.00	**299.00**	**35.00**	**78.00**	55,037.00
	04/02/03	**11,000.00**	**23,000.00**	**2,400.00**	13,000.00	**200.00**	**1,000.00**	**49.00**	**190.00**	50,839.00
	08/26/03	**12,000.00**	**33,000.00**	**3,200.00**	17,000.00	**250.00**	**1,200.00**	**210.00**	**450.00**	67,310.00
	01/08/04	**4,200.00**	**14,000.00**	**2,400.00**	12,000.00	**100.00**	**500.00**	6.30	**100.00**	33,306.30
	05/10/04	**8,600.00**	**21,000.00**	**2,400.00**	14,000.00	<250	<1,200	5.70	**210.00**	46,215.70
	08/17/04	**3,500.00**	**16,000.00**	**2,200.00**	14,000.00	<500	<2,500	**25.00**	**67.00**	35,792.00
	01/14/05	**10,200.00**	**34,600.00**	**3,150.00**	**18,400.00**	<1.0	38.00	20.00	**152.00**	66,560.00
	06/29/05	**9,040.00**	**26,000.00**	**3,040.00**	16,600.00	<500	<1,000	6.30	**115.00**	54,801.30
	09/16/05	**8,120.00**	**25,900.00**	**3,130.00**	17,000.00	<200	<400	NA	**143.00**	54,293.00
	02/28/06	**2,410.00**	**9,780.00**	**1,840.00**	7,910.00	<200	<400	NA	**15.90**	21,955.90
	06/21/06	**2,700.00**	**11,800.00**	**2,060.00**	10,000.00	<200	<400	11.10	**23.60**	26,594.70
	10/04/06	**3,400.00**	**13,900.00**	**2,130.00**	10,500.00	<250	<500	**50.90**	**43.40**	30,024.30
	SSTL	9.00	1,819.00	1,274.00	18,185.00	73.00	46.00	21.00	9.00	
	> SSTL	3,391.00	12,081.00	856.00	0.00	0.00	0.00	0.00	34.40	
MW-11	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	**7.80**	**6.00**	<0.020	13.80
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26.00**	<0.010	26.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**33.00**	**0.29**	33.29
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**46.00**	<0.010	46.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17.00**	<0.010	17.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**10.00**	<0.010	10.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**37.10**	<0.019	37.10
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.07**	0.07
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**30.10**	<0.019	30.10
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**12.40**	<0.019	12.40
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	5.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	7.40	0.00	
MW-12	01/06/03	**720.00**	**17.20**	13.40	**1,550.00**	<1.0	**113.00**	6.00	**12.00**	2,431.60
	04/02/03	**12.00**	<5.0	<1.0	1.80	<1.0	<5.0	**38.00**	0.24	52.04
	08/26/03	**51.00**	<5.0	<1.0	72.00	<1.0	5.50	**37.00**	0.37	165.87
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	0.015	0.015
	05/10/04	**23.00**	<5.0	<1.0	43.00	<1.0	<5.0	6.80	0.11	72.91
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**12.00**	0.11	12.11
	01/14/05	**74.20**	<1.0	<1.0	67.60	<1.0	<5.0	6.00	0.23	148.03
	06/29/05	**28.40**	<1.0	<1.0	10.80	<1.0	<2.0	<5.0	0.027	39.227
	09/16/05	Well Not Located								0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	NA	0.018	0.018
	06/21/06	7.20	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	7.20
	10/04/06	17.70	<1.0	<1.0	<3.0	<1.0	<2.0	12.10	0.02	29.82
	SSTL	7.00	5.00	68.00	730.00	5.00	36.00	7.00	7.00	
	> SSTL	10.70	0.00	0.00	0.00	0.00	0.00	5.10	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-13	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	1.30	<5.0	<0.020	1.30
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**40.00**	<0.010	40.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45.00**	<0.010	45.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**10.90**	<0.018	10.90
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	21.00	<0.019	21.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	5.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00	
MW-14	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**39.00**	<0.010	39.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100.00**	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45.00**	<0.010	45.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**19.00**	<0.010	19.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**15.00**	<0.020	15.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**6.40**	<0.018	6.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**5.10**	<0.019	5.10
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	5.00	0.510	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	
MW-15	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	9.00	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120.00**	<0.010	120.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**48.00**	<0.010	48.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26.00**	<0.010	26.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	8.00	<0.020	8.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	7.50	<0.018	7.50
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.038	0.038
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.032	0.032
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.046	0.046
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.50	0.900	9.400
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.050	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	
MW-16	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	18.00	<0.020	18.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	140.00	<0.010	140.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	13.00	<0.010	13.00
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-17	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	**44.00**	<0.020	44.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17.00**	<0.010	17.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**42.00**	<0.010	42.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.020	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	7.30	<0.010	7.30
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	9.00	<0.020	9.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.40	<0.019	5.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.024**	0.024
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	**0.021**	0.021
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	12.00	**0.026**	12.026
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.006	
MW-18	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**50.00**	<0.010	50.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100.00**	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**97.00**	<0.010	97.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.90	<0.010	9.90
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**17.00**	<0.020	17.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.70	<0.018	8.70
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	9.10	<0.019	9.10
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	11.50	<0.019	11.50
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.120	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-19	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	6.00	<0.020	6.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18.00**	<0.010	18.00
	01/08/04	<1.0	<5.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18.00**	<0.010	18.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	15.00	0.020	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-20	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	11.00	<0.020	11.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	130.00	<0.010	130.00
	05/10/04	Removed from Sampling Schedule								
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
TW-1	01/06/03	3,380.00	1,510.00	1,860.00	9,370.00	25.00	160.00	6.00	5.20	16,316.20
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	2,000.00	2,500.00	1,100.00	5,800.00	50.00	250.00	5.00	0.38	11,705.38
	05/10/04	Well Not Located								0.00
	08/17/04	67.00	<50	<10	59.00	<10	<50	30.00	0.52	156.52
	01/14/05	700.00	7.80	82.90	1,700.00	8.10	79.80	<5.0	0.47	2,579.07
	06/29/05	400.00	5.30	22.60	759.00	8.60	72.80	<5.0	0.41	1,268.71
	09/16/05	457.00	13.20	13.20	989.00	<10	60.80	NA	0.77	1,533.97
	02/28/06	95.60	13.30	<2.0	19.20	41.60	<4.0	NA	1.30	171.00
	06/21/06	986.00	11.80	105.00	1,980.00	14.20	153.00	<5.0	0.56	3,250.56
	10/04/06	1,090.00	23.30	174.00	2,530.00	<20	83.20	<5.0	1.20	3,901.70
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
TW-2	01/06/03	**6,620.00**	**6,860.00**	**620.00**	**4,110.00**	**50.20**	**160.00**	**6.00**	**5.20**	18,431.40
	04/02/03	**3,300.00**	**1,500.00**	**220.00**	**2,000.00**	**50.00**	**250.00**	**10.00**	**1.10**	7,331.10
	08/26/03	**3,000.00**	**450.00**	**79.00**	**1,700.00**	**10.00**	**160.00**	**6.80**	**0.35**	5,406.15
	01/08/04	**2,800.00**	**460.00**	**14.00**	**1,000.00**	**22.00**	**34.00**	**5.40**	**1.10**	4,336.50
	05/10/04	**3,700.00**	**640.00**	**160.00**	**1,800.00**	5.00	**170.00**	<5.0	**1.20**	6,476.20
	08/17/04	**1,400.00**	<500	<100	**300.00**	<100	<500	**5.40**	**2.20**	1,707.60
	01/14/05	**3,100.00**	**605.00**	**175.00**	**1,490.00**	**31.90**	**172.00**	<5.0	**0.59**	5,574.49
	06/29/05	**3,670.00**	**241.00**	**148.00**	**1,710.00**	**16.10**	**228.00**	<5.0	**0.40**	6,013.50
	09/16/05	**3,540.00**	**876.00**	**237.00**	**1,010.00**	**36.90**	**160.00**	NA	**0.86**	5,860.76
	02/28/06	**529.00**	**17.20**	**22.00**	**1,130.00**	<10	**31.10**	NA	**0.34**	1,729.64
	06/21/06	**4,050.00**	**1,430.00**	**320.00**	**1,890.00**	**51.20**	**258.00**	<5.0	**1.00**	8,000.20
	10/04/06	**2,390.00**	**776.00**	**116.00**	**581.00**	**59.80**	**<100**	<5.0	**1.30**	3,926.10
	SSTL	5.00	8.00	5.00	180.00	5.00	16.00	2.00	0.05	
	> SSTL	2,385.00	770.00	111.00	401.00	54.80	0.00	0.00	1.25	
TW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	**8.90**	<5.0	0.13	9.03
	04/02/03	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<5.0	0.03	0.031
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<0.010	0.00
	05/10/04	2.90	**11.00**	1.80	**12.00**	<1.0	<5.0	<5.0	0.05	27.75
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	0.04	0.04
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.08	0.077
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.04	0.044
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	2.00	0.230	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
Crook WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**10.00**	<0.020	10.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**9.80**	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	**12.00**	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	**400.00**	<1.0	<1.0	**110.00**	<1.0	**12.00**	<5.0	2.24	524.24
post		**22.00**	<1.0	<1.0	3.20	<1.0	<5.0	<5.0	0.09	25.29
pre	06/29/05	**193.00**	BDL	BDL	**69.90**	BDL	**9.60**	NA	NA	272.50
post		4.20	BDL	BDL	3.70	BDL	BDL	NA	NA	7.90
pre	09/16/05	**12.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	12.646
post		**342.00**	<10	<10	<30	<10	<20	NA	3.80	345.80
pre	02/28/06	Not Sampled								0.00
post										0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.041	0.041
		Not Sampled								0.00
pre	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.053	0.053
post		Not Sampled								0.00
	SSTL	5.00	2.00	2.00	26.00	2.00	5.00	5.00	5.00	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Swift WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**10.00**	<0.020	10.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**9.80**	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	**12.00**	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	**400.00**	<1.0	<1.0	**110.00**	<1.0	**12.00**	<5.0	2.24	524.24
post		**22.00**	<1.0	<1.0	**3.20**	<1.0	<5.0	<5.0	0.09	25.29
pre	06/29/05	**193.00**	BDL	BDL	**69.90**	BDL	**9.60**	NA	NA	272.50
post		**4.20**	BDL	BDL	**3.70**	BDL	ND	NA	NA	7.90
pre	09/16/05	**12.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.046	12.646
post		**342.00**	<10	<10	<30	<10	<20	NA	3.80	345.80
pre	02/28/06	**169.00**	<1.0	<1.0	**88.60**	<1.0	**9.30**	NA	NA	266.90
post		**7.20**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	7.20
	06/21/06	**182.00**	<1.0	<1.0	**114.00**	<1.0	**13.80**	<5.0	1.30	311.10
		9.30	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.049	9.349
pre	10/04/06	**86.40**	<1.0	<1.0	**62.20**	<2.0	**6.00**	<5.0	1.90	156.50
post		**30.10**	<1.0	<1.0	10.40	<1.0	<2.0	<5.0	0.180	40.680
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	> SSTL	28.10	0.00	0.00	8.40	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
Hill WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**9.00**	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**22.00**	<0.010	22.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**6.10**	<0.010	6.10
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
pre	01/14/05	**2.80**	<1.0	<1.0	<1.0	<1.0	<5.0	**10.00**	0.11	12.91
post		<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
pre	06/29/05	**2.40**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.19	2.59
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.06	0.063
pre	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	0.051
post		**2.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.16	2.76
pre	02/28/06	**9.40**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	9.40
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	0.00
	06/21/06	**11.10**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.35	11.45
		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.019	0.019
pre	10/04/06	**68.10**	<1.0	<1.0	8.50	<1.0	<2.0	<5.0	0.43	77.03
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.020	0.000
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Smith WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**5.20**	<0.010	5.20
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120.00**	<0.010	120.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**41.00**	<0.010	41.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**51.00**	<0.020	51.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**57.40**	<0.018	57.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	Not Sampled								0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	10/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL MASS										343,638.080
TOTAL SSTL MASS		117.00	10,972.00	7,769.00	80,330.00	503.00	391.00	199.00	53.33	100,082.00
INITIAL MASS ABOVE SSTL										217,876.56
CURRENT MASS ABOVE SSTL										266,206.146
PERCENT TOTAL MASS REDUCTION ABOVE SSTL										-22.182

µg/l - micrograms per liter
ND = Not Detected
NE = Not Established
NA = Not Analyzed
RBSL = Risk Based Screen Level
SSTL = Site Specific Target Levels
Bold denotes concentrations over their respective SSTL or RBSL
* = 09/16/05 Sampling Event SSTL Data Utilized For Reduction Calculation

- Concentration Reduction Calculation is as follows:

$$\frac{\text{[Initial Sample Concentration Above SSTL] - [Subsequent Sample Concentration Above SSTL]}}{\text{[Initial Sample Concentration Above SSTL]}} \times 100 = \%\ \text{Reduction}$$

APPENDIX C
Field Data Sheets

SEI Environmental

SC Monitoring Well Gauging Data Sheet

Site Name: Smith Grocery WO# 300401

Date 10-4-06

Well ID	Total Depth (feet)	Well Dia. (in.)	Depth to Product (feet)	Product Thickness (feet)	Depth to Water (feet)	Notes	
MW-1	35.00	2			30.24		1125
MW-2	38.00	2			32.76		1105
MW-3	35.00	2			29.85	Gauge Only	—
MW-4	27.00		could not Find			Gauge Only	—
MW-5	30.00	2			27.75	Gauge Only	—
MW-6	37.00	2			32.86		1135
MW-7	36.00	2			31.47		1145
MW-8	38.00	2			32.93		1120
MW-9	36.00		could not Find			Gauge Only	—
MW-10	44.00	2			39.56		1330
MW-11	44.00	2			39.35		1340
MW-12	44.00	2			38.79		1210
MW-13	47.00	2			42.05		1350
MW-14	50.00	2			42.47		1235
MW-15	50.00	2			43.61		1245
MW-16	37.00	2			31.18	Gauge Only	—
MW-17	40.00	2			35.78		1205
MW-18	46.00	2			41.64		1220
MW-19	50.00	2			44.12		1225
MW-20	35.00		could not Find			Gauge Only	—
TW-1	61.00	2			32.89		1055
TW-2	88.00	2			32.94		1115
TW-3	71.00	2			37.77		1320

WSW Samples: Crook (Pre/Post), Hill (Pre/Post), Swift (Pre/Post), & Smith (Pre/Post)

Analysis: EPA Method 8260B for BTEX, MTBE, and Naphthalene
EPA Method 8011 for EDB
LEAD

APPENDIX D
Laboratory Analytical Results and Chain-of-Custody

Sample Summary

SEI-Columbia, SC

Smith's Grocery; York, SC
Project No: 300401

Job No: F44253

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F44253-1	10/04/06	11:25	ZS	10/06/06	AQ	Ground Water	MW-1
F44253-2	10/04/06	11:05	ZS	10/06/06	AQ	Ground Water	MW-2
F44253-3	10/04/06	11:35	ZS	10/06/06	AQ	Ground Water	MW-6
F44253-4	10/04/06	11:45	ZS	10/06/06	AQ	Ground Water	MW-7
F44253-5	10/04/06	11:20	ZS	10/06/06	AQ	Ground Water	MW-8
F44253-6	10/04/06	13:30	ZS	10/06/06	AQ	Ground Water	MW-10
F44253-7	10/04/06	13:40	ZS	10/06/06	AQ	Ground Water	MW-11
F44253-8	10/04/06	12:10	ZS	10/06/06	AQ	Ground Water	MW-12
F44253-9	10/04/06	13:50	ZS	10/06/06	AQ	Ground Water	MW-13
F44253-10	10/04/06	12:35	ZS	10/06/06	AQ	Ground Water	MW-14
F44253-11	10/04/06	12:45	ZS	10/06/06	AQ	Ground Water	MW-15
F44253-12	10/04/06	12:05	ZS	10/06/06	AQ	Ground Water	MW-17
F44253-13	10/04/06	12:20	ZS	10/06/06	AQ	Ground Water	MW-18

Sample Summary
(continued)

SEI-Columbia, SC

Job No: F44253

Smith's Grocery; York, SC
Project No: 300401

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F44253-14	10/04/06	12:25	ZS	10/06/06	AQ	Ground Water	MW-19
F44253-15	10/04/06	10:55	ZS	10/06/06	AQ	Ground Water	TW-1
F44253-16	10/04/06	11:15	ZS	10/06/06	AQ	Ground Water	TW-2
F44253-17	10/04/06	13:20	ZS	10/06/06	AQ	Ground Water	TW-2
F44253-18	10/04/06	13:00	ZS	10/06/06	AQ	Ground Water	HILL PRE
F44253-19	10/04/06	13:05	ZS	10/06/06	AQ	Ground Water	HILL POST
F44253-20	10/04/06	11:50	ZS	10/06/06	AQ	Ground Water	SMITH PRE
F44253-21	10/04/06	14:05	ZS	10/06/06	AQ	Ground Water	SWIFT PRE
F44253-22	10/04/06	14:10	ZS	10/06/06	AQ	Ground Water	SWIFT POST
F44253-23	10/04/06	14:20	ZS	10/06/06	AQ	Ground Water	CROOK PRE

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- **Chain of Custody**

CHAIN OF CUSTODY

ACCUTEST.

4405 Vineland Rd., Suite C15
Orlando, FL 32811
407.425.6700, fax 407.425.0707

Accutest Job #: F44253
Accutest Control #: ①

Client Information

Name: SEI Environmental
Address: 5160 Reagan Dr., Suite 7
City: Charlotte State: NC Zip: 28206
Send Report to:
Phone #: 704-586-8824

Facility Information

Project Name: Smith Grocery
Location: York, SC
Project No.: 300401
FAX #: 704-596-8605

Analytical Information

Field ID / Point of Collection	Collection Date	Time	Sampled By	Matrix	# of bottles	Preservation HCl	Preservation MeoH	Preservation NaHSO4	Preservation Other	EPA method 8260B for BTEX, MTBE, & Naphthalene	EPA method 9011 for EDB	Lead
MW-1	10-4-6	1125	ZS	GW	7	3		1	3	X	X	X
MW-2		1105								X	X	X
MW-6		1135								X	X	X
MW-7		1145								X	X	X
MW-8		1120								X	X	X
MW-10		1330								X	X	X
MW-11		1340								X	X	X
MW-12		1210								X	X	X
MW-13		1350								X	X	X
MW-14	↓	1235	↓	↓	↓	↓	↓	↓	↓	X	X	X

Turnaround Information

☒ 7 Day Standard — Approved By:
☐ 14 Day
☐ 7 Days EMERGENCY
☐ Other _____ (Days)
RUSH TAT is for FAX data
Data unless previously approved.

Data Deliverable Information

☐ NJ Reduced
☐ NJ Full
☐ FULL CLP
☐ Disk Deliverable
☐ Other (Specify)
☐ Commercial "A"
☐ Commercial "B"
☐ ASP Category B
☐ State Forms

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Zach C. Smith	10-4-6 / 1555	1 FedEx	2 FedEx	10/6/06 9:30	2 [illegible]
3		3	4		4
5		5	Cooler Temp.	Preservation Correct/Checked	3.0, 2.4

Revised 08/2005 RS

F44253: Chain of Custody
Page 1 of 4

CHAIN OF CUSTODY

ACCUTEST.
4405 Vineland Rd., Suite C15
Orlando, FL 32811
407.425.6700, fax 407.425.0707

Accutest Quote #:
Accutest Control #: F44253

Client Information	Facility Information	Analytical Information
Name: SEI Environmental	Project Name: Smith Grocery	
Address: 5100 Reagan Dr., Suite 7	Location: York, SC	
City: Charlotte State: NC Zip: 28206	Project No.: 300401	
Send Report to:		
Phone #: 704-588-8524	FAX #: 704-596-8605	

Field ID / Point of Collection	Collection: Date	Time	Sampled By	Matrix	# of bottles	Preservation: HCl	H2SO4	HNO3	NaOH	Other	EPA method 8260B for BTEX, MTBE, + Naphthalene	EPA method 8011 for EDB	Lead
1 MW-15	10.4.06	1245	ZS	GW	7	3		1		3	X	X	X
2 MW-17		1205									X	X	X
3 MW-18		1220									X	X	X
4 MW-19		1225									X	X	X
5 TW4		1055									X	X	X
6 TW-2		1115									X	X	X
7 TW-2		1320									X	X	X

Turnaround Information
- [X] 7 day Standard — Approved By:
- [ ] 14 Day
- [ ] 7 Days EMERGENCY
- [ ] Other _____ (Days)

RUSH TAT is for FAX data
Data unless previously approved.

Data Deliverable Information
- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1 Zach C. Smith	10.4.06 1555	1 FX	2 FX	10/5/06 9:00	2 [signature]
3		3	4		4
5		5			

Cooler # | Preserved where applicable: BK | On Ice: A | 3.024

Revised 09/2005 RS

F44253: Chain of Custody
Page 2 of 4

CHAIN OF CUSTODY

ACCUTEST

4405 Vineland Rd., Suite C15
Orlando, FL 32811
407.425.6700, fax 407.425.0707

Accutest Job #: F44253
Accutest Control #:

Client Information	Facility Information	Analytical Information
Name: SEI Environmental	Project Name: Smith Grocery	
Address: 6160 Reagan Dr., Suite 7	Location: York, SC	
City: Charlotte State: NC Zip: 28206	Project No.: 300401	
Send Report to:		
Phone #: 704-596-8624	FAX #: 704-596-8605	

Field ID / Point of Collection	Collection: Date	Time	Sampled By	Matrix	# of bottles	Preservation: HCl	NaOH	H2SO4	NaHSO4	Other	EPA method 8260B for BTEX, MTBE, & Naphthalene	EPA method 8011 for EDB	Lead
1 Hill Pre	10.4.6	1300	ZS	GW	7	3		1		3	X	X	X
1 Hill Post	10.4.6	1305									X	X	X
2 Smith Pre	10.4.6	1150									X	X	X
1 Swift Pre		1405									X	X	X
2 Swift Post		1410									X	X	X
2 Crook Pre	6	1420									X	X	X

Turnaround Information

- [X] 7 Day Standard — Approved By:
- [ ] 14 Day
- [ ] 7 Days EMERGENCY
- [ ] Other _____ (Days)

RUSH TAT is for FAX data
Data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Smith Pre & Crook Pre have no GAC System

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Todd C. Smith	10.4.6/1555	FX	FX	10/5/06 9:00	ACE
2						
3						
4						
5						

Preserved where applicable: OK

On Ice: OK 30

Revised 09/2005 RS

F44253: Chain of Custody
Page 3 of 4

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F44253 CLIENT: SEI PROJECT: Smith Grocery

DATE/TIME RECEIVED: 10/5/06 9:00 # OF COOLERS RECEIVED: 2 COOLER TEMPS: 3.0 2.4

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 8536 3068 3052

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] TIMES ON COC DOES NOT MATCH LABEL(S)
- [ ] ID'S ON COC DOES NOT MATCH LABEL(S)
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

MISC. INFORMATION

NUMBER OF ENCORES ? 0

NUMBER OF 5035 FIELD KITS ? 2

NUMBER OR LAB FILTERED METALS ? 2

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE: 10/5/06 TECHNICIAN SIGNATURE/DATE: ASBD 10/09/06

3.1 3

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

AUG 3 1 2006

FRONTIS HEMPHILL
2146 OLD MCKINNEY RD
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received August 23, 2006
York County

Dear Mr. Hemphill

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

AUG 3 1 2006

GARY WIGGAM
3043 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received August 23, 2006
York County

Dear Mr. Wiggam:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

AUG 3 1 2006

EVERETTE & JANET CROOK
3035 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received August 23, 2006
York County

Dear Mr. & Mrs. Crook:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

AUG 3 1 2006

TONY & SUSAN HILL
3049 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received August 23, 2006
York County

Dear Mr. & Mrs. Hill:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

AUG 3 1 2006

LOUIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received August 23, 2006
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the report submitted by SEI Environmental, Inc. SEI Environmental received Corrective Action Plan approval in September 2001. Based on the proposed time frame of 30 months, corrective action activities were estimated to have been completed by March 2004. SEI should evaluate the current remediation methodology and propose any necessary modifications in order to expedite the remediation. The next corrective action status evaluation report should be submitted on or before October 15, 2006.

The report documented that the Swift water supply well contained benzene in the Post-GAC sample, but the report fails to document any filter changes. Please remember that SEI is responsible for maintaining the granulated activated carbon units. For any well that has detection in post-GAC samples, the GAC filter should be changed immediately and such work documented in the submitted reports.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Chris Boggs, SEI Environmental, 130 Penmarc Dr., Ste 108, Raleigh, NC, 27603
Technical file

SEI
Environmental, Inc

CORRECTIVE ACTION SYSTEM EVALUATION REPORT
February through June 2006

Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

PREPARED FOR:

Ms. Louis Smith
Smith's Grocery
3176 Charlotte Highway
York, South Carolina 29745

RECEIVED
AUG 23 2006
UNDERGROUND STORAGE
TANK PROGRAM

PREPARED BY:

SEI ENVIRONMENTAL, INC.
130 Penmarc Drive, Suite 108
Raleigh, North Carolina 27603-2434
UST Site Rehabilitation Contractor No. 354

August 18, 2006

SEI
Environmental, Inc

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: August 18, 2006
For Period Covering: March 01, 2006
Facility Name : Smith's Grocery
UST Permit Number: 09322
County: York
Latitude: N 35°02'30.59"

Monitoring Report Number: 10
to June 21, 2006
Street Address: 176 Charlotte Highway (49)
City: York, South Carolina
Zip Code: 29745
Longitude: W 81°08'47.98"

Submitted by UST Owner/Operator:

Name: Louis Smith
Company: Smith's Grocery
Address: 3176 Charlotte Highway
City: York State: SC
Zip Code: 29745
Telephone: (803) 684-6289
SEI Project Number: 300401

Prepared by Consultant/Contractor:

Name: Chris L. Boggs, P.G.
Company: SEI Environmental, Inc.
Address: 130 Penmarc Drive, Suite 108
City: Raleigh State: NC
Zip Code: 27603
Telephone: (919) 832-2535
UST Site Rehabilitation Contractor No. 354

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: Chris L. Boggs, P.G.
SC Reg. No. 2104
Signature:
Date: 8/18/06

RECEIVED
AUG 23 2006
UNDERGROUND STORAGE TANK PROGRAM

TABLE OF CONTENTS

LIMITATIONS iii

1.0 INTRODUCTION 1

2.0 FIELD MEASUREMENTS AND SAMPLING 1

2.1 GROUNDWATER SAMPLING 1, 2

2.2 WATER SUPPLY WELL SAMPLING 2, 3

3.0 LABORATORY ANALYTICAL RESULTS 3

3.1 GROUNDWATER ANALYTICAL RESULTS 3

3.2 WATER SUPPLY WELL ANALYTICAL RESULTS 3

3.3 SITE SPECIFIC TARGET LEVELS 3, 4

4.0 REMEDIATION SYSTEM EFFECTIVENESS 4

5.0 CONCLUSIONS AND RECOMMENDATIONS 4, 5

LIST OF TABLES

TABLE 1	Historical Groundwater Elevation and Product Thickness Data
TABLE 2	Historical Groundwater Analytical Results

LIST OF FIGURES

FIGURE 1	USGS Quadrangle Map
FIGURE 2	Site Map
FIGURE 3	Potentiometric Surface Map, June 21, 2006
FIGURE 4	Groundwater Chemicals of Concern Site Map, June 21, 2006

LIST OF APPENDICES

APPENDIX A	Figures
APPENDIX B	Tables
APPENDIX C	Field Data Information Sheets for Groundwater Sampling
APPENDIX D	Laboratory Reports and Chain-of-Custody Forms
APPENDIX E	Disposal Manifest for Purged Groundwater

LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Geologist registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by AccuTest Laboratories.

1.0 INTRODUCTION

Smith's Grocery is a convenience and retail fuel store located at 3176 Charlotte Highway (SC Highway 49) in York, York County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- May 10, 2004 – Groundwater Sampling Event
- August 17, 2004 – Groundwater Sampling Event
- January 14, 2005 – Groundwater Sampling Event
- June 29, 2005 – Groundwater Sampling Event
- September 16, 2005 – Groundwater Sampling Event
- February 28, 2006 – Groundwater Sampling Event
- June 21, 2006 – Groundwater Sampling Event

On June 21, 2006, seventeen groundwater monitoring wells and four water supply wells were sampled in accordance with the requirements of the PFP contract. This report provides details of the groundwater sampling event.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On June 21, 2006, groundwater samples were collected from seventeen (MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-17 through MW-19, and TW-1 through TW-3) of twenty-three existing groundwater monitoring wells. Six (MW-3 through MW-5, MW-9, MW-16, and MW-20) have been removed from the sampling schedule.

Prior to sampling, twenty-one (MW-1 through MW-3, MW-5 through MW-19, and TW-1 throughTW-3) of the twenty-three groundwater monitoring wells were gauged utilizing an oil-water interface probe to measure depth to groundwater, and to detect any free product present. Two (MW-4 and MW-20) monitoring wells were not gauged because they could not

be located. The depth to groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction. Figure 2 in Appendix A is a site map depicting monitoring well locations.

Free product was not currently and has not historically been detected in any of the monitoring wells. Figure 3 in Appendix A presents a groundwater potentiometric map for the current sampling event. The latest groundwater data indicate that groundwater flow at the site is predominately east to southeast with a hydraulic gradient of 0.035 feet per foot between monitoring wells MW-7 and MW-19. This flow direction is consistent with previous determinations of groundwater movement. Table 1 in Appendix B summarizes groundwater measurement data.

All monitoring wells were purged prior to sampling by removing a minimum of three well volumes of water via hand bailing with a new, disposable, polyethylene bailer or until groundwater quality data stabilized, or the well went dry. This purging process produced approximately 75 gallons of petroleum contaminated water. The purge water was disposed of at a South Carolina licensed facility. Appendix C contains Field Data Information Sheets for Groundwater Sampling.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead.

2.2 Water Supply Well Sampling

On June 21, 2006, groundwater samples were collected from four (Crook, Smith, Swift and Hill) water supply wells. Three water supply wells (Crook, Hill, and Swift) are fitted with

granular activated carbon (GAC) filters. As such, samples were collected from the Swift and Hill wells before (pre) and after (post) the GAC filters. The Crook well was not sampled in this manner during the current sampling event. Prior to sampling, the water was allowed to run for at least ten minutes. The samples were placed into laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene), 8011 (for ethylene dibromide (EDB)), and 3030C for lead.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

Chemicals of Concern (CoC) were detected in ten (MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, MW-17 and TW-2) of the seventeen monitoring wells sampled at concentrations exceeding their respective SSTL. Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.2 Water Supply Well Analytical Results

CoC were detected in two (Swift and Hill) of the pre-GAC filter samples collected at concentrations exceeding their respective SSTLs. The post-GAC filter sample for the Swift water supply well exceeded SSTLs for benzene. Figure 4 in Appendix A is a site map presenting water supply well locations and their CoC concentrations. Table 2 in Appendix B summarizes historical water supply well analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.3 Site Specific Target Levels

Site Specific Target Levels (SSTLs) have been designated for sixteen (MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-17 through MW-19, TW-2, and TW-3) monitoring wells and all four (Crook, Swift, Hill, and Smith) water supply wells.

For three (Crook, Swift, and Hill) water supply wells with GAC filters, the SSTLs apply to the pre-GAC filter samples. Table 4 in Appendix B summarizes SSTL information.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target concentrations for seven (benzene, toluene, ethylbenzene, xylenes, MTBE, naphthalene, lead, and EDB) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial January 6, 2003, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. Monitoring well MW-1 was not located during the current sampling event. Consequently, SSTL data for monitoring well MW-1 from the September 16, 2005, groundwater sampling event was utilized for the concentration reduction calculation. The formula is a follows:

$$\left[\frac{\text{[01/06/03 Sample Concentration Above SSTL]} - \text{[Current Sample Concentration Above SSTL]}}{\text{[01/06/03 Sample Concentration Above SSTL]}}\right] * 100 = \% \text{ Reduction}$$

Using the current analytical results, the concentration reduction is -10.951%. This percentage is up from 21.73% from the February 28, 2006 groundwater sampling event.

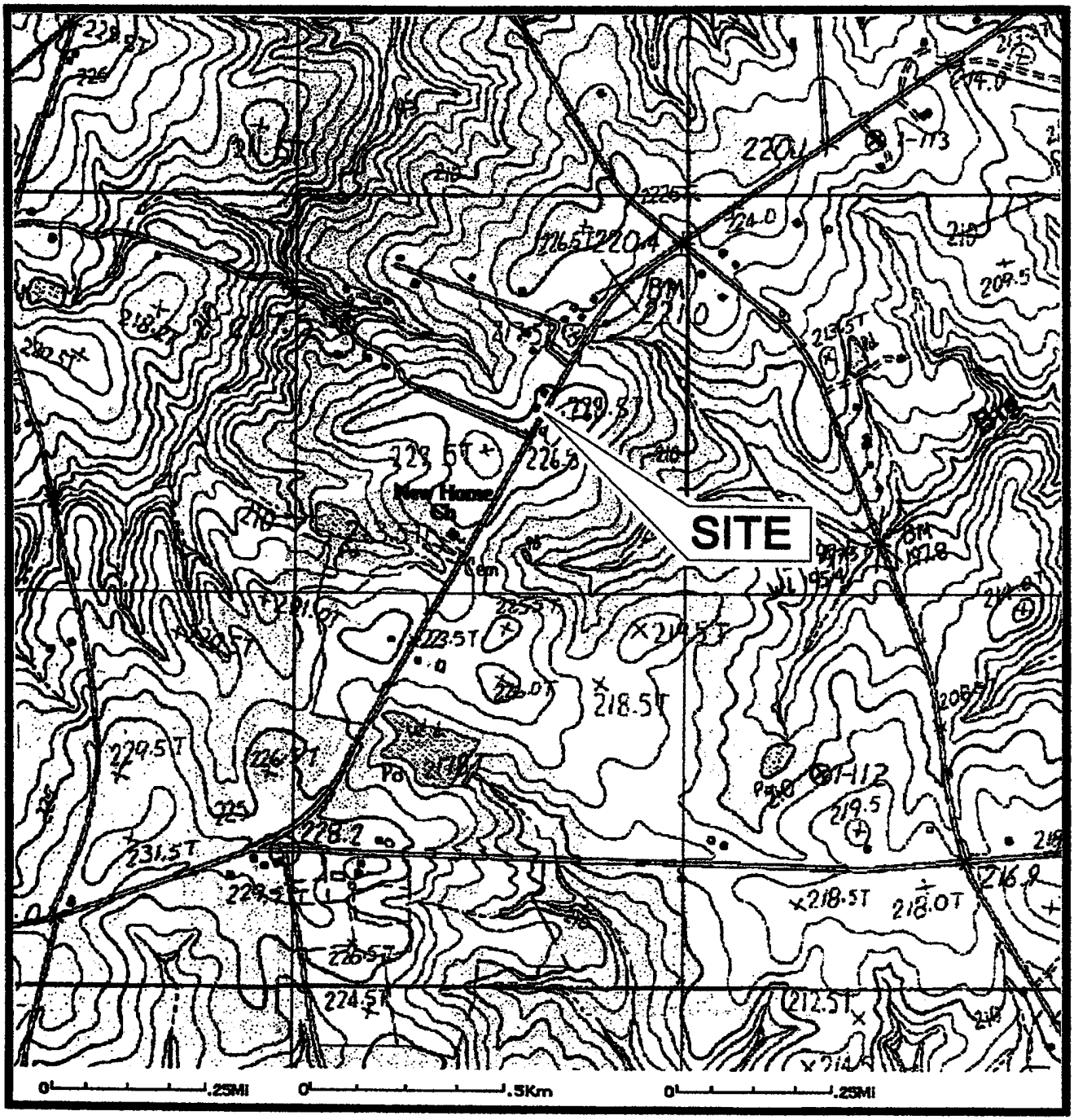
5.0 CONCLUSIONS

The groundwater flow direction at the time of the February 28, 2006 sampling event was towards the east, southeast with a hydraulic gradient of 0.035 feet per foot. Free product was not detected. CoC were detected in eight monitoring wells and two water supply wells above their respective SSTLs. The percent concentration reduction has been calculated at -10.951%.

SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. The next sampling event will occur in September 2006. SEI is currently evaluating alternative methods of active corrective action to be implemented at the site in order to proceed with the remediation effort.

APPENDIX A
FIGURES

7.5 MINUTE SERIES(TOPOGRAPHIC)

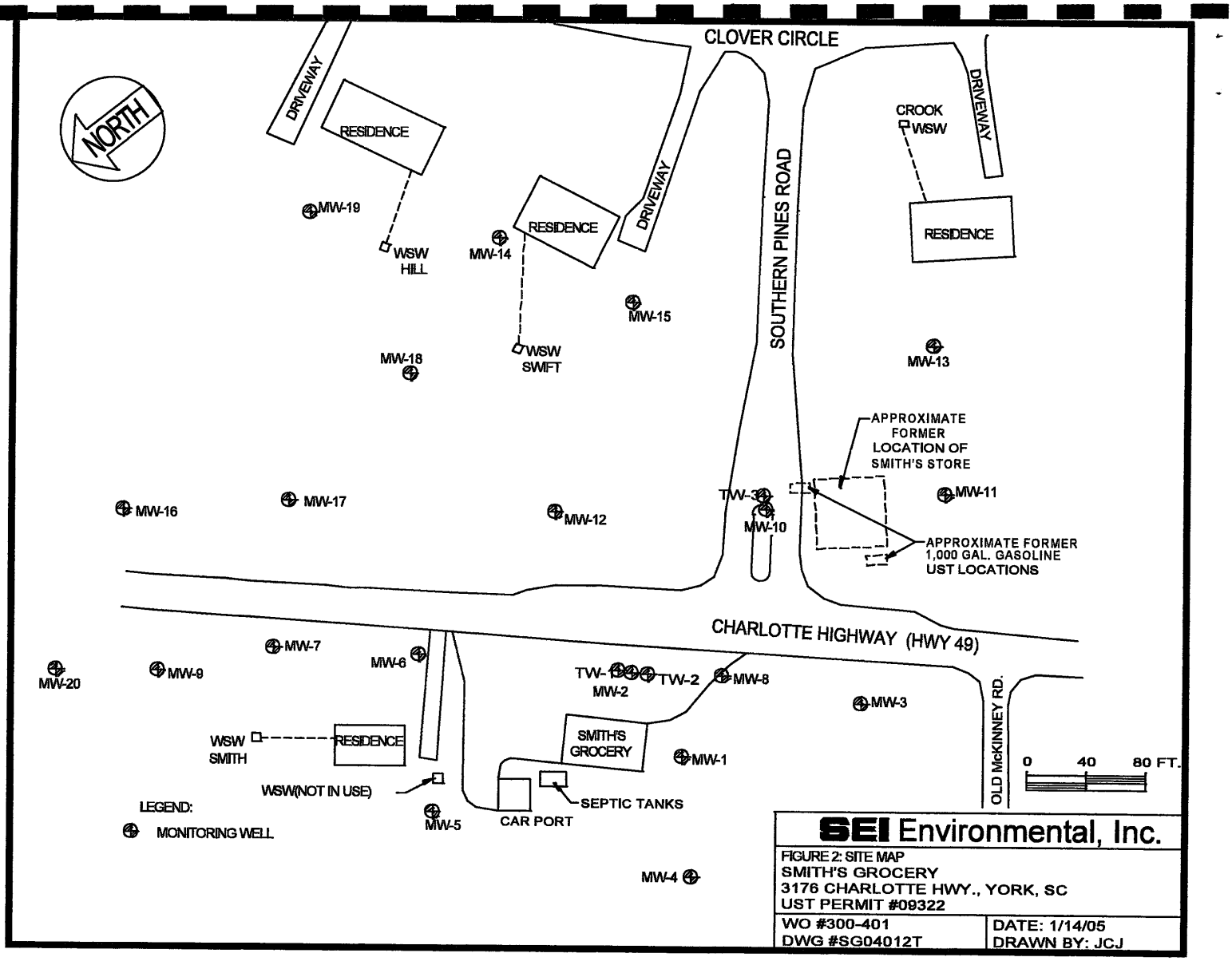


NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP(U.S.G.S. TOPO)
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

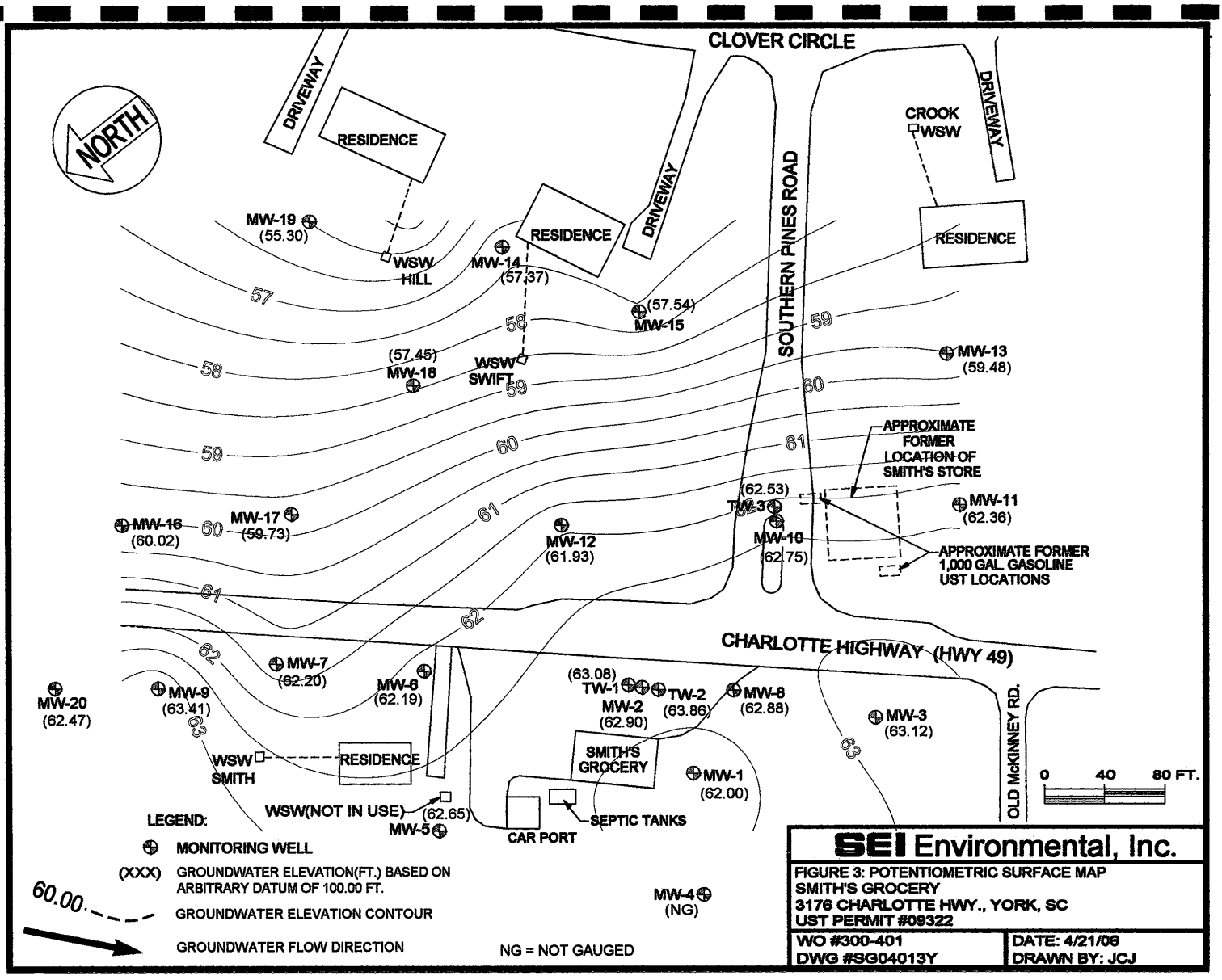
W.O. #: 300-401	DATE: 9/8/05
DWG #	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

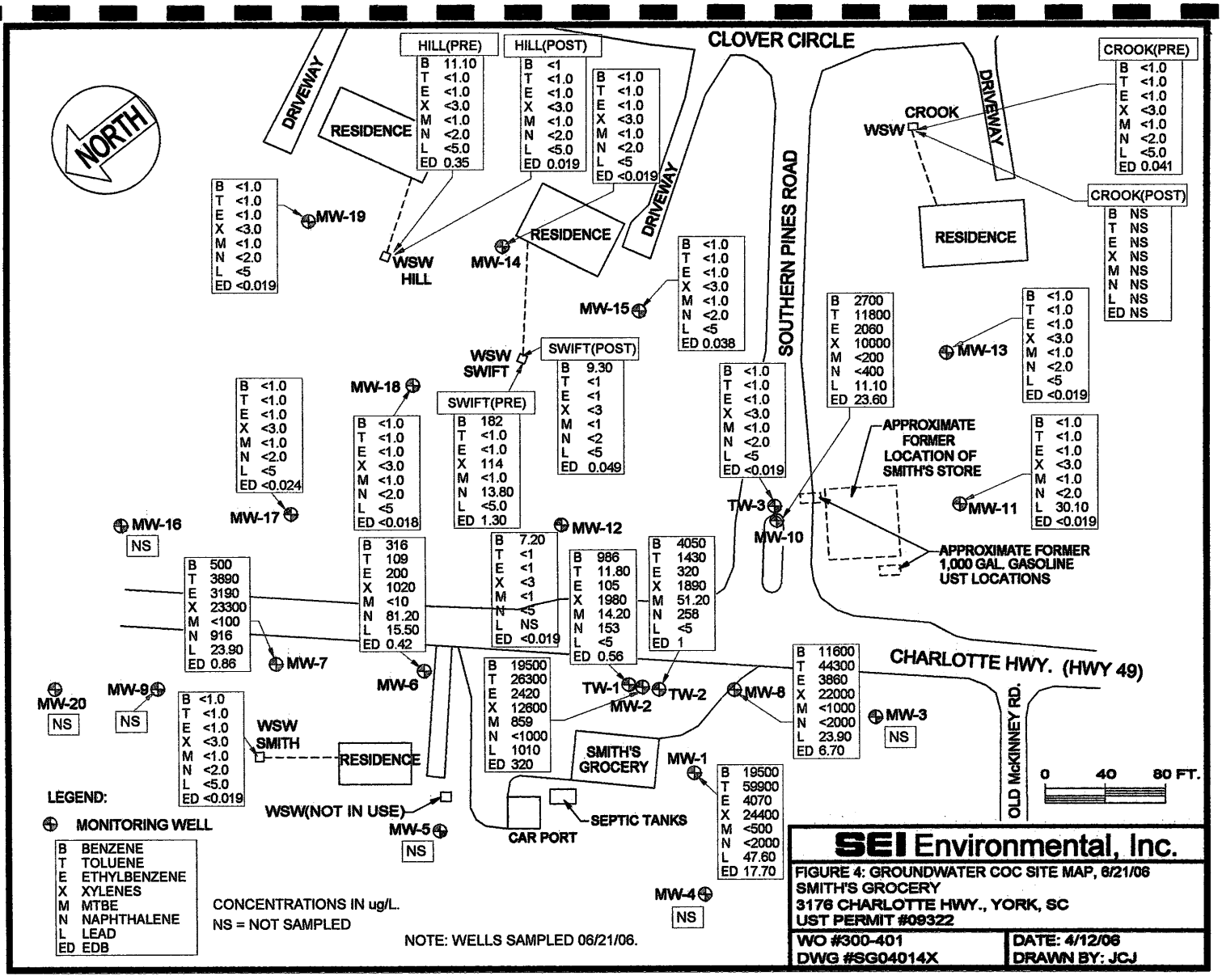
WO #300-401	DATE: 1/14/05
DWG #SG04012T	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: POTENTIOMETRIC SURFACE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 4/21/06
DWG #SG04013Y	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP, 6/21/06
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 4/12/06
DWG #SG04014X	DRAWN BY: JCJ

APPENDIX B
TABLES

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-1	01/06/03	29.88			91.16	61.28
	04/02/03	28.05				63.11
	08/26/03	24.07				67.09
	01/08/04	25.46				65.70
	05/10/04	26.90				64.26
	08/17/04	27.03				64.13
	01/14/05	27.06				64.10
	06/29/05	25.67				65.49
	09/16/05	28.10				63.06
	02/28/06	Well Not Located				N/A
	06/21/06	29.16				62.00
MW-2	01/06/03	33.76			94.57	60.81
	04/02/03	31.92				62.65
	08/26/03	27.81				66.76
	01/08/04	29.40				65.17
	05/10/04	26.68				67.89
	08/17/04	30.71				63.86
	01/14/05	30.78				63.79
	06/29/05	29.35				65.22
	09/16/05	30.61				63.96
	02/28/06	31.19				63.38
	06/21/06	31.67				62.90
MW-3	01/06/03	30.87			91.91	61.04
	04/02/03	29.02				62.89
	08/26/03	25.98				65.93
	01/08/04	26.46				65.45
	05/10/04	28.83				63.08
	08/17/04	27.76				64.15
	01/14/05	27.86				64.05
	06/29/05	26.39				65.52
	09/16/05	27.67				64.24
	02/28/06	29.10				62.81
	06/21/06	28.79				63.12
MW-4	01/06/03	24.58			86.20	61.62
	04/02/03	22.73				63.47
	08/26/03	15.07				71.13
	01/08/04	20.73				65.47
	05/10/04	25.94				60.26
	08/17/04	Well Not Located				N/A
	01/14/05	21.83				64.37
	06/29/05	20.51				65.69
	09/16/05	Well Not Located				N/A
	02/28/06	Well Not Located				N/A
	06/21/06	Well Not Located				N/A

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-5	01/06/03	27.96			89.29	61.33
	04/02/03	25.00				64.29
	08/26/03	22.70				66.59
	01/08/04	24.49				64.80
	05/10/04	25.57				63.72
	08/17/04	25.75				63.54
	01/14/05	25.44				63.85
	06/29/05	24.30				64.99
	09/16/05	25.86				63.43
	02/28/06	27.63				61.66
	06/21/06	26.64				62.65
MW-6	01/06/03	33.57			93.91	60.34
	04/02/03	31.66				62.25
	08/26/03	27.51				66.40
	01/08/04	29.58				64.33
	05/10/04	29.91				64.00
	08/17/04	29.50				64.41
	01/14/05	30.77				63.14
	06/29/05	29.74				64.17
	09/16/05	30.81				63.10
	02/28/06	31.07				62.84
	06/21/06	31.72				62.19
MW-7	01/06/03	31.57			91.68	60.11
	04/02/03	29.40				62.28
	08/26/03	26.88				64.80
	01/08/04	28.40				63.28
	05/10/04	27.78				63.90
	08/17/04	29.85				61.83
	01/14/05	29.28				62.40
	06/29/05	28.17				63.51
	09/16/05	29.66				62.02
	02/28/06	29.50				62.18
	06/21/06	30.48				61.20
MW-8	01/06/03	33.84			94.72	60.88
	04/02/03	32.02				62.70
	08/26/03	27.58				67.14
	01/08/04	29.47				65.25
	05/10/04	29.90				64.82
	08/17/04	30.88				63.84
	01/14/05	30.85				63.87
	06/29/05	29.50				65.22
	09/16/05	30.76				63.96
	02/28/06	31.30				63.42
	06/21/06	31.84				62.88

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-9	01/06/03	30.41			90.54	60.13
	04/02/03	28.20				62.34
	08/26/03	26.10				64.44
	01/08/04	27.33				63.21
	05/10/04	28.69				61.85
	08/17/04	29.50				61.04
	01/14/05	28.14				62.40
	06/29/05	26.97				63.57
	09/16/05	26.38				64.16
	02/28/06	Well Not Located				N/A
	06/21/06	27.13				63.41
MW-10	01/06/03	39.71			99.77	60.06
	04/02/03	37.77				62.00
	08/26/03	33.36				66.41
	01/08/04	35.04				64.73
	05/10/04	35.50				64.27
	08/17/04	36.49				63.28
	01/14/05	36.66				63.11
	06/29/05	35.04				64.73
	09/16/05	36.34				63.43
	02/28/06	37.02				62.75
	06/21/06	37.40				62.37
MW-11	01/06/03	40.37			100.46	60.09
	04/02/03	38.36				62.10
	08/26/03	33.88				66.58
	01/08/04	35.70				64.76
	05/10/04	36.19				64.27
	08/17/04	37.17				63.29
	01/14/05	36.79				63.67
	06/29/05	35.68				64.78
	09/16/05	37.11				63.35
	02/28/06	37.75				62.71
	06/21/06	38.10				62.36
MW-12	01/06/03	39.64			99.61	59.97
	04/02/03	37.78				61.83
	08/26/03	33.78				65.83
	01/08/04	35.44				64.17
	05/10/04	35.75				63.86
	08/17/04	36.72				62.89
	01/14/05	37.18				62.43
	06/29/05	35.34				64.27
	09/16/05	Well Not Located				N/A
	02/28/06	37.12				62.49
	06/21/06	37.68				61.93

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-13	01/06/03	42.87			100.39	57.52
	04/02/03	41.13				59.26
	08/26/03	37.20				63.19
	01/08/04	38.70				61.69
	05/10/04	39.27				61.12
	08/17/04	40.27				60.12
	01/14/05	40.12				60.27
	06/29/05	37.96				62.43
	09/16/05	40.11				60.28
	02/28/06	40.76				59.63
	06/21/06	40.91				59.48
MW-14	01/06/03	43.66			98.89	55.23
	04/02/03	42.10				56.79
	08/26/03	38.39				60.50
	01/08/04	39.40				59.49
	05/10/04	40.06				58.83
	08/17/04	41.12				57.77
	01/14/05	40.75				58.14
	06/29/05	39.77				59.12
	09/16/05	40.65				58.24
	02/28/06	41.42				57.47
	06/21/06	41.52				57.37
MW-15	01/06/03	44.97			100.18	55.21
	04/02/03	43.24				56.94
	08/26/03	39.58				60.60
	01/08/04	46.55				53.63
	05/10/04	41.19				58.99
	08/17/04	42.11				58.07
	01/14/05	43.06				57.12
	06/29/05	40.92				59.26
	09/16/05	41.80				58.38
	02/28/06	42.54				57.64
	06/21/06	42.64				57.54
MW-16	01/06/03	31.07			89.91	58.84
	04/02/03	29.00				60.91
	08/26/03	27.54				62.37
	01/08/04	28.03				61.88
	05/10/04	27.83				62.08
	08/17/04	29.23				60.68
	01/14/05	28.92				60.99
	06/29/05	27.86				62.05
	09/16/05	29.23				60.68
	02/28/06	28.35				61.56
	06/21/06	29.89				60.02

Table 1
Historical Groundwater Elevation and Product Thickness Data
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-17	01/06/03	36.81			94.46	57.65
	04/02/03	34.63				59.83
	08/26/03	37.08				57.38
	01/08/04	32.56				61.90
	05/10/04	32.93				61.53
	08/17/04	34.87				59.59
	01/14/05	33.83				60.63
	06/29/05	32.60				61.86
	09/16/05	33.84				60.62
	02/28/06	34.21				60.25
	06/21/06	34.73				59.73
MW-18	01/06/03	42.83			98.14	55.31
	04/02/03	41.26				56.88
	08/26/03	37.47				60.67
	01/08/04	38.14				60.00
	05/10/04	39.09				59.05
	08/17/04	35.43				62.71
	01/14/05	40.04				58.10
	06/29/05	38.93				59.21
	09/16/05	39.77				58.37
	02/28/06	40.54				57.60
	06/21/06	40.69				57.45
MW-19	01/06/03	45.14			98.27	53.13
	04/02/03	43.31				54.96
	08/26/03	39.24				59.03
	01/08/04	40.83				57.44
	05/10/04	41.47				56.80
	08/17/04	42.01				56.26
	01/14/05	42.18				56.09
	06/29/05	41.17				57.10
	09/16/05	42.25				56.02
	02/28/06	42.76				55.51
	06/21/06	42.97				55.30
MW-20	01/06/03	28.09			88.35	60.26
	04/02/03	25.79				62.56
	08/26/03	24.98				63.37
	01/08/04	25.10				63.25
	05/10/04	28.41				59.94
	08/17/04	Well Not Located				N/A
	01/14/05	25.85				62.50
	06/29/05	24.63				63.72
	09/16/05	Well Not Located				N/A
	02/28/06	25.88				62.47
	06/21/06	Well Not Located				N/A

Table 1

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery

3176 Charlotte Highway (Highway 49)

York, York County, South Carolina

UST Permit Number: 09322

SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
TW-1	01/06/03	34.33			94.72	60.39
	04/02/03	31.86				62.86
	08/26/03	27.96				66.76
	01/08/04	29.48				65.24
	05/10/04	30.31				64.41
	08/17/04	30.40				64.32
	01/14/05	30.75				63.97
	06/29/05	29.56				65.16
	09/16/05	30.76				63.96
	02/28/06	31.46				63.26
	06/21/06	31.64				63.08
TW-2	01/06/03	33.91			94.72	60.81
	04/02/03	32.04				62.68
	08/26/03	27.54				67.18
	01/08/04	29.45				65.27
	05/10/04	29.89				64.83
	08/17/04	30.87				63.85
	01/14/05	30.94				63.78
	06/29/05	29.52				65.20
	09/16/05	30.67				64.05
	02/28/06	31.36				63.36
	06/21/06	31.86				62.86
TW-3	01/06/03	38.81			99.21	60.40
	04/02/03	36.97				62.24
	08/26/03	32.80				66.41
	01/08/04	34.40				64.81
	05/10/04	34.79				64.42
	08/17/04	35.75				63.46
	01/14/05	38.75				60.46
	06/29/05	34.33				64.88
	09/16/05	30.59				68.62
	02/28/06	36.26				62.95
	06/21/06	36.68				62.53

N/A = Not Applicable

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-1*	01/06/03	**911.00**	**9,810.00**	**2,660.00**	**18,650.00**	**250.00**	**743.00**	**56.00**	<0.010	33,080.00
	04/02/03	**590.00**	**2,900.00**	960.00	7,400.00	27.00	**200.00**	**10.00**	<0.010	12,087.00
	08/26/03	**610.00**	1,200.00	640.00	4,800.00	**100.00**	**500.00**	**33.00**	<0.010	7,883.00
	01/08/04	**620.00**	850.00	340.00	3,800.00	**100.00**	**500.00**	**5.00**	0.17	6,215.17
	05/10/04	**330.00**	1,100.00	459.00	3,700.00	25.00	**130.00**	**40.00**	<0.010	5,784.00
	08/17/04	**380.00**	970.00	670.00	3,600.00	<25	**120.00**	**63.00**	<0.010	5,803.00
	01/14/05	**270.00**	1,440.00	900.00	5,620.00	<1.0	**268.00**	<5.0	0.09	8,498.09
	06/29/05	**273.00**	1,200.00	601.00	3,640.00	<20	**136.00**	**29.50**	<0.019	5,879.50
	09/16/05	**23,300.00**	**59,100.00**	**4,700.00**	**28,400.00**	<500	<1,000	NA	**27.20**	115,527.20
	02/28/06	Well Not Located								0.00
	06/21/06	**19,500.00**	**59,900.00**	**4,070.00**	**24,400.00**	<1,000	<2,000	**47.60**	**17.70**	107,870.00
	SSTL	**11.00**	**2,223.00**	**1,558.00**	**10,000.00**	**90.00**	**56.00**	**2.00**	**0.32**	
	> SSTL	19,489.00	57,677.00	2,512.00	14,400.00	0.00	0.00	45.60	17.38	
MW-2	01/06/03	**18,400.00**	**31,100.00**	**3,180.00**	**18,920.00**	**395.00**	**514.00**	28.00	0.02	72,537.02
	04/02/03	**13,000.00**	1,800.00	**1,600.00**	9,500.00	**480.00**	**500.00**	**190.00**	**160.00**	27,230.00
	08/26/03	**16,000.00**	**26,000.00**	**2,200.00**	13,000.00	**480.00**	**540.00**	**190.00**	**120.00**	58,530.00
	01/08/04	**18,000.00**	**33,000.00**	**2,200.00**	12,000.00	**880.00**	**1,200.00**	**1,000.00**	**150.00**	68,430.00
	05/10/04	**17,000.00**	**24,000.00**	**2,000.00**	11,000.00	**750.00**	**2,500.00**	**1,200.00**	**260.00**	58,710.00
	08/17/04	**19,000.00**	**29,000.00**	**2,900.00**	14,000.00	**1,200.00**	**2,500.00**	**2,100.00**	**500.00**	71,200.00
	01/14/05	**20,600.00**	**36,400.00**	**2,960.00**	**17,200.00**	**940.00**	**862.00**	**1,230.00**	**186.00**	80,378.00
	06/29/05	**18,500.00**	**27,300.00**	**2,600.00**	14,400.00	**952.00**	<500	**792.00**	**151.00**	64,695.00
	09/16/05	**24,300.00**	**34,500.00**	**2,870.00**	**15,500.00**	**1,130.00**	**645.00**	NA	0.083	78,945.083
	02/28/06	**24,400.00**	**36,200.00**	**2,700.00**	12,400.00	**847.00**	<500	NA	**310.00**	76,857.00
	06/21/06	**19,500.00**	**26,300.00**	**2,420.00**	12,600.00	**859.00**	<1,000	**1,010.00**	**320.00**	63,009.00
	SSTL	**10.00**	**2,021.00**	**1,416.00**	**15,000.00**	**81.00**	**51.00**	**30.00**	**10.00**	
	> SSTL	19,490.00	24,279.00	1,004.00	0.00	778.00	0.00	980.00	310.00	
MW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	350.00	<0.020	350.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	8.50	0.00	8.50
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	
MW-4	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	12.00	<0.020	12.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Removed from Sampling Schedule								0.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	
MW-5	01/06/03	<1.0	<1.0	<1.0	5.40	<1.0	<1.0	12.00	<0.020	17.40
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	5.40	<0.010	5.40
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	0.00

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-6	01/06/03	**4,840.00**	**20,400.00**	**3,540.00**	**19,020.00**	25.00	**640.00**	11.00	**7.00**	48,483.00
	04/02/03	**2,600.00**	**11,000.00**	**1,800.00**	**9,000.00**	**250.00**	**1,200.00**	**54.00**	2.60	25,906.60
	08/26/03	**1,400.00**	**5,800.00**	**1,100.00**	6,600.00	**250.00**	**1,200.00**	**37.00**	<0.010	16,387.00
	01/08/04	**350.00**	1,200.00	240.00	1,300.00	<1.0	**77.00**	<5.0	1.20	3,168.20
	05/10/04	**640.00**	**2,200.00**	300.00	1,900.00	<5.0	**150.00**	**36.00**	1.80	5,227.80
	08/17/04	**1,100.00**	**2,200.00**	730.00	3,400.00	<50	<250	13.00	<0.010	7,443.00
	01/14/05	**1,070.00**	**2,960.00**	718.00	3,990.00	<1.0	**116.00**	**107.00**	1.67	8,962.67
	06/29/05	**413.00**	500.00	290.00	1,480.00	<10	**77.30**	<5.0	0.55	2,760.85
	09/16/05	**323.00**	273.00	194.00	1,010.00	<10	**63.60**	NA	0.76	1,864.36
	02/28/06	**1,020.00**	1,150.00	619.00	2,980.00	<10	**141.00**	NA	1.00	5,911.00
	06/21/06	**316.00**	109.00	200.00	1,020.00	<10	**81.20**	15.50	0.42	1,742.12
	SSTL	**6.00**	**1,212.00**	**850.00**	**8,000.00**	**48.00**	**31.00**	**18.00**	**4.63**	
	> SSTL	310.00	0.00	0.00	0.00	0.00	50.20	0.00	0.00	
MW-7	01/06/03	**1,020.00**	1.00	**2,290.00**	**16,940.00**	1.00	**826.00**	5.00	**1.70**	21,084.70
	04/02/03	**240.00**	110.00	120.00	38.00	**210.00**	**120.00**	**240.00**	**1.70**	1,079.70
	08/26/03	**740.00**	250.00	110.00	1,600.00	**50.00**	**250.00**	**160.00**	0.09	3,160.09
	01/08/04	**630.00**	**13,000.00**	**2,400.00**	**25,000.00**	**100.00**	**1,000.00**	5.00	**3.50**	42,138.50
	05/10/04	**700.00**	**10,000.00**	**3,400.00**	**23,000.00**	**200.00**	**1,000.00**	5.00	**6.80**	38,311.80
	08/17/04	**23.00**	49.00	21.00	140.00	<5.0	<25	**19.00**	<0.010	252.00
	01/14/05	**565.00**	**9,180.00**	**3,570.00**	**24,400.00**	<1.0	**1,370.00**	**24.00**	**1.75**	39,110.75
	06/29/05	**582.00**	**7,030.00**	**3,480.00**	**23,100.00**	<100	**890.00**	<5.0	**1.70**	35,083.70
	09/16/05	**610.00**	**5,770.00**	**3,280.00**	**21,600.00**	<50	**1,040.00**	NA	**1.90**	32,301.90
	02/28/06	**178.00**	**4,760.00**	**2,480.00**	**19,300.00**	<100	**562.00**	NA	**1.20**	27,281.20
	06/21/06	**500.00**	**3,890.00**	**3,190.00**	**23,200.00**	<100	**916.00**	**23.90**	**0.86**	31,720.76
	SSTL	**6.00**	**1,212.00**	**850.00**	**12,123.00**	**48.00**	**31.00**	**18.00**	**0.66**	
	> SSTL	494.00	2,678.00	2,340.00	11,077.00	0.00	885.00	5.90	0.20	
MW-8	01/06/03	**6,770.00**	**84,600.00**	**3,560.00**	**24,740.00**	7.30	**362.00**	**24.00**	**1.90**	120,065.20
	04/02/03	**8,600.00**	**46,000.00**	**3,500.00**	**23,000.00**	**200.00**	**1,000.00**	**49.00**	**190.00**	82,539.00
	08/26/03	**3,800.00**	**10,000.00**	1,200.00	6,800.00	**100.00**	**500.00**	**81.00**	**58.00**	22,539.00
	01/08/04	**5,600.00**	**22,000.00**	**3,400.00**	**20,000.00**	**100.00**	**1,300.00**	**18.00**	**4.70**	52,422.70
	05/10/04	**4,500.00**	**18,000.00**	1,600.00	**18,000.00**	**200.00**	**1,000.00**	**67.00**	**6.30**	43,373.30
	08/17/04	**10,000.00**	**37,000.00**	**2,900.00**	**20,000.00**	<1,000	<5,000	**27.00**	**63.00**	69,990.00
	01/14/05	**6,780.00**	**38,200.00**	**4,340.00**	**28,200.00**	<1.0	**1,600.00**	<5.0	**2.33**	79,122.33
	06/29/05	**6,490.00**	**31,000.00**	**4,320.00**	**27,500.00**	<500	<1,000	<5.0	**2.60**	69,312.60
	09/16/05	**14,300.00**	**50,000.00**	**4,640.00**	**28,000.00**	54.60	**1,040.00**	NA	**22.20**	98,056.80
	02/28/06	**17,100.00**	**52,500.00**	**3,950.00**	**21,800.00**	<500	<1000	NA	**17.00**	95,367.00
	06/21/06	**11,600.00**	**44,300.00**	**3,860.00**	**22,000.00**	<1,000	<2,000	<10	**6.70**	81,766.70
	SSTL	**12.00**	**2,424.00**	**1,700.00**	**16,000.00**	**96.00**	**62.00**	**4.00**	**0.48**	
	> SSTL	11,588.00	41,876.00	2,160.00	6,000.00	0.00	0.00	0.00	6.22	
MW-9	01/06/03	<1.0	2.20	5.70	579.00	<1.0	**109.00**	**24.00**	<0.020	719.90
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	05/10/04	Well Not Located								0.00
	08/17/04	**540.00**	**12,000.00**	**2,800.00**	**23,000.00**	<500	<2,500	**19.00**	**8.40**	38,367.40
	01/14/05	Removed from Sampling Schedule								0.00
	RBSL	**5.00**	**1,000.00**	**700.00**	**10,000.00**	**40.00**	**25.00**	**15.00**	**0.05**	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-10	01/06/03	**7,980.00**	**24,900.00**	**3,540.00**	18,180.00	25.00	**299.00**	**35.00**	**78.00**	55,037.00
	04/02/03	**11,000.00**	**23,000.00**	**2,400.00**	13,000.00	**200.00**	**1,000.00**	**49.00**	**190.00**	50,839.00
	08/26/03	**12,000.00**	**33,000.00**	**3,200.00**	17,000.00	**250.00**	**1,200.00**	**210.00**	**450.00**	67,310.00
	01/08/04	**4,200.00**	**14,000.00**	**2,400.00**	12,000.00	**100.00**	**500.00**	6.30	**100.00**	33,306.30
	05/10/04	**8,600.00**	**21,000.00**	**2,400.00**	14,000.00	<250	<1,200	5.70	**210.00**	46,215.70
	08/17/04	**3,500.00**	**16,000.00**	**2,200.00**	14,000.00	<500	<2,500	**25.00**	**67.00**	35,792.00
	01/14/05	**10,200.00**	**34,600.00**	**3,150.00**	**18,400.00**	<1.0	38.00	20.00	**152.00**	66,560.00
	06/29/05	**9,040.00**	**26,000.00**	**3,040.00**	16,600.00	<500	<1,000	6.30	**115.00**	54,801.30
	09/16/05	**8,120.00**	**25,900.00**	**3,130.00**	17,000.00	<200	<400	NA	**143.00**	54,293.00
	02/28/06	**2,410.00**	**9,780.00**	**1,840.00**	7,910.00	<200	<400	NA	**15.90**	21,955.90
	06/21/06	**2,700.00**	**11,800.00**	**2,060.00**	10,000.00	<200	<400	11.10	**23.60**	26,594.70
	SSTL	**9.00**	**1,819.00**	**1,274.00**	**18,185.00**	**73.00**	**46.00**	**21.00**	**9.00**	
	> SSTL	2,691.00	9,981.00	786.00	0.00	0.00	0.00	0.00	14.60	
MW-11	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	**7.80**	**6.00**	<0.020	13.80
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26.00**	<0.010	26.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**33.00**	**0.29**	33.29
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**46.00**	<0.010	46.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17.00**	<0.010	17.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**10.00**	<0.010	10.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**37.10**	<0.019	37.10
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.07**	0.07
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**30.10**	<0.019	30.10
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**5.00**	**0.020**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	
MW-12	01/06/03	**720.00**	**17.20**	13.40	**1,550.00**	<1.0	**113.00**	6.00	**12.00**	2,431.60
	04/02/03	**12.00**	<5.0	<1.0	1.80	<1.0	<5.0	**38.00**	0.24	52.04
	08/26/03	**51.00**	<5.0	<1.0	72.00	<1.0	5.50	**37.00**	0.37	165.87
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	0.015	0.015
	05/10/04	**23.00**	<5.0	<1.0	43.00	<1.0	<5.0	6.80	0.11	72.91
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**12.00**	0.11	12.11
	01/14/05	**74.20**	<1.0	<1.0	67.60	<1.0	<5.0	6.00	0.23	148.03
	06/29/05	**28.40**	<1.0	<1.0	10.80	<1.0	<2.0	<5.0	0.027	39.227
	09/16/05	Well Not Located								0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	NA	0.018	0.018
	06/21/06	**7.20**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	7.20
	SSTL	**7.00**	**5.00**	**68.00**	**730.00**	**5.00**	**36.00**	**7.00**	**7.00**	
	> SSTL	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-13	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	1.30	<5.0	<0.020	1.30
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**40.00**	<0.010	40.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45.00**	<0.010	45.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**10.90**	<0.018	10.90
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**5.00**	**0.020**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-14	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**39.00**	<0.010	39.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100.00**	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45.00**	<0.010	45.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**19.00**	<0.010	19.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**15.00**	<0.020	15.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**6.40**	<0.018	6.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**5.00**	**0.510**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-15	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	9.00	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36.00**	<0.010	36.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120.00**	<0.010	120.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**48.00**	<0.010	48.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26.00**	<0.010	26.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	8.00	<0.020	8.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	7.50	<0.018	7.50
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.038	0.038
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.032	0.032
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.046	0.046
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**15.00**	**0.050**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-16	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	18.00	<0.020	18.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	140.00	<0.010	140.00
	05/10/04	Well Not Located								0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	13.00	<0.010	13.00
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
MW-17	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	**44.00**	<0.020	44.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17.00**	<0.010	17.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**42.00**	<0.010	42.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.020	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	7.30	<0.010	7.30
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	9.00	<0.020	9.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.40	<0.019	5.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	**0.024**	0.024
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	**0.021**	0.021
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**15.00**	**0.020**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.001	
MW-18	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**50.00**	<0.010	50.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100.00**	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**97.00**	<0.010	97.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.90	<0.010	9.90
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**17.00**	<0.020	17.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.70	<0.018	8.70
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	9.10	<0.019	9.10
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**15.00**	**0.120**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-19	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	6.00	<0.020	6.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18.00**	<0.010	18.00
	01/08/04	<1.0	<5.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18.00**	<0.010	18.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	**5.00**	**5.00**	**5.00**	**10.00**	**5.00**	**5.00**	**15.00**	**0.020**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MW-20	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	11.00	<0.020	11.00
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	130.00	<0.010	130.00
	05/10/04	Removed from Sampling Schedule								
	SSTL	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
TW-1	01/06/03	3,380.00	1,510.00	1,860.00	9,370.00	25.00	160.00	6.00	5.20	16,316.20
	04/02/03	Well Not Located								0.00
	08/26/03	Well Not Located								0.00
	01/08/04	2,000.00	2,500.00	1,100.00	5,800.00	50.00	250.00	5.00	0.38	11,705.38
	05/10/04	Well Not Located								0.00
	08/17/04	67.00	<50	<10	59.00	<10	<50	30.00	0.52	156.52
	01/14/05	700.00	7.80	82.90	1,700.00	8.10	79.80	<5.0	0.47	2,579.07
	06/29/05	400.00	5.30	22.60	759.00	8.60	72.80	<5.0	0.41	1,268.71
	09/16/05	457.00	13.20	13.20	989.00	<10	60.80	NA	0.77	1,533.97
	02/28/06	95.60	13.30	<2.0	19.20	41.60	<4.0	NA	1.30	171.00
	06/21/06	986.00	11.80	105.00	1,980.00	14.20	153.00	<5.0	0.56	3,250.56
	SSTL	NE	NE	NE	NE	NE	NE	NE	NE	
TW-2	01/06/03	**6,620.00**	**6,860.00**	**620.00**	**4,110.00**	**50.20**	**160.00**	**6.00**	**5.20**	18,431.40
	04/02/03	**3,300.00**	**1,500.00**	**220.00**	**2,000.00**	**50.00**	**250.00**	**10.00**	**1.10**	7,331.10
	08/26/03	**3,000.00**	**450.00**	**79.00**	**1,700.00**	**10.00**	**160.00**	**6.80**	**0.35**	5,406.15
	01/08/04	**2,800.00**	**460.00**	**14.00**	**1,000.00**	**22.00**	**34.00**	**5.40**	**1.10**	4,336.50
	05/10/04	**3,700.00**	**640.00**	**160.00**	**1,800.00**	5.00	**170.00**	<5.0	**1.20**	6,476.20
	08/17/04	**1,400.00**	<500	<100	**300.00**	<100	<500	**5.40**	**2.20**	1,707.60
	01/14/05	**3,100.00**	**605.00**	**175.00**	**1,490.00**	**31.90**	**172.00**	<5.0	**0.59**	5,574.49
	06/29/05	**3,670.00**	**241.00**	**148.00**	**1,710.00**	**16.10**	**228.00**	<5.0	**0.40**	6,013.50
	09/16/05	**3,540.00**	**876.00**	**237.00**	**1,010.00**	**36.90**	**160.00**	NA	**0.86**	5,860.76
	02/28/06	**529.00**	**17.20**	**22.00**	**1,130.00**	<10	**31.10**	NA	**0.34**	1,729.64
	06/21/06	**4,050.00**	**1,430.00**	**320.00**	**1,890.00**	**51.20**	**258.00**	<5.0	**1.00**	8,000.20
	SSTL	5.00	8.00	5.00	180.00	5.00	18.00	2.00	0.05	
	> SSTL	4,045.00	1,422.00	315.00	1,710.00	46.20	240.00	0.00	0.95	
TW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	**8.90**	<5.0	0.13	9.03
	04/02/03	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<5.0	0.03	0.031
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<0.010	0.00
	05/10/04	2.90	**11.00**	1.80	**12.00**	<1.0	<5.0	<5.0	0.05	27.75
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	0.04	0.04
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.08	0.077
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.04	0.044
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.019	0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	2.00	0.230	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
Crook WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**10.00**	<0.020	10.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**9.80**	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	**12.00**	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	**400.00**	<1.0	<1.0	**110.00**	<1.0	**12.00**	<5.0	2.24	524.24
post		**22.00**	<1.0	<1.0	3.20	<1.0	<5.0	<5.0	0.09	25.29
pre	06/29/05	**193.00**	BDL	BDL	**69.90**	BDL	**9.60**	NA	NA	272.50
post		4.20	BDL	BDL	3.70	BDL	BDL	NA	NA	7.90
pre	09/16/05	**12.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	12.646
post		**342.00**	<10	<10	<30	<10	<20	NA	3.80	345.80
pre	02/28/06	Not Sampled								0.00
post										0.00
pre	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.041	0.041
post		Not Sampled								0.00
	SSTL	**5.00**	**2.00**	**2.00**	**26.00**	**2.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Swift WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**10.00**	<0.020	10.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**9.80**	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	**12.00**	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	**400.00**	<1.0	<1.0	**110.00**	<1.0	**12.00**	<5.0	2.24	524.24
post		**22.00**	<1.0	<1.0	**3.20**	<1.0	<5.0	<5.0	0.09	25.29
pre	06/29/05	**193.00**	BDL	BDL	**69.90**	BDL	**9.60**	NA	NA	272.50
post		**4.20**	BDL	BDL	**3.70**	BDL	ND	NA	NA	7.90
pre	09/16/05	**12.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.046	12.646
post		**342.00**	<10	<10	<30	<10	<20	NA	3.80	345.80
pre	02/28/06	**169.00**	<1.0	<1.0	**88.60**	<1.0	**9.30**	NA	NA	266.90
post		**7.20**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	7.20
pre	06/21/06	**182.00**	<1.0	<1.0	**114.00**	<1.0	**13.80**	<5.0	1.30	311.10
post		**9.30**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.049	9.349
	SSTL	**2.00**	**2.00**	**2.00**	**2.00**	**5.00**	**5.00**	**5.00**	**5.00**	
	> SSTL	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Naph-thalene	Lead	EDB	Current Mass
Hill WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**9.00**	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23.00**	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**22.00**	<0.010	22.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**6.10**	<0.010	6.10
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
pre	01/14/05	**2.80**	<1.0	<1.0	<1.0	<1.0	<5.0	**10.00**	0.11	12.91
post		<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
pre	06/29/05	**2.40**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.19	2.59
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.06	0.063
pre	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.05	0.051
post		**2.60**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	0.16	2.76
pre	02/28/06	**9.40**	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	9.40
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	NA	0.00
pre	06/21/06	**11.10**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.35	11.45
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.019	0.019
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Smith WSW	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**5.20**	<0.010	5.20
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120.00**	<0.010	120.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**41.00**	<0.010	41.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	NA	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**51.00**	<0.020	51.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**57.40**	<0.018	57.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NA	<0.018	0.00
	02/28/06	Not Sampled								0.00
	06/21/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	> SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL MASS										328,416.515
TOTAL SSTL MASS		117.00	10,972.00	7,769.00	80,330.00	503.00	391.00	199.00	53.33	100,082.00
INITIAL MASS ABOVE SSTL										217,876.56
CURRENT MASS ABOVE SSTL										241,736.851
PERCENT TOTAL MASS REDUCTION ABOVE SSTL										-10.951

ug/l - micrograms per liter
D = Not Detected
E = Not Established
NA = Not Analyzed
RBSL = Risk Based Screen Level
SSTL = Site Specific Target Levels
Bold denotes concentrations over their respective SSTL or RBSL
* = 09/16/05 Sampling Event SSTL Data Utilized For Reduction Calculation

Concentration Reduction Calculation is as follows:

$$\frac{\text{[Initial Sample Concentration Above SSTL] - [Subsequent Sample Concentration Above SSTL]}}{\text{[Initial Sample Concentration Above SSTL]}} \times 100 = \%\ \text{Reduction}$$

APPENDIX C
Field Data Sheets

SEI Environmental

SC Monitoring Well Gauging Data Sheet

Site Name: Smith Grocery **WO#** 300401

Date 6/20/06 & 6/21/06

Well ID	Total Depth (feet)	Well Dia. (in.)	Depth to Product (feet)	Product Thickness (feet)	Depth to Water (feet)	Notes	
MW-1	35.00	2			29.16	Tagged IW-5	6.20
MW-2	38.00	2			31.67		6.20
~~MW-3~~	35.00	2			28.79	~~Gauge Only~~	6.20
~~MW-4~~	27.00				CNF	~~Gauge Only~~	6.20
~~MW-5~~	30.00	2			26.64	~~Gauge Only~~	6.20
MW-6	37.00	2			31.72		6.20
MW-7	36.00	2			30.48		6.20
MW-8	38.00	2			31.84		6.20
~~MW-9~~	36.00	2			27.13	~~Gauge Only~~	6.20
MW-10	44.00	2			37.40		
MW-11	44.00				38.10		
MW-12	44.00				37.68		
MW-13	47.00				40.91		
MW-14	50.00				41.52		
MW-15	50.00				42.64		
~~MW-16~~	37.00				29.89	~~Gauge Only~~	
MW-17	40.00				34.73		
MW-18	46.00				40.69		
MW-19	50.00				42.97		
~~MW-20~~	35.00				CNF	~~Gauge Only~~	6.20
TW-1	61.00	2			31.64	Tagged DW-1	6.20
TW-2	88.00	2			31.86		6.20
TW-3	71.00	2			36.68		

WSW Samples: ~~Crook (Pre/Post)~~, Hill (Pre/Post), Swift (Pre/Post), & Smith (Pre/Post)

Analysis: **EPA Method 8260B for BTEX, MTBE, and Naphthalene** 40 mL HCl
EPA Method 8011 for EDB 40 ml of Sodium Thio
LEAD 3030 cPb plastic w HNO3

2-inch diameter well: Well Volume = (water column) x (0.163 gallon/foot)
4-inch diameter well: Well Volume = (water column) x (0.652 gallon/foot)
Purge amount = Well Volume x 3

APPENDIX D
Laboratory Analytical Results and Chain-of-Custody

Sample Summary

SEI-Columbia, SC

Job No: F41617

Smith's Grocery; York, SC
Project No: 300401

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F41617-1	06/20/06	15:25	ZEPH	06/22/06	AQ	Ground Water	MW-7
F41617-2	06/20/06	13:40	ZEPH	06/22/06	AQ	Ground Water	MW-8
F41617-3	06/20/06	10:50	ZEPH	06/22/06	AQ	Ground Water	TW-1
F41617-4	06/20/06	12:15	ZEPH	06/22/06	AQ	Ground Water	TW-2
F41617-5	06/20/06	14:40	ZEPH	06/22/06	AQ	Ground Water	MW-6
F41617-6	06/20/06	14:25	ZEPH	06/22/06	AQ	Ground Water	MW-1
F41617-7	06/20/06	12:35	ZEPH	06/22/06	AQ	Ground Water	MW-2

CHAIN OF CUSTODY

ACCUTEST
4405 Vineland Rd., Suite C15
Orlando, FL 32811
407.425.6700, fax 407.425.0707

Accutest Job #:

Accutest Control #:

Client Information

Name: SEI Environmental
Address: 5100 Reagan Dr., Suite 7
City: Charlotte State: NC Zip: 28206
Send Report to:
Phone #: 704-596-8624

Facility Information

Project Name: Smith Grocery
Location: 3176 Charlotte Hwy York S.C
Project No.: 300-401
FAX #: 704-596-8605

Analytical Information

8260B for BTEX, Naphthalene, MTBE, Methanol, 8011 EDB, EDA 504 EDB, Pb Lead 239.2

Field ID / Point of Collection	Collection: Date	Time	Sampled By	Matrix	# of bottles	Preservation: Voc	NaOH	HNO3	H2So4	None
TW-3	6/21/06	9:40	SS, ZS	GW	7	3		1		
MW-10		9:50				3		1		
MW-13		10:00				3		1		
MW-11		10:20				3		1		
MW-15		10:25				3		1		
MW-14		10:35				3		1		
MW-12		10:50				3		1		
MW-17		11:05				3		1		
MW-18		11:20				3		1		
MW-19		11:45				3		1		

Turnaround Information

- [ ] 21 Day Standard — Approved By:
- [ ] 14 Day
- [x] 7 Days *EMERGENCY*
- [ ] Other _____ (Days)

RUSH TAT is for FAX data
Data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	6/21/06 14:30	1	2		2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by Sampler:	Date Time:	Received By:	Seal #	Preserved where applica	On Ice:
5		5		☐	☐

Revised 11/06 IPS

CHAIN OF CUSTODY

ACCUTEST

4405 Vineland Rd., Suite C15
Orlando, FL 32811
407.425.6700, fax 407.425.0707

Accutest Job #:

Accutest Control #:

Client Information

Name: SEI Environmental
Address: 5100 Reagan Dr., Suite 7
City: Charlotte State: NC Zip: 28206
Send Report to:
Phone #: 704-596-8624

Facility Information

Project Name: Smith Grocery
Location: 3176 Charlotte Hwy York S.C.
Project No.: 300-401
FAX #: 704-596-8605

Analytical Information

8260B for BTEX MTBE Naphthalene
EPA Method 8011 for EDB
Pb Lead 239.2

Field ID / Point of Collection	Collection: Date	Time	Sampled By	Matrix	# of bottles	Preservation: VOC	NaOH	HNO3	H2So4	None	8260B	EPA 8011	Pb 239.2
WSW Hill Pre	6/21/06	12:00	Scott, JR	DW	7	3		1			X	X	X
WSW Hill Post		12:05			7	3		1			X	X	X
WSW Swift Pre		12:20			7	3		1			X	X	X
WSW Swift Post		12:25			7	3		1			X	X	X
WSW Smith		13:00			7	3		1			X	X	X
WSW Creek		13:15			7	3		1			X	X	X

Turnaround Information

- [ ] 21 Day Standard
- [ ] 14 Day
- [X] 7 Days *EMERGENCY*
- [ ] Other _____ (Days)

Approved By:

RUSH TAT is for FAX data
Data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify) _____
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Sample Custody must be documented below each time samples change possesion, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	[signature]	6/21/06 14:30	1	2		2
2			3	4		4
3			5	Seal #	Preserved where applica ☐	On Ice: ☐

Revised 09/2005 RS

CHAIN OF CUSTODY

ACCUTEST

4405 Vineland Rd., Suite C15
Orlando, FL 32811
407.425.6700, fax 407.425.0707

Accutest Job #:

Accutest Control #:

Client Information

Name: SEI Environmental
Address: 5100 Reagan Dr., Suite 7
City: Charlotte State: NC Zip: 28206
Send Report to:
Phone #: 704-596-8624

Facility Information

Project Name: Smith Grocery
Location: 3176 Charlotte Hwy York, S.C.
Project No.: 300-401
FAX #: 704-596-8605

Analytical Information

Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	Voa	NaOH	HNO3	H2So4	None	8260B for BTEX	MTBE, Napthalene	EPA Method 8011 EDB	Pb Lead 3030C								
MW-7	6/20/06	15:25	Zeph	GW	7	3		1			X	X	X									
MW-8	↓	13:40	↓	↓	↓	3		1			X	X	X									
TW-1	↓	10:50	↓	↓	↓	3		1			X	X	X									
TW-2	↓	12:15	↓	↓	↓	3		1			X	X	X									
MW-6	↓	14:40	↓	↓	↓	3		1			X	X	X									
MW-1	↓	14:25	↓	↓	↓	3		1			X	X	X									
MW-2	↓	12:35	↓	↓	↓	3		1			X	X	X									

Turnaround Information

- ☐ 21 Day Standard
- ☐ 14 Day
- ☒ 7 Days *EMERGENCY*
- ☐ Other ________ (Days)

Approved By:

RUSH TAT is for FAX data
Data unless previously approved.

Data Deliverable Information

- ☐ NJ Reduced
- ☐ NJ Full
- ☐ FULL CLP
- ☐ Disk Deliverable
- ☐ Other (Specify)
- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ ASP Category B
- ☐ State Forms

Comments / Remarks

Sample Custody must be documented below each time samples change possesion, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	6/21/06 14:30	1	2		2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by Sampler: 5	Date Time:	Received By: 5	Seal #	Preserved where applica ☐	On Ice: ☐

Revised 09/2005 RS

APPENDIX E
Disposal Manifest for Purged Groundwater

HAZ-MAT

TRANSPORTATION AND DISPOSAL
P.O. BOX 37392 • CHARLOTTE, N.C. 28237
(704) 332-5600
FAX (704) 375-7183

Manifest No. 28042

P.O. No.

Job No. 06-338 2878

NON-HAZARDOUS SPECIAL WASTE

Section I GENERATOR

GENERATOR LOCATION
NAME Smith Gregory
ORIGINATING ADDRESS 3205 Charlotte Hwy 521
MAILING ADDRESS
CITY York STATE S.C. ZIP
PHONE NO.
CONTACT NAME Mark Norris
DESC. OF WASTE Petroleum Contact Water

WORK CONTRACTED BY
Bill To: (If different from information at left)
NAME SEI Environmental
ADDRESS 5100 Reagan Dr. Suite 7
CITY Charlotte STATE N.C. ZIP 28206
PHONE NO. 704-596-8624
CONTACT NAME Mark Norris

No.	Type	Units	Quantity

Section II INVOICE INFORMATION

DESCRIPTION	GALLONS / DRUMS	QUANTITY	LINE TOTAL
1. PETROLEUM CONTACT WATER PUMPED FROM TANKS, DRUMS OR AFVR		75 gal	
2. OFF-SPEC LIGHT OIL, DIESEL OR GAS PUMPED FROM TANKS OR DRUMS			
3. SOLUBLE OILS OR COOLANTS PUMPED FROM STORAGE			
4. SEDIMENT OR SOLIDS VACUUMED FROM CONTAINMENT AREA			
5. 55-GALLON DRUM REMOVED - SOLID OR EMPTY			
6. 55-GALLON DRUM REMOVED - LIQUID			
7.			
8.			
9.			
10. ARRIVAL TIME: DEPARTURE TIME:			

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

Scott Story — Generator Authorized Agent Name

Signature

06/21/06 — Shipment Date

Section III TRANSPORTER

(TRANSPORTER (Generator complete 9a). Transporter I complete 9b. Transporter II complete 9e.)

HAZ-MAT
TRANSPORTATION AND DISPOSAL
P.O. BOX 37392 • CHARLOTTE, N.C. 28237

a. Driver Name/Title
b. Phone No. c. Truck No.

Hazardous Waste Transporter Permits
ERA NCR 000003186
EPA NCD048461370

d. Driver Signature — Shipment Date

TRANSPORTER II

e. Name SEI Environmental
f. Address 5100 Reagan Dr. Suite 7 Charlotte N.C. 28206
g. Driver Name/Title Scott Story
h. Phone No. 704-596-8624 i. Truck No. 302
j. Transporter II Permit Nos.

Driver Signature — Shipment Date 6/21/06

Section IV FACILITY INFORMATION AND CERTIFICATE OF DISPOSAL

Site Name: Haz-Mat Transportation & Disposal, Inc.
Physical Address: 210 Dalton Avenue, Charlotte, N.C. 28206
a. Phone No. 704-332-5600
b. Mailing Address: P.O. Box 37392, Charlotte, N.C. 28237

e. Discrepancy Indication Space

This is to certify that all non-hazardous material removed from above location has been received and will be disposed of in accordance with applicable local, state and federal regulations in the following manner: (1) Petroleum are blended into a beneficial reusable fuel for use in large industrial burners. (2) Waste waters are to be treated with polymers, pH adjusters, and a flocculant, then flows through a dissolved air flotation system for pretreatment into the CMUD sanitation sewer system under permit IUP#5012. (3) Sludges from treatment systems are hauled to E.P.A. approved facilities for proper disposal. Manifest and certificate of disposal (4) Our treatment system operates on a first in, first out basis and product should be processed within seven days.

SIGNATURE OF FACILITY AGENT	DATE	MONTH	DAY	YEAR
Mike Hinds		6	21	

ORIGINAL - FINAL T.S.D. • YELLOW - DISPOSER • PINK - 1ST T.S.D. • GOLD - GENERATOR

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAY 03 2006

LOUIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received May 1, 2006
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the report submitted by SEI Environmental, Inc. SEI Environmental received Corrective Action Plan approval in September 2001. Based on the proposed time frame of 30 months, corrective action activities were estimated to been completed by March 2004; however, there is only a 37% reduction in the petroleum concentrations. SEI should evaluate the current remediation methodology and propose any necessary modifications in order to expedite the remediation. The next corrective action status evaluation report should be submitted on or before July 30, 2006.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Chris Boggs, SEI Environmental, 130 Penmarc Dr., Ste 108, Raleigh, NC, 27603
Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

MAY 0 2 2006

TONY & SUSAN HILL
3049 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received May 1, 2006
York County

Dear Mr. & Mrs. Hill:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

CORRECTIVE ACTION SYSTEM EVALUATION REPORT
June through September 2005

Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

PREPARED FOR:

Ms. Louis Smith
Smith's Grocery
3176 Charlotte Highway
York, South Carolina 29745

PREPARED BY:

SEI ENVIRONMENTAL, INC.
130 Penmarc Drive, Suite 108
Raleigh, North Carolina 27603-2434
UST Site Rehabilitation Contractor No. 41

RECEIVED
MAY 0 1 2006
UNDERGROUND STORAGE
TANK PROGRAM

April 25, 2006

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: April 11, 2006
Monitoring Report Number: 09
For Period Covering: September 16, 2005 to February 28,2006
Facility Name : Smith's Grocery
Street Address: 176 Charlotte Highway (49)
UST Permit Number: 09322
City: York, South Carolina
County: York
Zip Code: 29745
Latitude: N 35°02'30.59"
Longitude: W 81°08'47.98"

Submitted by UST Owner/Operator:

Name: Louis Smith
Company: Smith's Grocery
Address: 3176 Charlotte Highway
City: York State: SC
Zip Code: 29745
Telephone: (803) 684-6289
SEI Project Number: 300401

Prepared by Consultant/Contractor:

Name: Chris L. Boggs, P.G.
Company: SEI Environmental, Inc.
Address: 6190 Regency Parkway
City: Norcross State: GA
Zip Code: 30071
Telephone: (919) 388-9358
UST Site Rehabilitation Contractor No. 41

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name:	Chris L. Boggs, P.G.
SC Reg. No.	2101
Signature:	
Date:	4/12/06

CHRIS L. BOGGS REGISTERED NO. 2101

TABLE OF CONTENTS

LIMITATIONS iii
1.0 INTRODUCTION 1
2.0 FIELD MEASUREMENTS AND SAMPLING 1
2.1 GROUNDWATER SAMPLING 1
2.2 WATER SUPPLY WELL SAMPLING 3
3.0 LABORATORY ANALYTICAL RESULTS 3
3.1 GROUNDWATER ANALYTICAL RESULTS 3
3.2 WATER SUPPLY WELL ANALYTICAL RESULTS 3
3.3 SITE SPECIFIC TARGET LEVELS 4
4.0 REMEDIATION SYSTEM EFFECTIVENESS 5
5.0 CONCLUSIONS AND RECOMMENDATIONS 5

LIST OF TABLES

TABLE 1 Historical Groundwater Elevation and Product Thickness Data
TABLE 2 Historical Groundwater Analytical Results

LIST OF FIGURES

FIGURE 1 USGS Quadrangle Map
FIGURE 2 Site Map
FIGURE 3 Potentiometric Surface Map, February 28, 2006
FIGURE 4 Groundwater Chemicals of Concern Site Map, February 28, 2006

LIST OF APPENDICES

APPENDIX A Figures
APPENDIX B Tables
APPENDIX C Field Data Information Sheets for Groundwater Sampling
APPENDIX D Laboratory Reports and Chain-of-Custody Forms

LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Geologist registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by Accutest Laboratories.

1.0 INTRODUCTION

Smith's Grocery is a convenience and retail fuel store located at 3176 Charlotte Highway (SC Highway 49) in York, York County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- May 10, 2004 – Groundwater Sampling Event
- August 17, 2004 – Groundwater Sampling Event
- January 14, 2005 – Groundwater Sampling Event
- June 29, 2005 – Groundwater Sampling Event
- September 16, 2005 – Groundwater Sampling Event
- February 28, 2006 – Groundwater Sampling Event

On February 28, 2006, twenty groundwater monitoring wells and two water supply wells were sampled in accordance with the requirements of the PFP contract. This report provides details of the groundwater sampling event.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On February 28, 2006, groundwater samples were collected from sixteen (MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, MW-18, MW-19, TW-1, TW-2, and TW-3) of twenty-three existing groundwater monitoring wells. Six (MW-3, MW-4, MW-5, MW-9, MW-16, and MW-20) monitoring wells were not sampled because they were removed from the sampling schedule. One (MW-1) monitoring well was not sampled because it could not be located.

Prior to sampling, twenty (MW-2, MW-3, MW-5 through MW-19, TW-1, TW-2, and TW-3) of the twenty-three groundwater monitoring wells were gauged utilizing an oil-water interface probe to measure depth to groundwater, and to detect any free product present. Two (MW-1

and MW-4) monitoring wells were not gauged because they could not be located. The depth to groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction.

Free product was not currently and has not historically been detected in any of the monitoring wells. Figure 3 in Appendix A presents a groundwater poetentiometric map for the current sampling event. The latest groundwater data indicate that groundwater flow at the site is predominately east to southeast with a hydraulic gradient of 0.032 feet per foot. This flow direction is consistent with previous determinations of groundwater movement. Table 1 in Appendix B summarizes groundwater measurement data.

All monitoring wells were purged prior to sampling by removing a minimum of three well volumes of water via hand bailing with a new, disposable, polyethylene bailer or until groundwater quality data stabilized, or the well went dry. This purging process produced approximately 55 gallons of petroleum contaminated water. The purge water was disposed of at a South Carolina licensed facility. Table 3 summarizes field observation data. Appendix C contains Field Data Information Sheets for Groundwater Sampling.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Flordia. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene) and 8011 (for ethylene dibromide (EDB)). Lead was not sampled for this quarter.

2.2 Water Supply Well Sampling

On February 28, 2006, groundwater samples were collected from two (Swift and Hill) water supply wells. These water supply wells are fitted with granular activated carbon (GAC) filters. As such, samples were collected before (pre) and after (post) the GAC filters. Prior to

sampling, the water was allowed to run for at least ten minutes. The samples were placed into laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene). Lead was not sampled for this quarter.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

CoCs were detected in six (MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2) of the sixteen monitoring wells sampled at concentrations exceeding their respective SSTL. Monitoring well MW-2 contained the highest concentrations of benzene (24,400 micrograms per liter (µg/L)) ethylbenzene (4,700 µg/L), total xylenes (28,400 µg/L) EDB (143 µg/L), and MTBE (847 µg/L). Monitoring well MW-8 contained the highest concentrations of toluene (52,500 µg/L). Monitoring well MW-7 and MW-8 contained the highest concentration of naphthalene (562 µg/L). Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.2 Water Supply Well Analytical Results

CoCs were detected in the two (Swift and Hill) of the pre-GAC filter samples collected at concentrations exceeding their respective SSTLs for specific compounds. Both the Swift and Hill water supply wells contained concentrations of benzene (169 µg/L and 9.4 µg/L, respectively) in the pre-GAC filter samples. The post-GAC filter sample for the Swift water supply well contained benzene at a concentration of 7.2 µg/L. This exceeds the SSTL for benzene for this well of 5 µg/L. Figure 4 in Appendix A is a site map presenting water supply well locations and their CoC concentrations. Table 2 in Appendix B summarizes historical water supply well analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.3 Site Specific Target Levels

Site Specific Target Levels (SSTLs) have been designated for sixteen (MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, MW-18, MW-19, TW-2, and TW-3) monitoring wells and all four (Crook, Swift, Hill, and Smith) water supply wells. For the three (Crook, Swift, and Hill) water supply wells with GAC filters, the SSTLs apply to the pre-GAC filter samples. Eight (MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-17, and TW-2) monitoring wells and two (Hill and Swift) water supply wells contained CoC concentrations exceeded their SSTLs. Table 4 in Appendix B summarizes SSTL information.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target concentrations for seven (benzene, toluene, ethylbenzene, xylenes, MTBE, naphthalene, lead, and EDB) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial January 6, 2003, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. For lead and the data used in the calculation was from the June 29, 2005, sampling event. For monitoring well MW-1 the data used in the calculation was from the September 16, 2005 sampling event. The formula is a follows:

$$\left[\frac{\text{[01/06/03 Sample Concentration Above SSTL]} - \text{[Current Sample Concentration Above SSTL]}}{\text{[1/06/03 Sample Concentration Above SSTL]}}\right] * 100 = \% \text{ Reduction}$$

Using the current analytical results, the concentration reduction is -21.02%.

5.0 CONCLUSIONS

The groundwater flow direction at the time of the February 28, 2006 sampling event was towards the east, southeast with a hydraulic gradient of 0.032 feet per foot. Free product was

not detected. CoC were detected in eight monitoring wells and two water supply wells above their respective SSTLs. The percent concentration reduction has been calculated at -22.73%,

During the previous sampling event, there was a significant increase in petroleum constituent concentrations exhibited by monitoring well MW-1. For example, benzene concentrations increased from 273 µg/L on June 29, 2005, to 23,300 µg/L on September 16, 2005. As the data from the September 16, 2005 sampling event was used in the calculation of the COC reduction for the site the increase in COC concentrations above the SSTLs may be anomalous. Thus, subsequent monitoring events will have to give direction to further investigation into the increased concentrations.

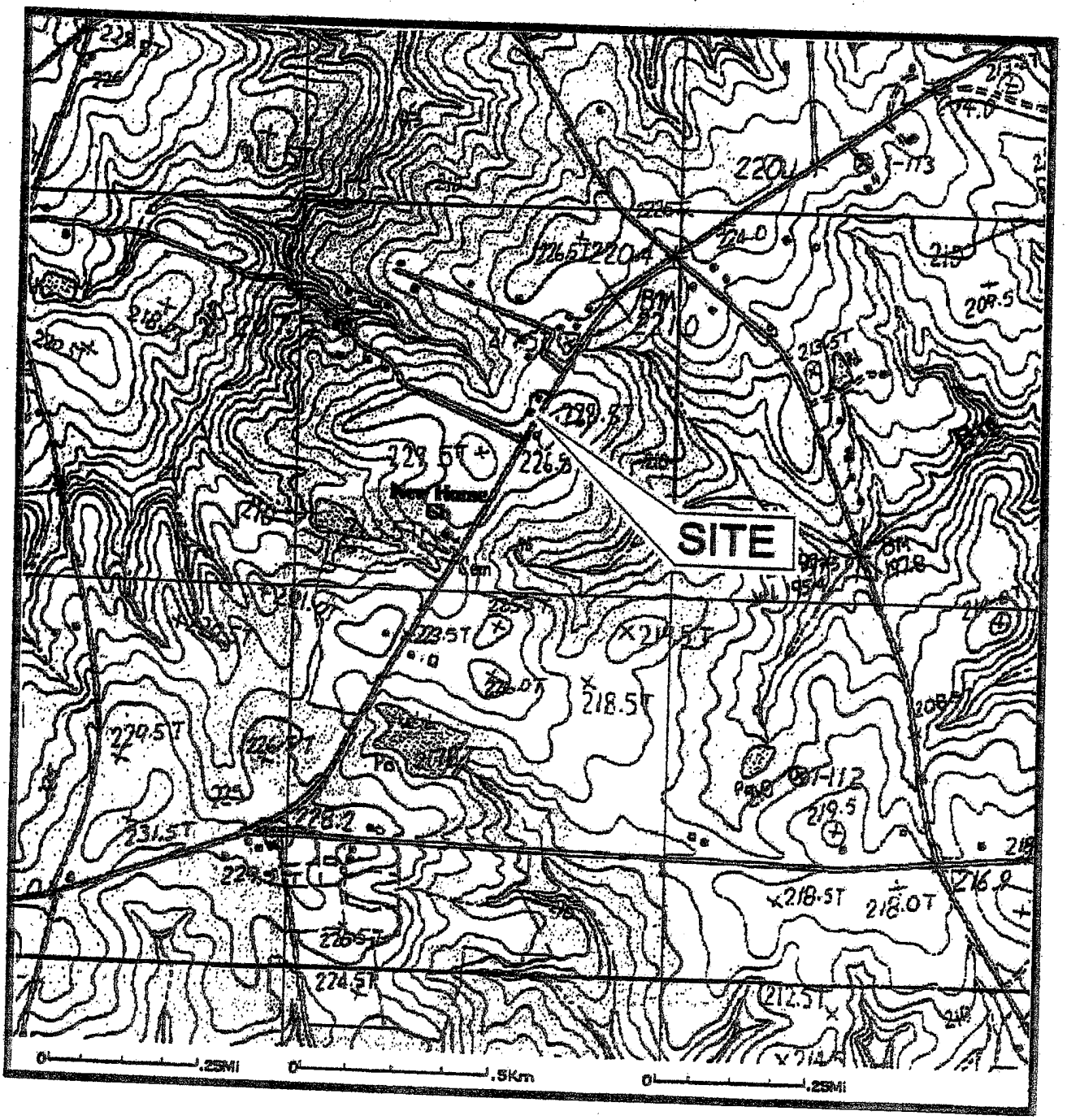
If subsequent monitoring events manifest the same concentration increases in monitoring well MW-1, efforts will be made to determine the locations of the former UST system as a potential contributing factor. Also, the site will be examined for other potential source areas around and immediately up gradient of monitoring well MW-1, such as a previously unknown heating oil UST. However, if subsequent monitoring events show concentrations back within historical range, then the current sample would become suspect for laboratory error, most likely misidentification and switching with an unrelated sample.

The post-GAC filter water supply well samples collected from the Swift well contained concentrations of CoC above their respective SSTLs. The post-GAC filter concentrations indicated filter break through. SEI has ordered parts for the system and will change out the GAC filter at Swift during the next quarter.

SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. The next sampling event will occur in May 2006. SEI is currently evaluating alternative methods of active corrective action to be implemented at the site in order to proceed with the remediation effort.

APPENDIX A
FIGURES

7.5 MINUTE SERIES(TOPOGRAPHIC)



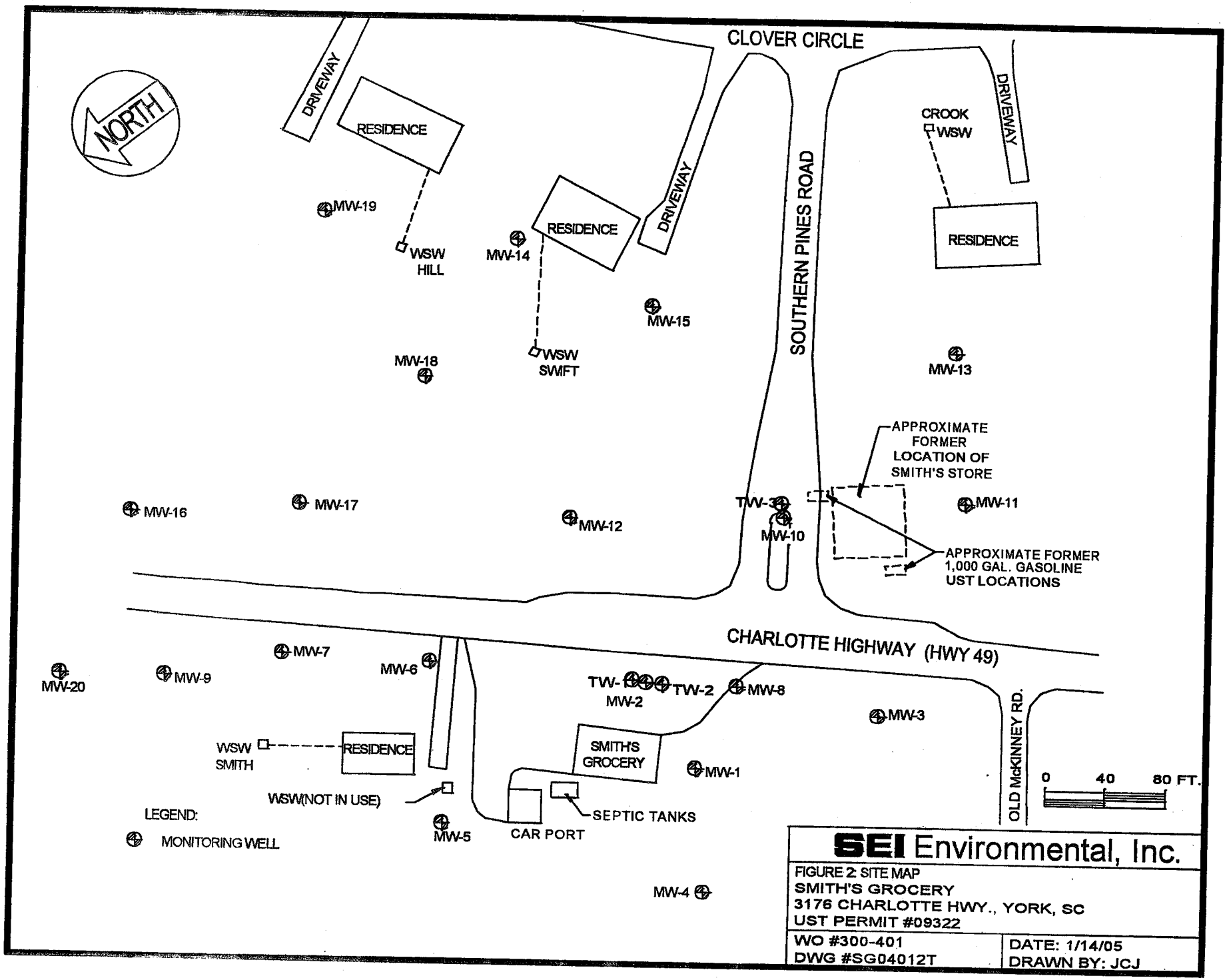
NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP(U.S.G.S. TOPO)
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

W.O. #: 300-401
DWG #

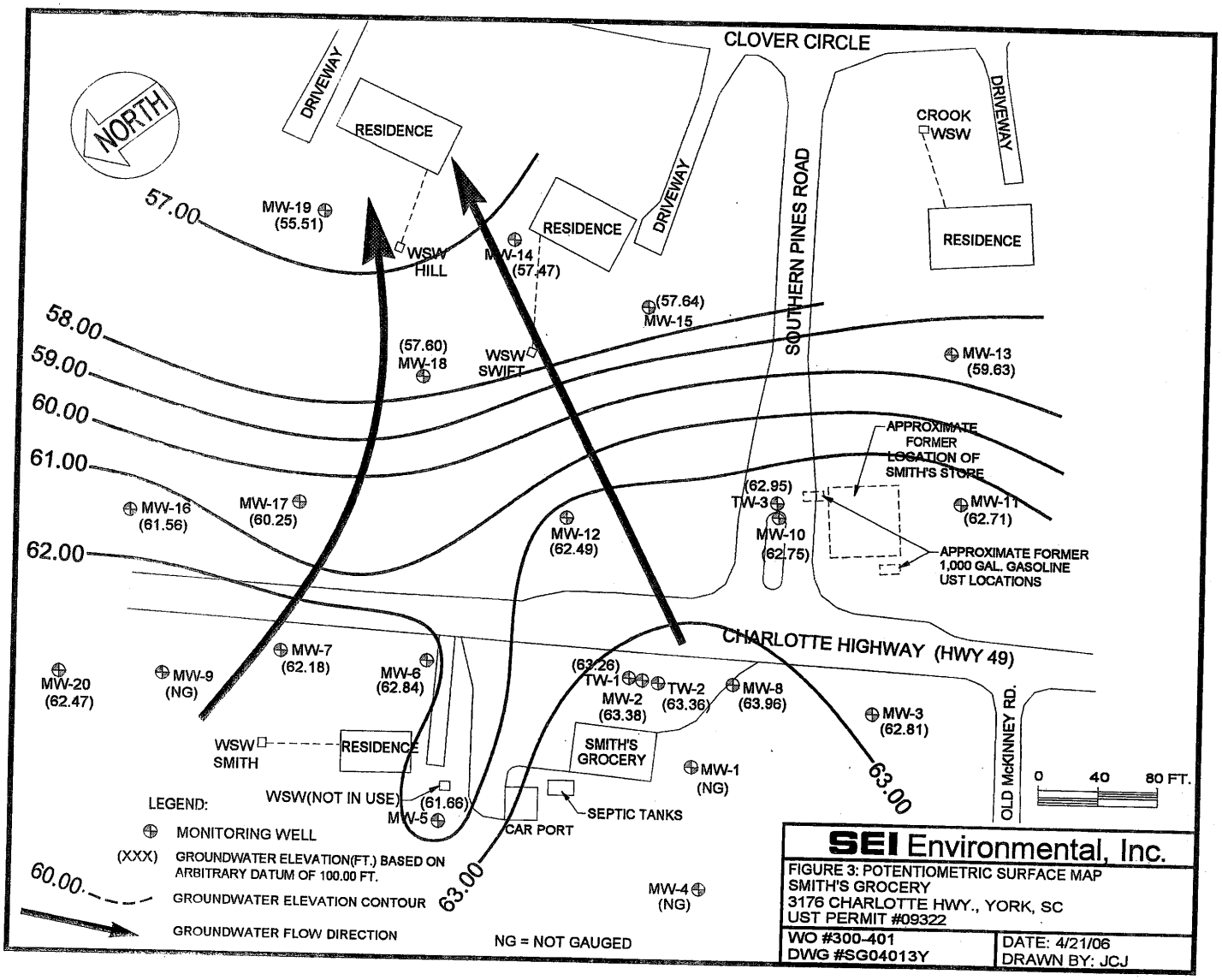
DATE: 9/8/05
DRAWN BY: JCJ

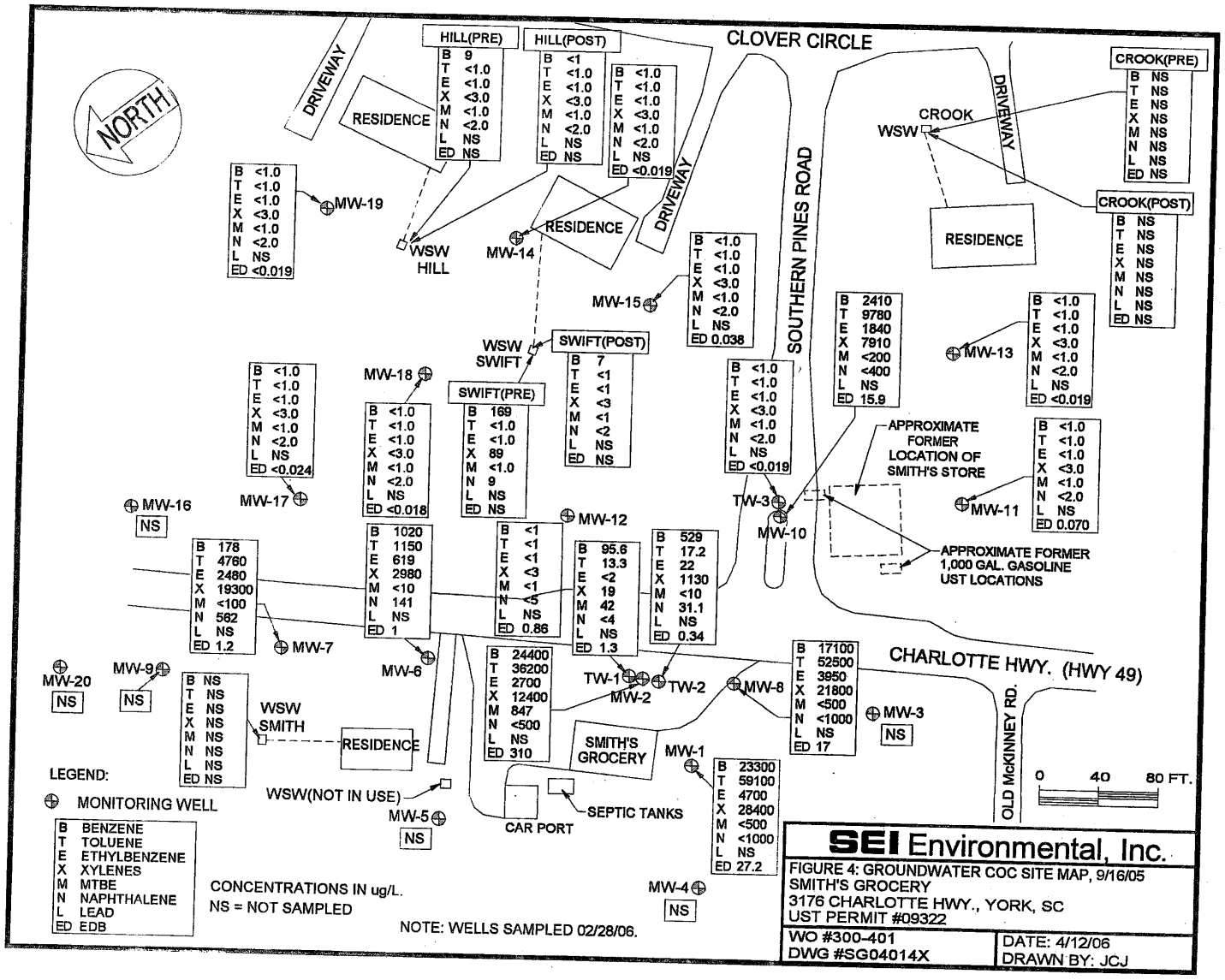


SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 1/14/05
DWG #SG04012T	DRAWN BY: JCJ


CLOVER CIRCLE
NORTH
DRIVEWAY
RESIDENCE
DRIVEWAY
CROOK
WSW
DRIVEWAY
RESIDENCE
SOUTHERN PINES ROAD
57.00
MW-19
(55.51)
WSW
HILL
MW-14
(57.47)
RESIDENCE
(57.64)
MW-15
58.00
59.00
60.00
61.00
62.00
(57.60)
MW-18
WSW
SWIFT
MW-13
(59.63)
APPROXIMATE
FORMER
LOCATION OF
SMITH'S STORE
(62.95)
TW-3
MW-10
(62.75)
MW-11
(62.71)
MW-16
(61.56)
MW-17
(60.25)
MW-12
(62.49)
APPROXIMATE FORMER
1,000 GAL. GASOLINE
UST LOCATIONS
CHARLOTTE HIGHWAY (HWY 49)
MW-20
(62.47)
MW-9
(NG)
MW-7
(62.18)
MW-6
(62.84)
(63.26)
TW-1
MW-2
(63.38)
TW-2
(63.36)
MW-8
(63.96)
MW-3
(62.81)
OLD McKINNEY RD.
WSW
SMITH
RESIDENCE
SMITH'S
GROCERY
MW-1
(NG)
63.00
0
40
80 FT.
LEGEND:
WSW(NOT IN USE)
(61.66)
MW-5
SEPTIC TANKS
CAR PORT
MONITORING WELL
(XXX) GROUNDWATER ELEVATION(FT.) BASED ON ARBITRARY DATUM OF 100.00 FT.
60.00
GROUNDWATER ELEVATION CONTOUR
63.00
MW-4
(NG)
GROUNDWATER FLOW DIRECTION
NG = NOT GAUGED
SEI Environmental, Inc.
FIGURE 3: POTENTIOMETRIC SURFACE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322
WO #300-401
DWG #SG04013Y
DATE: 4/21/06
DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP, 9/16/05
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401
DWG #SG04014X

DATE: 4/12/06
DRAWN BY: JCJ

APPENDIX B
TABLES

Table 1

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-1	01/06/03	29.88			91.16	61.28
	04/02/03	28.05				63.11
	08/26/03	24.07				67.09
	01/08/04	25.46				65.70
	05/10/04	26.90				64.26
	08/17/04	27.03				64.13
	01/14/05	27.06				64.10
	06/29/05	25.67				65.49
	09/16/05	28.10				63.06
	02/28/06	Not Located				NM
MW-2	01/06/03	33.76			94.57	60.81
	04/02/03	31.92				62.65
	08/26/03	27.81				66.76
	01/08/04	29.40				65.17
	05/10/04	26.68				67.89
	08/17/04	30.71				63.86
	01/14/05	30.78				63.79
	06/29/05	29.35				65.22
	09/16/05	30.61				63.96
	02/28/06	31.19				63.38
MW-3	01/06/03	30.87			91.91	61.04
	04/02/03	29.02				62.89
	08/26/03	25.98				65.93
	01/08/04	26.46				65.45
	05/10/04	28.83				63.08
	08/17/04	27.76				64.15
	01/14/05	27.86				64.05
	06/29/05	26.39				65.52
	09/16/05	27.67				64.24
	02/28/06	29.10				62.81
MW-4	01/06/03	24.58			86.20	N/M
	04/02/03	22.73				63.47
	08/26/03	15.07				71.13
	01/08/04	20.73				65.47
	05/10/04	25.94				60.26
	08/17/04	NM				NM
	01/14/05	21.83				64.37
	06/29/05	20.51				65.69
	09/16/05	Not Located				NM
	02/28/06	Not Located				NM
MW-5	01/06/03	27.96			89.29	58.24
	04/02/03	25.00				61.20
	08/26/03	22.70				63.50
	01/08/04	24.49				61.71
	05/10/04	25.57				60.63
	08/17/04	25.75				60.45
	01/14/05	25.44				60.76
	06/29/05	24.30				61.90
	09/16/05	25.86				60.34
	02/28/06	27.63				58.57
MW-6	01/06/03	33.57			93.91	60.34
	04/02/03	31.66				62.25
	08/26/03	27.51				66.40
	01/08/04	29.58				64.33
	05/10/04	29.91				64.00
	08/17/04	29.50				64.41
	01/14/05	30.77				63.14
	06/29/05	29.74				64.17
	09/16/05	30.81				63.10
	02/28/06	31.07				62.84

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-7	01/06/03	31.57			91.68	60.11
	04/02/03	29.40				62.28
	08/26/03	26.88				64.80
	01/08/04	28.40				63.28
	05/10/04	27.78				63.90
	08/17/04	29.85				61.83
	01/14/05	29.28				62.40
	06/29/05	28.17				63.51
	09/16/05	29.66				62.02
	02/28/06	29.50				62.18
MW-8	01/06/03	33.84			94.72	60.88
	04/02/03	32.02				62.70
	08/26/03	27.58				67.14
	01/08/04	29.47				65.25
	05/10/04	29.90				64.82
	08/17/04	30.88				63.84
	01/14/05	30.85				63.87
	06/29/05	29.50				65.22
	09/16/05	30.76				63.96
	02/28/06	31.30				63.42
MW-9	01/06/03	30.41			90.54	60.13
	04/02/03	28.20				62.34
	08/26/03	26.10				64.44
	01/08/04	27.33				63.21
	05/10/04	28.69				61.85
	08/17/04	29.50				61.04
	01/14/05	28.14				62.40
	06/29/05	26.97				63.57
	09/16/05	26.38				64.16
	02/28/06	Not Located				NM
MW-10	01/06/03	39.71			99.77	60.06
	04/02/03	37.77				62.00
	08/26/03	33.36				66.41
	01/08/04	35.04				64.73
	05/10/04	35.50				64.27
	08/17/04	36.49				63.28
	01/14/05	36.66				63.11
	06/29/05	35.04				64.73
	09/16/05	36.34				63.43
	02/28/06	37.02				62.75
MW-11	01/06/03	40.37			100.46	60.09
	04/02/03	38.36				62.10
	08/26/03	33.88				66.58
	01/08/04	35.70				64.76
	05/10/04	36.19				64.27
	08/17/04	37.17				63.29
	01/14/05	36.79				63.67
	06/29/05	35.68				64.78
	09/16/05	37.11				63.35
	02/28/06	37.75				62.71
MW-12	01/06/03	39.64			99.61	59.97
	04/02/03	37.78				61.83
	08/26/03	33.78				65.83
	01/08/04	35.44				64.17
	05/10/04	35.75				63.86
	08/17/04	36.72				62.89
	01/14/05	37.18				62.43
	06/29/05	35.34				64.27
	09/16/05	Not Located				NM
	02/28/06	37.12				62.49
MW-13	01/06/03	42.87			100.39	57.52
	04/02/03	41.13				59.26
	08/26/03	37.20				63.19
	01/08/04	38.70				61.69
	05/10/04	39.27				61.12
	08/17/04	40.27				60.12
	01/14/05	40.12				60.27
	06/29/05	37.96				62.43
	09/16/05	40.11				60.28
	02/28/06	40.76				59.63

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-14	01/06/03	43.66			98.89	55.23
	04/02/03	42.10				56.79
	08/26/03	38.39				60.50
	01/08/04	39.40				59.49
	05/10/04	40.06				58.83
	08/17/04	41.12				57.77
	01/14/05	40.75				58.14
	06/29/05	39.77				59.12
	09/16/05	40.65				58.24
	02/28/06	41.42				57.47
MW-15	01/06/03	44.97			100.18	55.21
	04/02/03	43.24				56.94
	08/26/03	39.58				60.60
	01/08/04	46.55				53.63
	05/10/04	41.19				58.99
	08/17/04	42.11				58.07
	01/14/05	43.06				57.12
	06/29/05	40.92				59.26
	09/16/05	41.80				58.38
	02/28/06	42.54				57.64
MW-16	01/06/03	31.07			89.91	58.84
	04/02/03	29.00				60.91
	08/26/03	27.54				62.37
	01/08/04	28.03				61.88
	05/10/04	27.83				62.08
	08/17/04	29.23				60.68
	01/14/05	28.92				60.99
	06/29/05	27.86				62.05
	09/16/05	29.23				60.68
	02/28/06	28.35				61.56
MW-17	01/06/03	36.81			94.46	57.65
	04/02/03	34.63				59.83
	08/26/03	37.08				57.38
	01/08/04	32.56				61.90
	05/10/04	32.93				61.53
	08/17/04	34.87				59.59
	01/14/05	33.83				60.63
	06/29/05	32.60				61.86
	09/16/05	33.84				60.62
	02/28/06	34.21				60.25
MW-18	01/06/03	42.83			98.14	55.31
	04/02/03	41.26				56.88
	08/26/03	37.47				60.67
	01/08/04	38.14				60.00
	05/10/04	39.09				59.05
	08/17/04	35.43				62.71
	01/14/05	40.04				58.10
	06/29/05	38.93				59.21
	09/16/05	39.77				58.37
	02/28/06	40.54				57.60
MW-19	01/06/03	45.14			98.27	53.13
	04/02/03	43.31				54.96
	08/26/03	39.24				59.03
	01/08/04	40.83				57.44
	05/10/04	41.47				56.80
	08/17/04	42.01				56.26
	01/14/05	42.18				56.09
	06/29/05	41.17				57.10
	09/16/05	42.25				56.02
	02/28/06	42.76				55.51
MW-20	01/06/03	28.09			88.35	60.26
	04/02/03	25.79				62.56
	08/26/03	24.98				63.37
	01/08/04	25.10				63.25
	05/10/04	28.41				59.94
	08/17/04	NM				NM
	01/14/05	25.85				62.50
	06/29/05	24.63				63.72
	09/16/05	Not Located				NM
	02/28/06	25.88				62.47

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
TW-1	01/06/03	34.33			94.72	60.39
	04/02/03	31.86				62.86
	08/26/03	27.96				66.76
	01/08/04	29.48				65.24
	05/10/04	30.31				64.41
	08/17/04	30.40				64.32
	01/14/05	30.75				63.97
	06/29/05	29.56				65.16
	09/16/05	30.76				63.96
	02/28/06	31.46				63.26
TW-2	01/06/03	33.91			94.72	60.81
	04/02/03	32.04				62.68
	08/26/03	27.54				67.18
	01/08/04	29.45				65.27
	05/10/04	29.89				64.83
	08/17/04	30.87				63.85
	01/14/05	30.94				63.78
	06/29/05	29.52				65.20
	09/16/05	30.67				64.05
	02/28/06	31.36				63.36
TW-3	01/06/03	38.81			99.21	60.40
	04/02/03	36.97				62.24
	08/26/03	32.80				66.41
	01/08/04	34.40				64.81
	05/10/04	34.79				64.42
	08/17/04	35.75				63.46
	01/14/05	38.75				60.46
	06/29/05	34.33				64.88
	09/16/05	30.59				68.62
	02/28/06	36.26				64.20

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethylbenzen	Xylenes	MTBE	Naphthalene	Lead	EDB	Current Mass
MW-1	01/06/03	911	9,810	2,660	18,650	250	743	56	<0.010	33,080.00
	04/02/03	590	2,900	960	7,400	27	200	*10*	<0.010	12,087.00
	08/26/03	610	1,200	640	4,800	100.0	500	*33*	<0.010	7,883.00
	01/08/04	620	850	340	3,800	100	500	*5*	0.17	6,215.17
	05/10/04	330	1,100	459	3,700	25	130	*40*	<0.010	5,784.00
	08/17/04	380	970	670	3,600	<25	120	*63*	<0.010	5,803.00
	01/14/05	270	1,440	900	5,620	<1.0	268	*<5.0*	0.09	8,498.09
	06/29/05	273	1,200	601	3,640	<20	136	*29.5*	<0.019	5,879.50
	09/16/05	23,300	59,100	4,700	28,400	<500	<1,000	*N/S*	27.2	115,527.20
	02/28/06	Not Sampled-Could Not Locate								0.00
	SSTL	11.0	2,223	1,558	10,000	90	56	*2*	0.32	
	> SSTL	23,289	56,877	3,142	18,400	0	0	*0*	26.88	
MW-2	01/06/03	18,400	31,100	3,180	18,920	395	514	28	0.02	72,537.02
	04/02/03	13,000	1,800	1,600	9,500	480	500	*190*	160	27,230.00
	08/26/03	16,000.0	26,000.0	2,200.0	13,000.0	480.0	540.0	*190*	120	58,530.00
	01/08/04	18,000.0	33,000.0	2,200.0	12,000.0	880.0	1,200.0	*1000*	150	68,430.00
	05/10/04	17,000.0	24,000.0	2,000.0	11,000.0	750.0	2,500.0	*1200*	260	58,710.00
	08/17/04	19,000.0	29,000.0	2,900.0	14,000.0	1,200.0	2,500.0	*2100*	500	71,200.00
	01/14/05	20,600.0	36,400.0	2,960.0	17,200.0	940.0	862.0	*1230*	186	80,378.00
	06/29/05	18,500.0	27,300.0	2,600.0	14,400.0	952.0	<500	*792*	151	64,695.00
	09/16/05	24,300	34,500	2,870	15,500	1,130	645	*N/S*	0.083	78,945.08
	2/28/2006	24,400	36,200	2,700	12,400	847	<500	*NS*	310	76,857.00
	SSTL	10.0	2,021	1,416	16,000	81	51	*30*	10	
	> SSTL	24,390	34,179	1,284	0	766	0	0	0	
MW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	350	<0.020	350.00
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	*N/S*	N/S	0.00
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	*N/S*	N/S	0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	*<5.0*	<0.010	0.00
	05/10/04	N/S	N/S	N/S	N/S	N/S	N/S	*N/S*	N/S	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	*8.5*	0	8.50
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MW-4	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	12	<0.020	12.00
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	Removed from Sampling Schedule								0.00
	SSTL	N/A	N/A	N/A	N/A	N/A	N/A	*N/A*	N/A	
MW-5	01/06/03	<1.0	<1.0	<1.0	5	<1.0	<1.0	12	<0.020	17.40
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	*N/S*	N/S	0.00
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	*N/S*	N/S	0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	*<5.0*	<0.010	0.00
	05/10/04	N/S	N/S	N/S	N/S	N/S	N/S	*N/S*	N/S	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	*5.4*	<0.010	5.40
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	N/A	N/A	N/A	N/A	N/A	N/A	*N/A*	N/A	0.00

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethylbenzen	Xylenes	MTBE	Naphthalene	Lead	EDB	Current Mass
MW-6	01/06/03	4840	20400	3540	19020	25	640	11	7	48,483.00
	04/02/03	2600	11000	1800	9000	250	1200	54	2.6	25,906.60
	08/26/03	1400	5800	1100	6600	250	1200	37	<0.010	16,387.00
	01/08/04	350	1200	240	1300	<1.0	77	<5.0	1.2	3,168.20
	05/10/04	640	2200	300	1900	<5.0	150	36	1.8	5,227.80
	08/17/04	1100	2200	730	3400	<50	<250	13	<0.010	7,443.00
	01/14/05	1070	2960	718	3990	<1.0	116	107	1.67	8,962.67
	06/29/05	413	500	290	1480	<10	77	<5.0	0.55	2,760.85
	09/16/05	323	273	194	1010	<10	64	N/S	0.76	1,864.36
	02/28/06	1020	1150	619	2980	<10	141	NS	1	5,911.00
	SSTL	**6**	**1212**	**850**	**8000**	**48**	**31**	**18**	**4.83**	
	> SSTL	1,014	0	0	0	0	0	0	0	
MW-7	01/06/03	1,020.0	1.0	2,290.0	16,940.0	1.0	826.0	5	1.7	21,084.70
	04/02/03	240.0	110.0	120.0	38.0	210.0	120.0	240	1.7	1,079.70
	08/26/03	740.0	250.0	110.0	1,600.0	50.0	250.0	160	0.09	3,160.09
	01/08/04	630.0	13,000.0	2,400.0	25,000.0	100.0	1,000.0	5	3.5	42,138.50
	05/10/04	700.0	10,000.0	3,400.0	23,000.0	200.0	1,000.0	5	6.8	38,311.80
	08/17/04	23.0	49.0	21.0	140.0	<5.0	<25	19	<0.010	252.00
	01/14/05	565.0	9,180.0	3,570.0	24,400.0	<1.0	1,370.0	24	1.75	39,110.75
	06/29/05	582.0	7,030.0	3,480.0	23,100.0	<100	890.0	<5.0	1.7	35,083.70
	09/16/05	610.0	5,770.0	3,280.0	21,600.0	<50	1,040.0	N/S	1.9	32,301.90
	02/28/06	178.0	4,760.0	2,480.0	19,300.0	<100	562.0	NS	1.2	27,281.20
	SSTL	**6.0**	**1,212.0**	**850.0**	**12,123.0**	**48.0**	**31.0**	**18**	**0.66**	
	> SSTL	172	3,548	1,630	7,177	0	0	0	0.54	
MW-8	01/06/03	6,770.0	84,600.0	3,560.0	24,740.0	7.3	362.0	24	1.9	120,065.20
	04/02/03	8,600.0	46,000.0	3,500.0	23,000.0	200.0	1,000.0	49	190	82,539.00
	08/26/03	3,800.0	10,000.0	1,200.0	6,800.0	100.0	500.0	81	58	22,539.00
	01/08/04	5,600.0	22,000.0	3,400.0	20,000.0	100.0	1,300.0	18	4.7	52,422.70
	05/10/04	4,500.0	18,000.0	1,600.0	18,000.0	200.0	1,000.0	67	6.3	43,373.30
	08/17/04	10,000.0	37,000.0	2,900.0	20,000.0	<1,000	<5,000	27	63	69,990.00
	01/14/05	6,780.0	38,200.0	4,340.0	28,200.0	<1.0	1,600.0	<5.0	2.33	79,122.33
	06/29/05	6,490.0	31,000.0	4,320.0	27,500.0	<500	<1,000	<5.0	2.6	69,312.60
	09/16/05	14,300.0	50,000.0	4,640.0	28,000.0	54.6	1,040.0	N/S	22.2	98,056.80
	02/28/06	17,100.0	52,500.0	3,950.0	21,800.0	<500	<1000	NS	17	95,367.00
	SSTL	**12.0**	**2,424.0**	**1,700.0**	**16,000.0**	**96.0**	**62.0**	**4**	**0.48**	
	> SSTL	17,088	50,076	2,250	5,800	0	0	0	16.52	
MW-9	01/06/03	<1.0	2.2	5.7	579.0	<1.0	109.0	24	<0.020	719.90
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	36	<0.010	36.00
	05/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	08/17/04	540.0	12,000.0	2,800.0	23,000.0	<500	<2,500	19	8	38,367.40
	01/14/05	Removed from Sampling Schedule								0.00
	RBSL	**5.0**	**1,000**	**700**	**10,000**	**40**	**25**	**15**	**0**	
MW-10	01/06/03	7,980	24,900	3,540	18,180	25	299	35	78	55,037.00
	04/02/03	11,000	23,000	2,400	13,000	200.0	1,000	49	190	50,839.00
	08/26/03	12,000	33,000	3,200	17,000	250.0	1,200	210	450	67,310.00
	01/08/04	4,200	14,000	2,400	12,000	100	500	6.3	100	33,306.30
	05/10/04	8,600	21,000	2,400	14,000	<250	<1,200	5.7	210	46,215.70
	08/17/04	3,500	16,000	2,200	14,000	<500	<2,500	25	67	35,792.00
	01/14/05	10,200	34,600	3,150	18,400	<1.0	38	20	152	66,560.00
	06/29/05	9,040	26,000	3,040	16,600	<500	<1,000	6.3	115	54,801.30
	09/16/05	8,120	25,900	3,130	17,000	<200	<400	*NS*	143	54,293.00
	02/28/06	2,410.0	9,780.0	1,840	7,910	<200	<400	*NS*	15.9	21,955.90
	SSTL	**9.0**	**1,819.0**	**1,274**	**18,185**	**73**	**46**	***21***	**9**	
	> SSTL	2,401	7,961	566	0	0	0	0	6.9	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethylbenzen	Xylenes	MTBE	Naphthalene	Lead	EDB	Current Mass
MW-11	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	8	6	<0.020	13.80
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	26	<0.010	26.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	33	0.290	33.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	46	<0.010	46.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	17	<0.010	17.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	10	<0.010	10.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	37.1	<0.019	37.10
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	0.070	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	<0.019	0.00
	SSTL	**5.0**	**5.0**	**5**	**10**	**5**	**5**	***5***	**0.020**	
	> SSTL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
MW-12	01/06/03	720	17	13	1,550	<1.0	113	6	12	2,419.60
	04/02/03	12	<5.0	<1.0	2	<1.0	<5.0	38	0.240	51.80
	08/26/03	51	<5.0	<1.0	72	<1.0	6	37	0.370	165.50
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	0.015	0.00
	05/10/04	23	<5.0	<1.0	43	<1.0	<5.0	6.8	0.110	72.80
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	12	0.110	12.00
	01/14/05	74	<1.0	<1.0	68	<1.0	<5.0	6	0.230	147.80
	06/29/05	28	<1.0	<1.0	11	<1.0	<2.0	<5.0	0.027	39.20
	09/16/05	Not Sampled - Could Not Locate								0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	*NS*	0.018	0.00
	SSTL	**7.0**	**5.0**	**68**	**730**	**5**	**36**	***7***	**7.0**	
	> SSTL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
MW-13	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	1	<5.0	<0.020	1.30
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	40	<0.010	40.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	45	<0.010	45.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	36	<0.010	36.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	10.9	<0.018	10.90
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	<0.019	0.00
	SSTL	**5.0**	**5.0**	**5**	**10**	**5**	**5**	***5***	**0.020**	
	> SSTL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
MW-14	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	39	<0.010	39.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	100	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	45	<0.010	45.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	19	<0.010	19.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	15	<0.020	15.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	6.4	<0.018	6.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	<0.019	0.00
	SSTL	**5.0**	**5.0**	**5**	**10**	**5**	**5**	***5***	**0.510**	
	> SSTL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethylbenzen	Xylenes	MTBE	Naphthalene	Lead	EDB	Current Mass
MW-15	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	9	<0.020	9.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	36	<0.010	36.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	120	<0.010	120.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	48	<0.010	48.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	26	<0.010	26.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	8	<0.020	8.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	7.5	<0.018	7.50
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	0.038	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	0.032	0.00
	SSTL	**5.0**	**5.0**	**5**	**10**	**5**	**5**	***15***	**0.050**	
	> SSTL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
MW-16	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	18	<0.020	18.00
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	140	<0.010	140.00
	05/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	13	<0.010	13.00
	01/14/05	Removed from Sampling Schedule								0.00
	SSTL	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	
MW-17	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	44	<0.020	44.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	17	<0.010	17.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	42	<0.010	42.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.020	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	7.3	<0.010	7.30
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	9	<0.020	9.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.4	<0.019	5.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*NS*	0.024	0.02
	SSTL	**5.0**	**5.0**	**5**	**10**	**5**	**5**	***15***	**0.020**	
	> SSTL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.004**	
MW-18	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020	0.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	50	<0.010	50.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	100	<0.010	100.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	97	<0.010	97.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.9	<0.010	9.90
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	17	<0.020	17.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.7	<0.018	8.70
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	<0.018	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	<0.019	0.00
	SSTL	**5.0**	**5.0**	**5**	**10**	**5**	**5**	***15***	**0.120**	
	> SSTL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethylbenzen	Xylenes	MTBE	Naphthalene	Lead	EDB	Current Mass
MW-19	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	6	<0.020	6.00
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	18	<0.010	18.00
	01/08/04	<1.0	<5.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	18	<0.010	18.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019	0.00
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	<0.019	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*N/S*	<0.019	0.00
	SSTL	5.0	5.0	5	10	5	5	*15*	0.020	
	> SSTL	0	0	0	0	0	0	0	0	
MW-20	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	11	<0.020	11.00
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	130	<0.010	130.00
	05/10/04	Removed from Sampling Schedule								
	SSTL	N/A	N/A	N/A	N/A	N/A	N/A	*N/A*	N/A	
TW-1	01/06/03	3,380	1,510	1,860	9,370	25	160	6	5.2	16,311.00
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	01/08/04	2,000	2,500	1,100	5,800	50	250	5	0.380	11,705.00
	05/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	0.00
	08/17/04	67	<50	<10	59	<10	<50	30	0.52	156.00
	01/14/05	700	8	83	1,700	8	80	<5.0	0.47	2,578.60
	06/29/05	400	5	23	759	9	73	<5.0	0.41	1,268.30
	09/16/05	457	13	13	989	<10	61	*N/S*	0.77	1,533.20
	02/28/06	95.6	13.3	<2	19	42	<4	*NS*	1.3	169.70
	SSTL	N/A	N/A	N/A	N/A	N/A	N/A	*N/A*	N/A	
TW-2	01/06/03	6,620	6,860	620	4,110	50	160	6	5.2	18,426.20
	04/02/03	3,300	1,500	220	2,000	50.0	250	10	1.1	7,330.00
	08/26/03	3,000	450	79	1,700	10.0	160	7	0.35	5,405.80
	01/08/04	2,800	460	14	1,000	22	34	5	1.1	4,335.40
	05/10/04	3,700	640	160	1,800	5	170	<5.0	1.2	6,475.00
	08/17/04	1,400	<500	<100	300	<100	<500	5	2.2	1,705.40
	01/14/05	3,100	605	175	1,490	32	172	<5.0	0.59	5,573.90
	06/29/05	3,670	241	148	1,710	16	228	<5.0	0.40	6,013.10
	09/16/05	3,540	876	237	1,010	37	160	*N/S*	0.86	5,859.90
	02/28/06	529.0	17.2	22	1,130	<10	31.1	*NS*	0.34	1,729.30
	SSTL	5.0	8.0	5	180	5	18	2	0.05	
	> SSTL	524	9	17	950	0	0	0	0.29	
TW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	9	<5.0	0.130	8.90
	04/02/03	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<5.0	0.031	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<0.010	0.00
	05/10/04	3	11	2	12	<1.0	<5.0	<5.0	0.050	27.70
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	0.040	0.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.077	0.00
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*NS*	0.044	0.00
	02/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	*NS*	<0.019	0.00
	SSTL	5.0	5.0	5	10	5	5	2	0.230	
	> SSTL	0	0	0	0	0	0	0	0	

Table 2

Historical Groundwater Analytical Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well	Date	Benzene	Toluene	Ethylbenzen	Xylenes	MTBE	Naphthalene	Lead	EDB	Current Mass
Strife	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	10	<0.020	10.00
WSW	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	23	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	10	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
Crook	08/17/04	12	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	400	<1.0	<1.0	110	<1.0	12	<5.0	2.24	522.00
post		22	<1.0	<1.0	3	<1.0	<5.0	<5.0	0.090	25.20
pre	06/29/05	193	ND	ND	70	ND	10	N/S	N/S	272.50
post		4	ND	ND	4	ND	ND	N/S	N/S	7.90
pre	09/16/05	13	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	0.046	12.60
post		342	<10	<10	<30	<10	<20	N/S	3.8	342.00
pre	02/28/06	Not Sampled								
post										
	SSTL	5.0	2.0	2	26	2	5	5	5.0	
	> SSTL	0	0	0	0	0	0	0	0	
Swift	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	10	<0.020	10.00
WSW	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	23	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	10	<0.020	9.80
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030	0.00
	08/17/04	12	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019	12.00
pre	01/14/05	400	<1.0	<1.0	110	<1.0	12	<5.0	2.24	522.00
post		22	<1.0	<1.0	3	<1.0	<5.0	<5.0	0.090	25.20
pre	06/29/05	193	ND	ND	70	ND	10	N/S	N/S	272.50
post		4	ND	ND	4	ND	ND	N/S	N/S	7.90
pre	09/16/05	13	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	0.046	12.60
post		342	<10	<10	<30	<10	<20	N/S	3.8	342.00
pre	02/28/06	169	<1	<1	89	<1	9	NS	NS	266.90
post		7	<1	<1	<3	<1	<2	NS	NS	7.20
	SSTL	2.0	2.0	2	2	5	5	5	5.0	
	> SSTL	167	0	0	0	0	0	0	0	
Hill	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	9	<0.020	9.00
WSW	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	23	<0.010	23.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	22	<0.010	22.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	6	<0.010	6.10
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	N/S	<0.010	
pre	01/14/05	3	<1.0	<1.0	<1.0	<1.0	<5.0	10	0.11	
post		<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020	
pre	06/29/05	2	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.19	
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.063	
pre	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	0.051	0.00
post		3	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	0.160	2.60
pre	02/28/06	9	<1.0	<1.0	<3.0	<1.0	<2.0	NS	NS	9.40
post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NS	NS	0.00
	SSTL	2.0	2.0	2	2	5	5	5	5.0	
	> SSTL	7	0	0	0	0	0	0	0	
Smith	01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	0.00
WSW	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010	0.00
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	5	<0.010	5.20
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	120	<0.010	120.00
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	41	<0.010	41.00
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	N/S	<0.010	0.00
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	51	<0.020	51.00
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	57	<0.018	57.40
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	<0.018	0.00
	02/28/06	Not Sampled								0.00
	SSTL	2.0	2.0	2	2	5	5	5	5.0	
	> SSTL	0	0	0	0	0	0	0	0	
TOTAL MASS										344,636
TOTAL SSTL MASS		117	10,972	7,769	80,330	503	391		100,082	
INITIAL MASS ABOVE SSTL									217,877	
CURRENT MASS ABOVE SSTL									263,685	
PERCENT TOTAL MASS REDUCTION ABOVE SSTL									-21.02	

APPENDIX C
Field Data Sheets

York

SEI Environmental

SC Monitoring Well Gauging Data Sheet

Site Name: Smith Grocery **WO#** 300401

Date 2/28/06

Well ID	Total Depth (feet)	Well Dia. (in.)	Depth to Product (feet)	Product Thickness (feet)	Depth to Water (feet)	Notes
MW-1	35.00		Cannot Find			
MW-2	38.00				31.19	
MW-3	35.00				29.10	Gauge Only
MW-4	27.00		Cannot Find			Gauge Only
MW-5	30.00				27.63	Gauge Only
MW-6	37.00				31.07	
MW-7	36.00				28.50	
MW-8	38.00				31.30	
MW-9	36.00		← Plow over →			Gauge Only
MW-10	44.00				37.02	
MW-11	44.00				37.75	
MW-12	44.00				37.12	
MW-13	47.00				40.76	
MW-14	50.00				41.42	
MW-15	50.00				42.54	
MW-16	37.00				28.35	Gauge Only
MW-17	40.00				34.21	
MW-18	46.00				40.54	
MW-19	50.00				42.76	
MW-20	35.00				25.88	Gauge Only
TW-1	61.00				31.46	
TW-2	88.00				31.36	
TW-3	71.00				36.26	
WSW Samples: Crook (Pre/Post), Hill (Pre/Post), Swift (Pre/Post), & Smith (Pre/Post)						

Analysis: **EPA Method 8260B for BTEX, MTBE, and Naphthalene**
EPA Method 8011 for EDB
LEAD

2-inch diameter well: Well Volume = (water column) x (0.163 gallon/foot)
4-inch diameter well: Well Volume = (water column) x (0.652 gallon/foot)
Purge amount = Well Volume x 3

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # TW-2

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = ____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	8.0	9.0	9.3	9.3				
Specific Conductivity (µmhos/cm)	50	10	0	0				
Water Temperature (°C)	21.5	21.6	21.6	21.6				
Dissolved Oxygen	2.8	2.8	2.9	2.9				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # MW-2

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = _____ X _____ = _____ gals
3 casing volume (3 X CV) = _____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	8.0	8.2	8.2	8.2				
Specific Conductivity (µmhos/cm)	0	0	0	0				
Water Temperature (°C)	21.1	21.0	21.0	21.0				
Dissolved Oxygen	1.0	2.0	2.4	2.5				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # TW-1

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = _____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.0	5.8	6.0	6.0				
Specific Conductivity (µmhos/cm)	10	0	-40	-35				
Water Temperature (°C)		21.5	21.5	21.5				
Dissolved Oxygen	1.0	1.1	1.1	1.1				
PID readings, if required								

Remarks: _____

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter serial no.		Conductivity Meter serial no.	
pH = 4.0		standard	
pH = 7.0		standard	
pH = 10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # MW-6

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.4	5.0	5.4	5.4				
Specific Conductivity (µmhos/cm)	20	20	30	35				
Water Temperature (°C)	20.3	20.4	20.4	20.4				
Dissolved Oxygen	2.5	1.8	1.1	1.0				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # MW-7

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = ____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.3	5.3	5.3	5.4				
Specific Conductivity (µmhos/cm)	50	100	125	130				
Water Temperature (°C)	19.5	19.6	19.6	19.5				
Dissolved Oxygen	1.5	1.5	1.5	1.5				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # 17

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.4	5.3	5.4	5.4				
Specific Conductivity (µmhos/cm)	155	155	150	155				
Water Temperature (°C)	18.8	18.8	18.8	18.8				
Dissolved Oxygen	1.0	0	1.1	1.1				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # 12

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.0	5.0	5.4	5.4				
Specific Conductivity (µmhos/cm)	150	180	200	200				
Water Temperature (°C)	19.0	19.0	19.2	19.2				
Dissolved Oxygen	1.5	1.2	1.5	1.5				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter serial no.		Conductivity Meter serial no.	
pH = 4.0		standard	
pH = 7.0		standard	
pH = 10.0		standard	

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # TW-3

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = ____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	6.5	6.0	5.9	5.9				
Specific Conductivity (µmhos/cm)	160	150	170	170				
Water Temperature (°C)	20.1	20.0	20.0	20.0				
Dissolved Oxygen	1.0	2.5	2.1	2.1				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # MW-10

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	3.8	4.5	5.0	5.0				
Specific Conductivity (µmhos/cm)	150	200	235	230				
Water Temperature (°C)	20.0	20.0	20.2	20.0				
Dissolved Oxygen	4.6	4.4	4.5	4.5				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # 18

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.6	5.8	5.8	5.9				
Specific Conductivity (µmhos/cm)	70	70	70	65				
Water Temperature (°C)	19.0	19.0	19.0	19.0				
Dissolved Oxygen	2.0	1.0	0.5	0.5				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # 15

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = ____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.8	5.7	5.8	5.9				
Specific Conductivity (µmhos/cm)	100	106	105	100				
Water Temperature (°C)	18.8	18.8	18.8	18.8				
Dissolved Oxygen	0.4	0.4	0.4	0.5				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # 14

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	4.8	4.7	4.8	4.8				
Specific Conductivity (µmhos/cm)	120	110	120	120				
Water Temperature (°C)	19.2	19.2	19.2	19.2				
Dissolved Oxygen	2.0	3.1	3.2	3.2				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # 19

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	6.8	6.8	6.7	6.7				
Specific Conductivity (µmhos/cm)	120	120	125	120				
Water Temperature (°C)	19.1	19.1	19.1	19.1				
Dissolved Oxygen	4.1	3.5	2.9	3.0				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # 8

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	4.0	5.0	5.4	5.5				
Specific Conductivity (µmhos/cm)	-10	-20	-30	-35				
Water Temperature (°C)	19.5	19.5	19.5	19.5				
Dissolved Oxygen	4.0	3.9	3.7	3.6				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # 13

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = _____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.3	5.3	5.3	5.3				
Specific Conductivity (µmhos/cm)	150	150	120	120				
Water Temperature (°C)	18.6	18.6	18.6	18.6				
Dissolved Oxygen	4.0	3.8	3.9	3.9				
PID readings, if required								

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): _____

Field Personnel: _____

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	_____	serial no.	_____
pH = 4.0	_____	standard	_____
pH = 7.0	_____	standard	_____
pH = 10.0	_____	standard	_____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name Smith Grocery Job # 300401

Site ID # 09322 Monitoring Well # 11

Water Supply Well Public _____ Private _____

Monitoring Well Diamter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C= 0.163
for a 4 inch well C = 0.652

*Free Product Thickness _____ feet
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD-DGW) _____ feet
1 casing volume (CV = LWC X C) = ____ X ____ = ____ gals
3 casing volume (3 X CV) = ____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals
* If fee product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.0	4.9	4.8	4.8				
Specific Conductivity (µmhos/cm)	145	150	160	165				
Water Temperature (°C)	18.6	18.5	18.5	18.5				
Dissolved Oxygen	4.0	4.0	4.1	4.1				
PID readings, if required								

Remarks: _____

Douglas Parker SEI ENVIRONMENTAL, INC

To: Leigh Ann Gordon
Subject: Drums for Pickup

Here are the sites for the drums. All are petroleum contaminanted:

NC Products (505918)
916 Withers Road
Raleigh, NC 27603
1 Drum Absorbent Booms

Cash N Carry (300402)
4818 Pine Oak Road
Effingham, SC 29541
1 drum purge water

Country Store (300174)
Hwy 378 & Dukes Road
Turbeville, SC 29162
1 drum purge water

The Pantry 816 (506947)
1807 North Harrison Boulevard
Cary, NC 27513
2 drums of absorbent

Amoco #2
1380 South Main Street
Darlington, SC
1 drum purge water

On The Run #20 (506953)
Lee-Moore Oil
3321 NC Highway 55
Durham, NC 3 drums soil

Thomas Grocery (303097)
15836 Hwy 301
New Zion, SC 29501
1 drum purge water

Gibbs Grocery (304010)
863 Pamplico Hwy
Pamplico, SC
1 drum purge water

The Pantry 3702 (506955)
1146 North Military Hwy
Norfolk, VA 23502
1 drum absorbent material & absorbent booms

Smith Gro; Neely's
Hot spot, + Pantry #3288
1 Drum water

GARCO, Inc.

NON-HAZARDOUS WASTE MANIFEST

Please print or type

NON-HAZARDOUS WASTE MANIFEST		Manifest Document No. 06091	Page 1 of
3 Generator's Name and Mailing Address	SEI 130 Penmarc Drive Suite 108 Raleigh, NC 27603	4 Generator's US EPA ID No.	
		4 Generator's Phone	
5 Transporter 1 Company Name GARCO, Inc.	6 US EPA ID No. NCR000135384	7 Transporter 1 Phone (336) 683-0911	
7 Transporter 2 Company Name	8 US EPA ID No.	9 Transporter 2 Phone	
9 Designated Facility Name and Site Address	GARCO, Inc. 2503 N. Fayetteville St. Asheboro, NC 27203	10 US EPA ID Number NCR000135384	
		11 Facility's Phone (336) 683-0911	

11 Waste Description	12 Containers No	Type	13 Total Quantity	14 Unit Wt/Vol
A) Non-Hazardous Material	008	DM	3200	P
B) Non-Hazardous Material	005	DM	2000	P
C)				
D)				

15 Additional Descriptions for Materials Listed Above

A) Petroleum Contaminated Soil & C)

B) Petroleum Contaminated Water D)

multi site

15 Special Handling Instructions and Additional Information

24 Hour ER# 800-814-1204

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year
Brandon D. Jolly	Brandon D. Jolly	03	06	06

17 Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
James T. Hill Jr.	James T. Hill Jr.	03	06	06

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

19. Discrepancy Indication Space

20 Facility Owner or Operator: Certification of receipt for waste materials covered by this manifest, except as noted above.

Printed/Typed Name	Signature	Date Month	Day	Year
L A Gordon	L A Gordon	3	16	06

GARCO, Inc.

Environmental, Industrial & Recycling Services

Certificate of Disposal

GENERATOR: SEI
130 Penmarc Drive
Suite 108
Raleigh, NC 27603

MATERIAL ACCEPTED:	DISPOSAL METHOD:
8 - Drum(s) - (3200 - lbs.) - Non-Hazardous Material - Petroleum Contaminated Soil & Booms	Subtitle D Landfill
5 - Drum(s) - (2000 - lbs.) - Non-Hazardous Material - Petroleum Contaminated Water	Waste Water Treatment

GARCO, Inc. accepted the above listed materials on 3/6/2006.

GARCO, Inc. has accepted custody of the above referenced non-hazardous material. This material has been determined to be non-hazardous by a material profile, generator knowledge, and/or analytical data provided to GARCO, Inc..

Greg Russell
President

Post Office Box 1907 / Asheboro, NC 27204-1907 / 336-683-0911 / Fax 336-683-0811

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

EVERETTE & JANET CROOK
3035 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received May 1, 2006
York County

Dear Mr. & Mrs. Crook:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAY 02 2006

GARY WIGGAM
3043 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received May 1, 2006
York County

Dear Mr. Wiggam:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAY 02 2006

FRONTIS HEMPHILL
2146 OLD MCKINNEY RD
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received May 1, 2006
York County

Dear Mr. Hemphill

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

CERTIFIED MAIL

7001 2510 0008 4154 5313

MAR 2 4 2006

LOUIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Notice of Alleged Violation
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control directed you to submit a Corrective Action Status Evaluation Report in October 2005 with the report due on January 30, 2006. To date the required report has not been received. In accordance with Section 280.65 of the South Carolina Underground Storage Tank Regulations, the assessment must be conducted as chemicals of concern are above the risk-based-screening levels.

Implementation of this scope of work should proceed upon receipt of this correspondence. **Please submit the report within 30 days from the date of this letter. Should you not submit the report on or before May 1, 2006, this office will be forced to initiate enforcement action.**

On all correspondence regarding this site, please reference UST Permit #09322. If you have any questions concerning this correspondence, please contact me at (803) 896-6397, via fax at (803) 896-6245, or via e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Hartford Hight, SEI Environmental, 6190 Regency Pkwy, Ste 308, Norcross, GA, 30071
Technical File

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

JAN 05 2006

MR HARTFORD HIGHT PG
SEI ENVIRONMENTAL INC
6190 REGENCY PKWY STE 308
NORCROSS, GA 30071

Re: Pay For Performance Corrective Action Projects
Proposed Reporting Schedule received December 12, 20051

Dear Mr. Hight:

Thank you for providing the proposed reporting schedule. The schedule has been reviewed by our project managers and is approvable as submitted with one exception.

For the Perry's Grocery project (UST Permit ID# 03426, SEI Project No. 303196) semi-annual sampling and reporting was proposed. Because this corrective action is being augmented with the use of the Potassium Triple Salt, the Department would like to reports submitted on a quarterly basis to better characterize the effect of the new technology.

The UST Program appreciates SEI's efforts to get these projects back on track. We look forward to working with you in the near future to bring these sites to closure. Please feel free to contact me at (803) 896-6585 if you have any questions or need additional information.

Sincerely,

Christopher S. Doll, P.G., Manager
Northeastern SC Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

Cc: Technical Files (11585, 03713, 14457, 09322, 03467, 11732, 14839, 06601, 02476, 08327,09160, 14433, 14561, 03439, 05981, 02427, 03426, 14541, 04031, 09319, 03462, 03463, 09370, 08376, 02542, 08551, 02724, 04744, 11756)
Lee Monts, Manager, Southwestern SC Corrective Action Section
Kent Coleman, P. G., Director, Assessment and Corrective Action Division

DHEC/UST/010506

SEI
Environmental, Inc.

130 Penmarc Drive
Suite 108
Raleigh, NC 27603-2470
800.474.7049
919.832.2535
Fax 832.5914

RECEIVED
NOV 0 9 2005
UNDERGROUND STORAGE
TANK PROGRAM

November 7, 2005

Ms. Debra L. Thoma, Hydrogeologist
South Carolina Department of Health and Environmental Control
Assessment & Corrective Action Section, Underground Storage Tank Program
2600 Bull Street
Columbia, South Carolina 29201

RE: Water Supply Well Sampling Results
Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Dear Ms. Thoma:

On September 16, 2005, the Swift's water supply well, associated with the above referenced site, was sampled. Sample results received on October 17, 2005, indicated that GAC filter break through of petroleum constituents had occurred. As such, on October 18, 2005, SEI personnel mobilized to site to perform maintenance on the Swift GAC filter.

On October 19, 2005, SEI personnel re-sampled the Swift water supply well, both pre and post GAC filter. Results indicate pre-GAC filter concentrations of benzene, total xylenes, naphthalene, and 1,2-dibromide. Results indicate post-GAC filter concentrations below laboratory detection limits for all compounds. A copy of the laboratory report is attached.

Thus, the Swift water supply well high concentration issue has been addressed. If you have any questions or comments, please contact me at (919) 832-2535.

Sincerely,
SEI Environmental, Inc.

Douglas S. Parker
Project Manager

cc: Ms. Louis Smith, Smith's Grocery
3176 Charlotte Highway
York, South Carolina 29745

Southeast
ACCUTEST.
Laboratories

11/04/05

RECEIVED
NOV 0 9 2005
UNDERGROUND STORAGE
TANK PROGRAM

Technical Report for

SEI-Columbia, SC

Smith's Grocery; York, SC

300401

Accutest Job Number: F35934

Sampling Date: 10/19/05

Report to:

DParker@SEI-Environmental.com

ATTN: Distribution3

Total number of pages in report: 16

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4

Table of Contents

-1-

Section 1: Sample Summary 3
Section 2: Sample Results 4
2.1: F35934-1: WSW SWIFT-PRE 4
2.2: F35934-2: WSW SWIFT-POST 5
2.3: F35934-3: TRIP BLANK 6
Section 3: Misc. Forms 7
3.1: Chain of Custody 8
Section 4: GC/MS Volatiles - QC Data Summaries 10
4.1: Method Blank Summary 11
4.2: Blank Spike Summary 13
4.3: Matrix Spike/Matrix Spike Duplicate Summary 15

Sample Summary

SEI-Columbia, SC

Job No: F35934

Smith's Grocery; York, SC
Project No: 300401

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F35934-1	10/19/05	11:00	S	10/20/05	AQ	Ground Water	WSW SWIFT-PRE
F35934-2	10/19/05	11:15	S	10/20/05	AQ	Ground Water	WSW SWIFT-POST
F35934-3	10/19/05	00:00	S	10/20/05	AQ	Trip Blank Water	TRIP BLANK

Report of Analysis

Client Sample ID:	WSW SWIFT-PRE		
Lab Sample ID:	F35934-1	Date Sampled:	10/19/05
Matrix:	AQ - Ground Water	Date Received:	10/20/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0008306.D	1	11/01/05	KK	n/a	n/a	VM357
Run #2	N0007836.D	2	11/02/05	KK	n/a	n/a	VN331

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	172 [a]	2.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	107	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	11.0	2.0	ug/l	
106-93-4	1,2-Dibromoethane	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	97%	86-115%
17060-07-0	1,2-Dichloroethane-D4	98%	95%	73-126%
2037-26-5	Toluene-D8	99%	104%	86-112%
460-00-4	4-Bromofluorobenzene	94%	93%	83-119%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WSW SWIFT-POST		
Lab Sample ID:	F35934-2	Date Sampled:	10/19/05
Matrix:	AQ - Ground Water	Date Received:	10/20/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0008307.D	1	11/01/05	KK	n/a	n/a	VM357
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		86-115%
17060-07-0	1,2-Dichloroethane-D4	93%		73-126%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	99%		83-119%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F35934-3	**Date Sampled:**	10/19/05
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/20/05
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Smith's Grocery; York, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0008304.D	1	11/01/05	KK	n/a	n/a	VM357
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		86-115%
17060-07-0	1,2-Dichloroethane-D4	93%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	97%		83-119%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- **Chain of Custody**

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F35934
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: SEI Environmental
ADDRESS: 5500 Rowan Dr Suite 7
CITY: Charlotte STATE: N.C. ZIP: 28206
SEND REPORT TO:
PHONE #: 704-536-8824

FACILITY INFORMATION

PROJECT NAME: Smith's Grocery
LOCATION: HWY 49 York, S.C.
PROJECT NO.: 300401
FAX #: 704-536-8005

ANALYTICAL INFORMATION

8260B BTEX MTBE EDB

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION					8260B BTEX MTBE EDB	LAB USE ONLY
							ICE	HCl	H2SO4	HNO3	NONE		
1	WSW Swift-Pre	10/19/05	11:05	Scott	H2O	3	3					X	
2	WSW Swift-Post	10/19/05	11:15	Scott	H2O	3	3					X	
3	Trip Blank											X	

DATA TURNAROUND INFORMATION

☒ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER _____

APPROVED BY: _____ _____ _____

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☐ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☐ OTHER (SPECIFY) _____

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Scott Cope	10/19/05 1530	1. FX	2. FX	10-20-05 9:00	2. Steven Cooper
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐
5.		6.			TEMPERATURE: 2°

F35934: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F35934 CLIENT: SET PROJECT: Smith's Grocery

DATE/TIME RECEIVED: 10-20-05 9100 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 2.8

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: unreadable

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] NO COC RECEIVED
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SOIL INFORMATION

NUMBER OF ENCORES ? 0

NUMBER OF 5035 FIELD KITS ? 0

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] TIMES ON COC DON'T MATCH LABEL
- [ ] ID'S ON COC DON'T MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE: Steven Brown 10-20-05 TECHNICIAN SIGNATURE/DATE:

ASBD08/22/05

3.1 C

F35934: Chain of Custody
Page 2 of 2

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: F35934
Account: SEISCC SEI-Columbia, SC
Project: Smith's Grocery; York, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM357-MB	M0008303.D	1	11/01/05	KK	n/a	n/a	VM357

The QC reported here applies to the following samples: Method: SW846 8260B

F35934-1, F35934-2, F35934-3

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	86-115%
17060-07-0	1,2-Dichloroethane-D4	93%	73-126%
2037-26-5	Toluene-D8	99%	86-112%
460-00-4	4-Bromofluorobenzene	99%	83-119%

Method Blank Summary

Job Number: F35934
Account: SEISCC SEI-Columbia, SC
Project: Smith's Grocery; York, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN331-MB	N0007832.D	1	11/02/05	KK	n/a	n/a	VN331

The QC reported here applies to the following samples: Method: SW846 8260B

F35934-1

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	86-115%
17060-07-0	1,2-Dichloroethane-D4	95%	73-126%
2037-26-5	Toluene-D8	104%	86-112%
460-00-4	4-Bromofluorobenzene	96%	83-119%

Blank Spike Summary

Job Number: F35934
Account: SEISCC SEI-Columbia, SC
Project: Smith's Grocery; York, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM357-BS	M0008301.D	1	11/01/05	KK	n/a	n/a	VM357

The QC reported here applies to the following samples: Method: SW846 8260B

F35934-1, F35934-2, F35934-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	26.2	105	80-120
106-93-4	1,2-Dibromoethane	25	21.6	86	68-116
100-41-4	Ethylbenzene	25	26.0	104	82-115
1634-04-4	Methyl Tert Butyl Ether	25	24.4	98	67-127
91-20-3	Naphthalene	25	23.7	95	62-129
108-88-3	Toluene	25	26.3	105	81-114
1330-20-7	Xylene (total)	75	78.9	105	81-118

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	86-115%
17060-07-0	1,2-Dichloroethane-D4	93%	73-126%
2037-26-5	Toluene-D8	101%	86-112%
460-00-4	4-Bromofluorobenzene	97%	83-119%

Blank Spike Summary

Job Number: F35934
Account: SEISCC SEI-Columbia, SC
Project: Smith's Grocery; York, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN331-BS	N0007831.D	1	11/02/05	KK	n/a	n/a	VN331

The QC reported here applies to the following samples: Method: SW846 8260B

F35934-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	23.4	94	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	86-115%
17060-07-0	1,2-Dichloroethane-D4	96%	73-126%
2037-26-5	Toluene-D8	98%	86-112%
460-00-4	4-Bromofluorobenzene	93%	83-119%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F35934
Account: SEISCC SEI-Columbia, SC
Project: Smith's Grocery; York, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F35934-2MS	M0008308.D	1	11/01/05	KK	n/a	n/a	VM357
F35934-2MSD	M0008309.D	1	11/01/05	KK	n/a	n/a	VM357
F35934-2	M0008307.D	1	11/01/05	KK	n/a	n/a	VM357

The QC reported here applies to the following samples: Method: SW846 8260B

F35934-1, F35934-2, F35934-3

CAS No.	Compound	F35934-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.79		25	27.1	105	26.4	102	3	72-125/7
106-93-4	1,2-Dibromoethane	ND		25	21.6	86	21.5	86	0	67-113/10
100-41-4	Ethylbenzene	ND		25	26.1	104	25.3	101	3	73-119/8
1634-04-4	Methyl Tert Butyl Ether	ND		25	23.0	92	24.1	96	5	61-129/9
91-20-3	Naphthalene	ND		25	19.4	78	21.3	85	9	52-127/13
108-88-3	Toluene	ND		25	26.1	104	25.3	101	3	67-123/8
1330-20-7	Xylene (total)	ND		75	78.8	105	76.7	102	3	73-122/7

CAS No.	Surrogate Recoveries	MS	MSD	F35934-2	Limits
1868-53-7	Dibromofluoromethane	98%	99%	97%	86-115%
17060-07-0	1,2-Dichloroethane-D4	97%	97%	93%	73-126%
2037-26-5	Toluene-D8	100%	100%	102%	86-112%
460-00-4	4-Bromofluorobenzene	92%	95%	99%	83-119%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F35934
Account: SEISCC SEI-Columbia, SC
Project: Smith's Grocery; York, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F35993-9MS	N0007842.D	1	11/02/05	KK	n/a	n/a	VN331
F35993-9MSD	N0007843.D	1	11/02/05	KK	n/a	n/a	VN331
F35993-9	N0007841.D	1	11/02/05	KK	n/a	n/a	VN331

The QC reported here applies to the following samples: Method: SW846 8260B

F35934-1

CAS No.	Compound	F35993-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	19.2		25	43.3	96	42.3	92	2	72-125/7

CAS No.	Surrogate Recoveries	MS	MSD	F35993-9	Limits
1868-53-7	Dibromofluoromethane	101%	101%	101%	86-115%
17060-07-0	1,2-Dichloroethane-D4	96%	96%	98%	73-126%
2037-26-5	Toluene-D8	97%	96%	104%	86-112%
460-00-4	4-Bromofluorobenzene	91%	94%	95%	83-119%

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

OCT 27 2005

GARY WIGGAM
3043 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received October 24, 2005
York County

Dear Mr. Wiggam:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

OCT 27 2005

EVERETTE & JANET CROOK
3035 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received October 24, 2005
York County

Dear Mr. & Mrs. Crook:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

OCT 27 2005

FRONTIS HEMPHILL
2146 OLD MCKINNEY RD
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received October 24, 2005
York County

Dear Mr. Hemphill

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Monitoring Well MW-3 was sampled and no petroleum compounds were detected. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

OCT 27 2005

TONY & SUSAN HILL
3049 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received October 24, 2005
York County

Dear Mr. & Mrs. Hill:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

OCT 27 2005

LOUIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received October 24, 2005
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the report submitted by SEI Environmental, Inc. SEI Environmental received Corrective Action Plan approval in September 2001. Based on the proposed time frame of 30 months, corrective action activities should have been completed in March 2004; however, there is only a 37% reduction in the petroleum concentrations. SEI should evaluate the current remediation methodology and propose any necessary modifications in order to expedite the remediation. The next corrective action status evaluation report documenting the results from the September sampling event should be submitted on or before January 30, 2006.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Hartford Hight, SEI Environmental, 6190 Regency Pkwy, Ste 308, Norcross, GA, 30071
Technical file

SEI
Environmental, Inc

CORRECTIVE ACTION SYSTEM EVALUATION REPORT
June through September 2005

Smith Grocery
176 Charlotte Highway (SC Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

PREPARED FOR:

Ms. Louis Smith
Smith's Grocery
3176 Charlotte Highway
York, South Carolina 29745

RECEIVED
OCT 24 2005
UNDERGROUND STORAGE
TANK PROGRAM

PREPARED BY:

SEI ENVIRONMENTAL, INC.
130 Penmarc Drive, Suite 108
Raleigh, North Carolina 27603-2434
UST Site Rehabilitation Contractor No. 41

October 21, 2005

SEI
Environmental, Inc.

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: October 21, 2005
Monitoring Report Number: 09
For Period Covering: June 30, 2005
to September 16, 2005
Facility Name : Smith's Grocery
Street Address: 176 Charlotte Highway (49)
UST Permit Number: 09322
City: York, South Carolina
County: York
Zip Code: 29745
Latitude: N 35°02'30.59"
Longitude: W 81°08'47.98"

Submitted by UST Owner/Operator:	Prepared by Consultant/Contractor:
Name: Louis Smith	Name: Douglas S. Parker
Company: Smith's Grocery	Company: SEI Environmental, Inc.
Address: 3176 Charlotte Highway	Address: 130 Penmarc Drive, Suite 108
City: York State: SC	City: Raleigh State: NC
Zip Code: 29745	Zip Code: 27603-2434
Telephone: (803) 684-6289	Telephone: (919) 832-2535
SEI Project Number: 300401	UST Site Rehabilitation Contractor No. 41

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: Douglas S. Parker
Signature:

Name: Hartford W. Hight, P.G.
SC Reg. No. 2384
Signature:
Date: 10/17/05

HARTFORD W. HIGHT REGISTERED NO. 2384 SOUTH CAROLINA PROFESSIONAL GEOLOGIST

TABLE OF CONTENTS

LIMITATIONS iii
1.0 INTRODUCTION 1
2.0 FIELD MEASUREMENTS AND SAMPLING 1
2.1 GROUNDWATER SAMPLING 1
2.2 WATER SUPPLY WELL SAMPLING 3
3.0 LABORATORY ANALYTICAL RESULTS 3
3.1 GROUNDWATER ANALYTICAL RESULTS 3
3.2 WATER SUPPLY WELL ANALYTICAL RESULTS 3
3.3 SITE SPECIFIC TARGET LEVELS 4
4.0 REMEDIATION SYSTEM EFFECTIVENESS 5
5.0 CONCLUSIONS AND RECOMMENDATIONS 5

LIST OF TABLES

TABLE 1 Historical Groundwater Elevation and Product Thickness Data
TABLE 2 Historical Groundwater Analytical Results
TABLE 3 Summary of Field Observations – September 16, 2005
TABLE 4 Concentration Reduction Calculations – September 16, 2005

LIST OF FIGURES

FIGURE 1 USGS Quadrangle Map
FIGURE 2 Site Map
FIGURE 3 Potentiometric Surface Map, September 16, 2005
FIGURE 4 Groundwater Chemicals of Concern Site Map, September 16, 2005

LIST OF APPENDICES

APPENDIX A Figures
APPENDIX B Tables
APPENDIX C Field Data Information Sheets for Groundwater Sampling
APPENDIX D Laboratory Reports and Chain-of-Custody Forms

LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Geologist registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by Accutest Laboratories.

1.0 INTRODUCTION

Smith's Grocery is a convenience and retail fuel store located at 3176 Charlotte Highway (SC Highway 49) in York, York County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- May 10, 2004 – Groundwater Sampling Event
- August 17, 2004 – Groundwater Sampling Event
- January 14, 2005 – Groundwater Sampling Event
- June 29, 2005 – Groundwater Sampling Event
- September 16, 2005 – Groundwater Sampling Event

On September 16, 2005, sixteen groundwater monitoring wells and four water supply wells were sampled in accordance with the requirements of the PFP contract. This report provides details of the groundwater sampling event.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On September 16, 2005, groundwater samples were collected from sixteen (MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-13, MW-14, MW-15, MW-17, MW-18, MW-19, TW-1, TW-2, and TW-3) of twenty-three existing groundwater monitoring wells. Six (MW-3, MW-4, MW-5, MW-9, MW-16, and MW-20) monitoring wells were not sampled because they were removed from the sampling schedule. One (MW-12) monitoring well was not sampled because it could not be located.

Prior to sampling, twenty-one (MW-1 through MW-11, MW-13 through MW-19, TW-1, TW-2, and TW-3) of the twenty-three groundwater monitoring wells were gauged utilizing an oil-water interface probe to measure depth to groundwater, and to detect any free product present. Two (MW-12 and MW-20) monitoring wells were not gauged because they could not be

located. The depth to groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction.

Free product was not currently and has not historically been detected in any of the monitoring wells. Figure 3 in Appendix A presents a groundwater poetentiometric map for the current sampling event. The latest groundwater data indicate that groundwater flow at the site is predominately east to southeast with a hydraulic gradient varying between 0.0168 feet per foot (between monitoring wells MW-8 and MW-14) and 0.0222 feet per foot (between monitoring wells MW-6 and MW-19). This flow direction is consistent with previous determinations of groundwater movement. Table 1 in Appendix B summarizes groundwater measurement data.

All monitoring wells were purged prior to sampling by removing a minimum of three well volumes of water via hand bailing with a new, disposable, polyethylene bailer or until groundwater quality data stabilized, or the well went dry. This purging process produced approximately 103.66 gallons of petroleum contaminated water. The purge water was disposed of at a South Carolina licensed facility. Table 3 summarizes field observation data. Appendix C contains Field Data Information Sheets for Groundwater Sampling.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Flordia. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene) and 8011 (for ethylene dibromide (EDB)). Lead was not sampled for this quarter.

2.2 Water Supply Well Sampling

On September 16, 2005, groundwater samples were collected from four (Crook, Swift, Hill, and Smith) water supply wells. Three (Crook, Swift, and Hill) of the water supply wells are

fitted with granular activated carbon (GAC) filters. As such, samples were collected before (pre) and after (post) the GAC filters. Prior to sampling, the water was allowed to run for at least ten minutes. The samples were placed into laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Flordia. The groundwater samples were analyzed by EPA Methods 8260B (for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene) and 8011 (for ethylene dibromide (EDB)). Lead was not sampled for this quarter.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

CoCs were detected in eight (MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, and TW-2) of the sixteen monitoring wells sampled at concentrations exceeding their respective SSTL. Monitoring well MW-2 contained the highest concentrations of benzene (24,300 micrograms per liter (µg/L)) and MTBE (1,130 µg/L). Monitoring well MW-1 contained the highest concentrations of toluene (59,100 µg/L), ethylbenzene (4,700 µg/L), and total xylenes (28,900 µg/L). Monitoring wells MW-7 and MW-8 contained the equally highest concentration of naphthalene (1,040 µg/L). Monitoring well MW-10 contained the highest concentration of EDB (143 µg/L). Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.2 Water Supply Well Analytical Results

CoCs were detected in two (Crook and Swift) of the three pre-GAC filter samples collected at concentrations exceeding their respective SSTLs for specific compounds. The Crook water supply well contained a concentration of EDB (368 µg/L) and the Swift water supply well contained a concentration of benzene (12.6 µg/L). CoCs were detected in two (Swift and Hill) of the three post-GAC filter samples collected at concentrations exceeding their respective SSTLs for specific compounds. Both the Swift and Hill water supply wells

contained concentrations of benzene (342 µg/L and 2.6 µg/L, respectively). The Smith water supply well sample was below laboratory detection limits for CoCs. Figure 4 in Appendix A is a site map presenting water supply well locations and their CoC concentrations. Table 2 in Appendix B summarizes historical water supply well analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.3 Site Specific Target Levels

Site Specific Target Levels (SSTLs) have been designated for sixteen (MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, MW-18, MW-19, TW-2, and TW-3) monitoring wells and all four (Crook, Swift, Hill, and Smith) water supply wells. For the three (Crook, Swift, and Hill) water supply wells with GAC filters, the SSTLs apply to the pre-GAC filter samples. Eight (MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, and TW-2) monitoring wells and two (Crook and Swift) water supply wells contained CoC concentrations exceeded their SSTLs.

During the September 16, 2005, sampling event, in monitoring well MW-1, SSTLs were exceed for all CoCs except MTBE and naphthalene. In monitoring wells MW-2 and MW-11, SSTLs were exceeded for all CoCs except EDB. In monitoring well MW-6, SSTLs were exceeded for benzene and naphthalene only. In monitoring wells MW-7 and MW-8, SSTLs were exceeded for all CoCs except MTBE. In monitoring well MW-10, SSTLs were exceeded for all CoCs except xylenes, MTBE, and naphthalene. In monitoring well TW-2, SSTLs were exceeded for all CoCs. In the Crook water supply well pre-GAC filter sample, SSTLs were exceeded for EDB only. In the Swift water supply well pre-GAC filter sample, SSTLs were exceeded for benzene only. Table 4 in Appendix B summarizes SSTL information.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target

concentrations for seven (benzene, toluene, ethylbenzene, xylenes, MTBE, naphthalene, lead, and EDB) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial January 6, 2003, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. For lead and monitoring well MW-12, the data used in the calculation was from the prior June 29, 2005, sampling event. The formula is a follows:

$$\left[\frac{\text{[01/06/03 Sample Concentration Above SSTL]} - \text{[Current Sample Concentration Above SSTL]}}{\text{[01/06/03 Sample Concentration Above SSTL]}}\right] * 100 = \%\ \text{Reduction}$$

Using the current analytical results, the concentration reduction is 37.47%. Table 4 in Appendix B presents concentration reduction calculations.

5.0 CONCLUSIONS

The groundwater flow direction at the time of the September 16, 2005, sampling event was towards the east, southeast with a hydraulic gradient varying between 0.0168 and 0.0222 feet per foot. Free product was not detected. CoC were detected in eight monitoring wells and two water supply wells above their respective SSTLs. The percent concentration reduction has been calculated at 37.47%, which is an improvement from the June 29, 2005, percent concentration reduction of 25.59%.

During this sampling event, there was a significant increase in petroleum constituent concentrations exhibited by monitoring well MW-1. For example, benzene concentrations increased from 273 µg/L on June 29, 2005, to 23,300 µg/L on September 16, 2005. In addition, monitoring wells MW-2 and MW-8, which are immediately down gradient of monitoring well MW-1, also exhibited increases in benzene and toluene concentrations. As depth to groundwater is on the deep end of historical depths, washing of petroleum constituents from the "smear" zone of the soil is not suspected. In addition, there are no known existing dispensers, USTs, ASTs, or other potential source areas located immediately adjacent or up gradient of monitoring well MW-1. Where the former USTs and dispensers

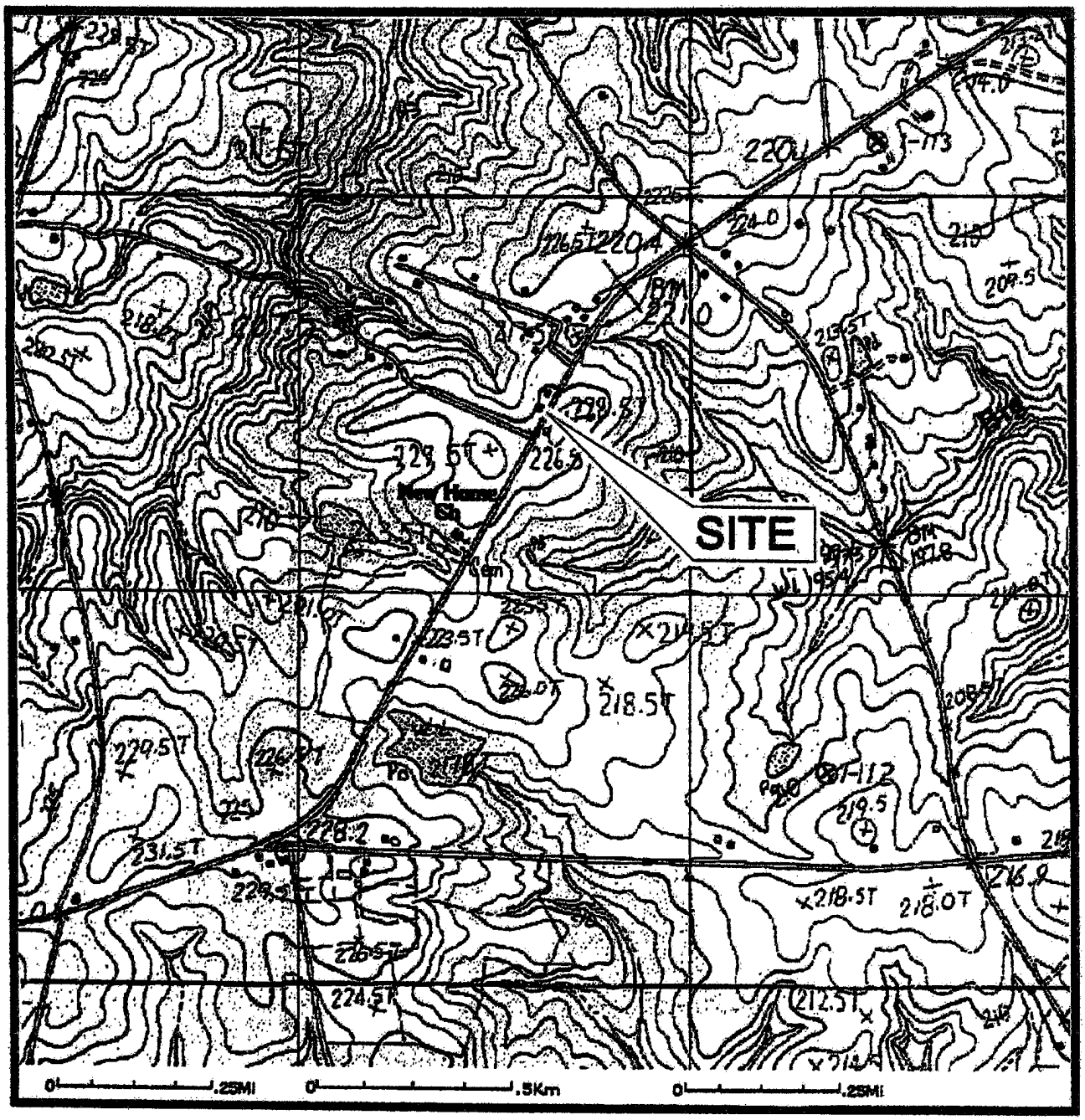
were located is unknown and existing site features do not suggest the locations. However, it is believed that the former USTs and dispensers were down gradient of monitoring well MW-1. As such, the cause of the dramatic increase in concentrations in monitoring well MW-1 is unknown at this time. Thus, subsequent monitoring events will have to give direction to further investigation into the increased concentrations.

If subsequent monitoring events manifest the same concentration increases in monitoring well MW-1, efforts will be made to determine the locations of the former UST system as a potential contributing factor. Also, the site will be examined for other potential source areas around and immediately up gradient of monitoring well MW-1, such as a previously unknown heating oil UST. However, if subsequent monitoring events show concentrations back within historical range, then the current sample would become suspect for laboratory error, most likely misidentification and switching with an unrelated sample.

Two (Swift and Hill) post-GAC filter water supply well samples contained concentrations of CoC above their respective SSTLs. In addition, it is highly likely that the pre and post-GAC filter samples for the Swift water supply well were inadvertently switched, so that in fact the pre-GAC filter sample had a concentration was 342 µg/L and the post-GAC filter sample had a concentration of 12.6 µg/L. Either way, the post-GAC filter concentrations indicated filter break through. As such, on October 18, 2005, SEI Environmental, Inc. personnel mobilized to the site to conduct necessary maintenance. In addition, SEI has order parts for the system and will change out the GAC filter at Swift during the next quarter.

SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. The next sampling event will occur in December 2005. SEI is currently evaluating alternative methods of active corrective action to be implemented at the site in order to proceed with the remediation effort.

7.5 MINUTE SERIES(TOPOGRAPHIC)

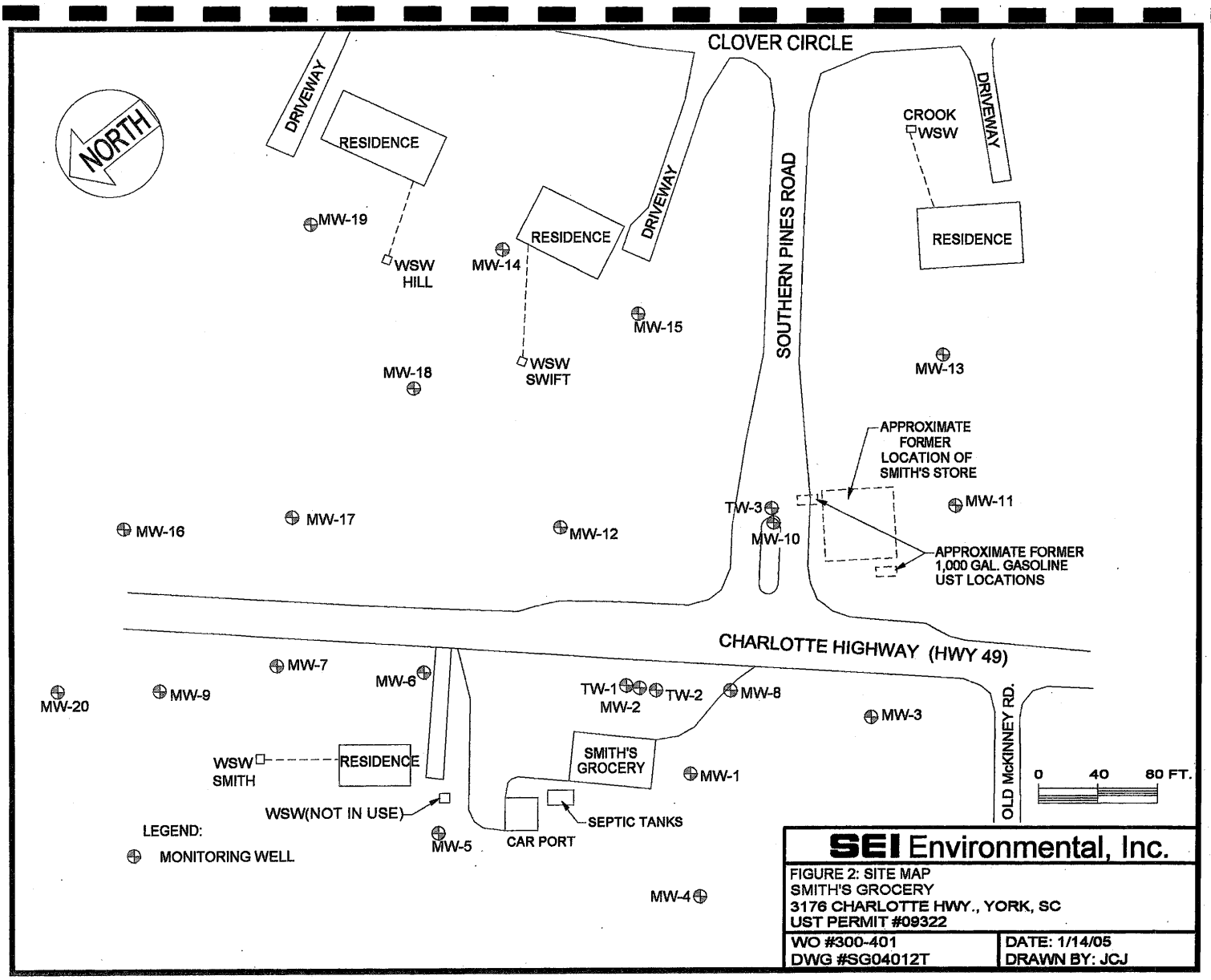


NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP(U.S.G.S. TOPO)
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

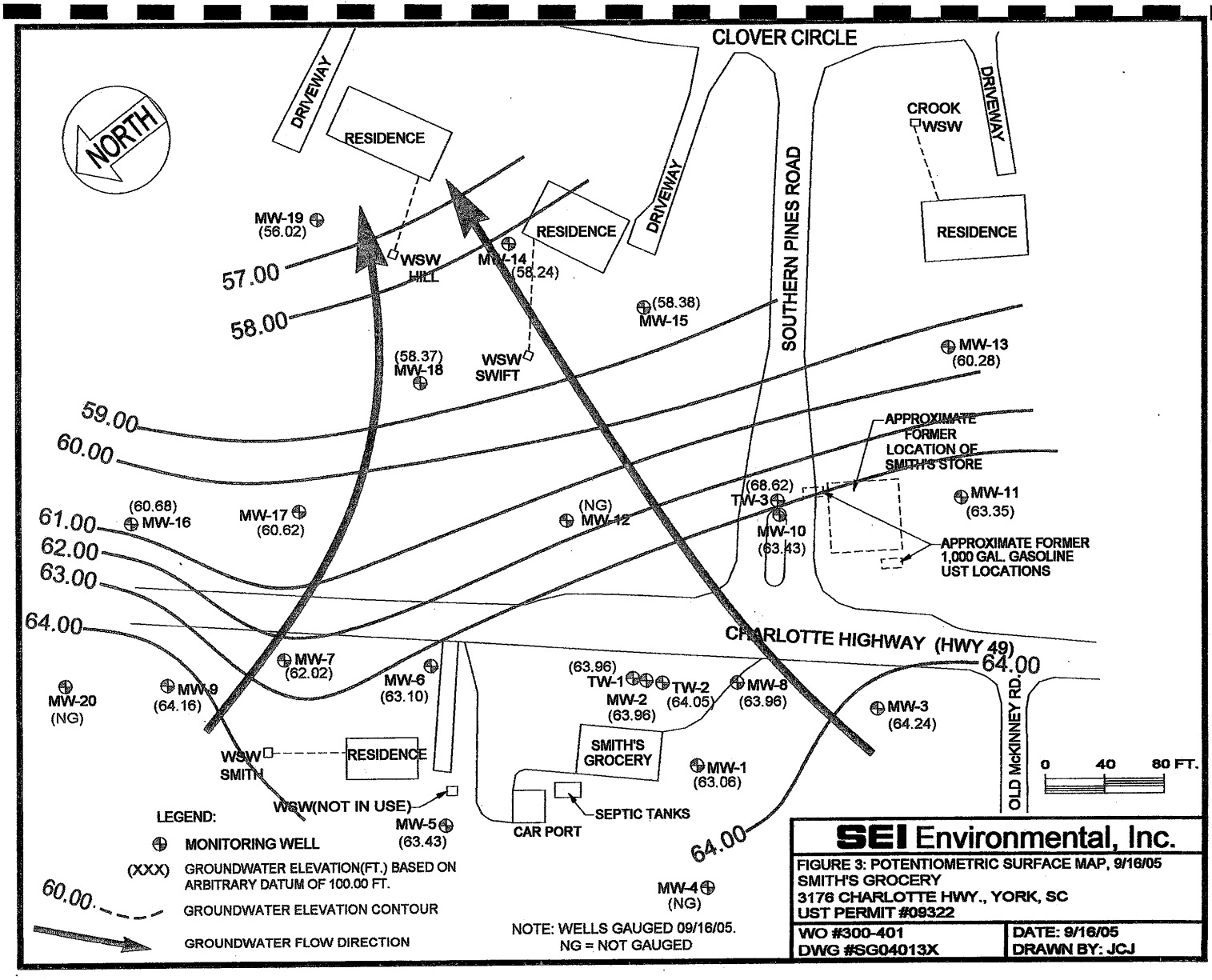
W.O. #: 300-401	DATE: 9/8/05
DWG #	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

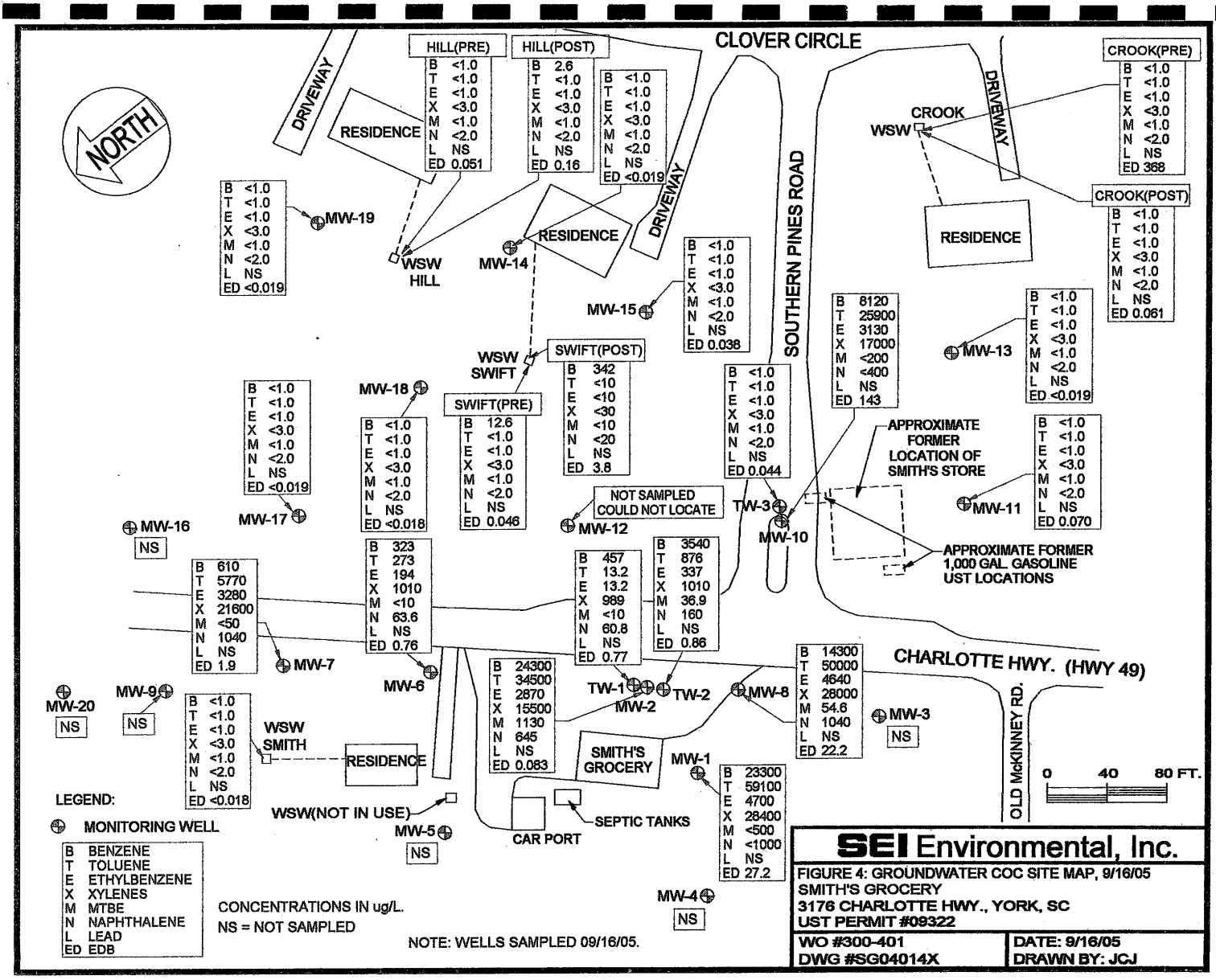
WO #300-401	DATE: 1/14/05
DWG #SG04012T	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: POTENTIOMETRIC SURFACE MAP, 9/16/05
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 9/16/05
DWG #SG04013X	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP, 9/16/05
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 9/16/05
DWG #SG04014X	DRAWN BY: JCJ

TABLE 1

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well Location	Date Gauged	Top of Casing Elevation (feet)	Depth of Well (feet)	Depth to Groundwater (feet)	Depth to Product (feet)	Product Thickness (feet)	Groundwater Elevation (feet)
MW-1	01/06/03	91.16	35.00	29.88	–	–	61.28
	04/02/03			28.05	–	–	63.11
	08/26/03			24.07	–	–	67.09
	01/08/04			25.46	–	–	65.70
	05/10/04			26.90	–	–	64.26
	08/17/04			27.03	–	–	64.13
	01/14/05			27.06	–	–	64.10
	06/29/05			25.67	–	–	65.49
	09/16/05			28.10	–	–	63.06
MW-2	01/06/03	94.57	38.00	33.76	–	–	60.81
	04/02/03			31.92	–	–	62.65
	08/26/03			27.81	–	–	66.76
	01/08/04			29.40	–	–	65.17
	05/10/04			26.68	–	–	67.89
	08/17/04			30.71	–	–	63.86
	01/14/05			30.78	–	–	63.79
	06/29/05			29.35	–	–	65.22
	09/16/05			30.61	–	–	63.96
MW-3	01/06/03	91.91	35.00	30.87	–	–	61.04
	04/02/03			29.02	–	–	62.89
	08/26/03			25.98	–	–	65.93
	01/08/04			26.46	–	–	65.45
	05/10/04			28.83	–	–	63.08
	08/17/04			27.76	–	–	64.15
	01/14/05			27.86	–	–	64.05
	06/29/05			26.39	–	–	65.52
	09/16/05			27.67	–	–	64.24
MW-4	01/06/03	86.20	27.00	24.58	–	–	61.62
	04/02/03			22.73	–	–	63.47
	08/26/03			15.07	–	–	71.13
	01/08/04			20.73	–	–	65.47
	05/10/04			25.94	–	–	60.26
	08/17/04			NM	–	–	NM
	01/14/05			21.83	–	–	64.37
	06/29/05			20.51	–	–	65.69
	09/16/05			Not Located			
MW-5	01/06/03	89.29	30.00	27.96	–	–	61.33
	04/02/03			25.00	–	–	64.29

TABLE 1 (continued)

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well Location	Date Gauged	Top of Casing Elevation (feet)	Depth of Well (feet)	Depth to Groundwater (feet)	Depth to Product (feet)	Product Thickness (feet)	Groundwater Elevation (feet)
MW-5 (continued)	08/26/03	89.29	30.00	22.70	–	–	66.59
	01/08/04			24.49	–	–	64.80
	05/10/04			25.57	–	–	63.72
	08/17/04			25.75	–	–	63.54
	01/14/05			25.44	–	–	63.85
	06/29/05			24.30	–	–	64.99
	09/16/05			25.86	–	–	63.43
MW-6	01/06/03	93.91	37.00	33.57	–	–	60.34
	04/02/03			31.66	–	–	62.25
	08/26/03			27.51	–	–	66.40
	01/08/04			29.58	–	–	64.33
	05/10/04			29.91	–	–	64.00
	08/17/04			29.50	–	–	64.41
	01/14/05			30.77	–	–	63.14
	06/29/05			29.74	–	–	64.44
	09/16/05			30.81	–	–	63.10
MW-7	01/06/03	91.68	36.00	31.57	–	–	60.11
	04/02/03			29.40	–	–	62.28
	08/26/03			26.88	–	–	64.80
	01/08/04			28.40	–	–	63.28
	05/10/04			27.78	–	–	63.90
	08/17/04			29.85	–	–	61.83
	01/14/05			29.28	–	–	62.40
	06/29/05			28.17	–	–	63.51
	09/16/05			29.66	–	–	62.02
MW-8	01/06/03	94.72	38.00	33.84	–	–	60.88
	04/02/03			32.02	–	–	62.70
	08/26/03			27.58	–	–	67.14
	01/08/04			29.47	–	–	65.25
	05/10/04			29.90	–	–	64.82
	08/17/04			30.88	–	–	63.84
	01/14/05			30.85	–	–	63.87
	06/29/05			29.50	–	–	65.22
	09/16/05			30.76	–	–	63.96
MW-9	01/06/03	90.54	36.00	30.41	–	–	60.13
	04/02/03			28.20	–	–	62.34
	08/26/03			26.10	–	–	64.44
	01/08/04			27.33	–	–	63.21
	05/10/04			28.69	–	–	61.85

TABLE 1 (continued)

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well Location	Date Gauged	Top of Casing Elevation (feet)	Depth of Well (feet)	Depth to Groundwater (feet)	Depth to Product (feet)	Product Thickness (feet)	Groundwater Elevation (feet)
MW-9 (continued)	08/17/04	90.54	36.00	29.50	–	–	61.04
	01/14/05			28.14	–	–	62.40
	06/29/05			26.97	–	–	63.57
	09/16/05			26.38	–	–	64.16
MW-10	01/06/03	99.77	44.00	39.71	–	–	60.06
	04/02/03			37.77	–	–	62.00
	08/26/03			33.36	–	–	66.41
	01/08/04			35.04	–	–	64.73
	05/10/04			35.50	–	–	64.27
	08/17/04			36.49	–	–	63.28
	01/14/05			36.66	–	–	63.11
	06/29/05			35.04	–	–	64.73
	09/16/05			36.34	–	–	63.43
MW-11	01/06/03	100.46	44.00	40.37	–	–	60.09
	04/02/03			38.36	–	–	62.10
	08/26/03			33.88	–	–	66.58
	01/08/04			35.70	–	–	64.76
	05/10/04			36.19	–	–	64.27
	08/17/04			37.17	–	–	63.29
	01/14/05			36.79	–	–	63.67
	06/29/05			35.68	–	–	64.78
	09/16/05			37.11	–	–	63.35
MW-12	01/06/03	99.61	44.00	39.64	–	–	59.97
	04/02/03			37.78	–	–	61.83
	08/26/03			33.78	–	–	65.83
	01/08/04			35.44	–	–	64.17
	05/10/04			35.75	–	–	63.86
	08/17/04			36.72	–	–	62.89
	01/14/05			37.18	–	–	62.43
	06/29/05			35.34	–	–	64.27
	09/16/05			Not Located			
MW-13	01/06/03	100.39	47.00	42.87	–	–	57.52
	04/02/03			41.13	–	–	59.26
	08/26/03			37.20	–	–	63.19
	01/08/04			38.70	–	–	61.69
	05/10/04			39.27	–	–	61.12
	08/17/04			40.27	–	–	60.12
	01/14/05			40.12	–	–	60.27

TABLE 1 (continued)

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well Location	Date Gauged	Top of Casing Elevation (feet)	Depth of Well (feet)	Depth to Groundwater (feet)	Depth to Product (feet)	Product Thickness (feet)	Groundwater Elevation (feet)
MW-13 (continued)	06/29/05	100.39	47.00	37.96	–	–	62.43
	09/16/05			40.11	–	–	60.28
MW-14	01/06/03	98.89	50.00	43.66	–	–	55.23
	04/02/03			42.10	–	–	56.79
	08/26/03			38.39	–	–	60.50
	01/08/04			39.40	–	–	59.49
	05/10/04			40.06	–	–	58.83
	08/17/04			41.12	–	–	57.77
	01/14/05			40.75	–	–	58.14
	06/29/05			39.77	–	–	59.12
	09/16/05			40.65	–	–	58.24
MW-15	01/06/03	100.18	50.00	44.97	–	–	55.21
	04/02/03			43.24	–	–	56.94
	08/26/03			39.58	–	–	60.60
	01/08/04			46.55	–	–	53.63
	05/10/04			41.19	–	–	58.99
	08/17/04			42.11	–	–	58.07
	01/14/05			43.06	–	–	57.12
	06/29/05			40.92	–	–	59.26
	09/16/05			41.80	–	–	58.38
MW-16	01/06/03	89.91	37.00	31.07	–	–	58.84
	04/02/03			29.00	–	–	60.91
	08/26/03			27.54	–	–	62.37
	01/08/04			28.03	–	–	61.88
	05/10/04			27.83	–	–	62.08
	08/17/04			29.23	–	–	60.68
	01/14/05			28.92	–	–	60.99
	06/29/05			27.86	–	–	62.05
	09/16/05			29.23	–	–	60.68
MW-17	01/06/03	94.46	40.00	36.81	–	–	57.65
	04/02/03			34.63	–	–	59.83
	08/26/03			37.08	–	–	57.38
	01/08/04			32.56	–	–	61.90
	05/10/04			32.93	–	–	61.53
	08/17/04			34.87	–	–	59.59
	01/14/05			33.83	–	–	60.63
	06/29/05			32.60	–	–	61.86
	09/16/05			33.84	–	–	60.62

TABLE 1 (continued)

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well Location	Date Gauged	Top of Casing Elevation (feet)	Depth of Well (feet)	Depth to Groundwater (feet)	Depth to Product (feet)	Product Thickness (feet)	Groundwater Elevation (feet)
MW-18	01/06/03	98.14	46.00	42.83	–	–	59.21
	04/02/03			41.26	–	–	58.10
	08/26/03			37.47	–	–	62.71
	01/08/04			38.14	–	–	59.05
	05/10/04			39.09	–	–	60.00
	08/17/04			35.43	–	–	60.67
	01/14/05			40.04	–	–	56.88
	06/29/05			38.93	–	–	55.31
	09/16/05			39.77	–	–	58.37
MW-19	01/06/03	98.27	50.00	45.14	–	–	57.10
	04/02/03			43.31	–	–	56.09
	08/26/03			39.24	–	–	56.26
	01/08/04			40.83	–	–	56.80
	05/10/04			41.47	–	–	57.44
	08/17/04			42.01	–	–	59.03
	01/14/05			42.18	–	–	54.96
	06/29/05			41.17	–	–	53.13
	09/16/05			42.25	–	–	56.02
MW-20	01/06/03	88.35	35.00	28.09	–	–	60.26
	04/02/03			25.79	–	–	62.56
	08/26/03			24.98	–	–	63.37
	01/08/04			25.10	–	–	63.25
	05/10/04			28.41	–	–	59.94
	08/17/04			NM	–	–	NM
	01/14/05			25.85	–	–	62.50
	06/29/05			24.63	–	–	63.72
	09/16/05			Not Located			
TW-1	01/06/03	94.72	61.00	34.33	–	–	60.69
	04/02/03			31.86	–	–	62.86
	08/26/03			27.96	–	–	66.76
	01/08/04			29.48	–	–	65.24
	05/10/04			30.31	–	–	64.41
	08/17/04			30.40	–	–	64.32
	01/14/05			30.75	–	–	63.97
	06/29/05			29.56	–	–	65.16
	09/16/05			30.76	–	–	63.96
TW-2	01/06/03	94.72	88.00	33.91	–	–	60.81
	04/02/03			32.04	–	–	62.68
	08/26/03			27.54	–	–	67.18

TABLE 1 (continued)

Historical Groundwater Elevation and Product Thickness Data

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well Location	Date Gauged	Top of Casing Elevation (feet)	Depth of Well (feet)	Depth to Groundwater (feet)	Depth to Product (feet)	Product Thickness (feet)	Groundwater Elevation (feet)
TW-2 (continued)	01/08/04	94.72	88.00	29.45	--	--	65.27
	05/10/04			29.89	--	--	64.83
	08/17/04			30.87	--	--	63.85
	01/14/05			30.94	--	--	63.78
	06/29/05			29.52	--	--	65.20
	09/16/05			30.67	--	--	64.05
TW-3	01/06/03	99.21	71.00	38.81	--	--	60.40
	04/02/03			36.97	--	--	62.24
	08/26/03			32.80	--	--	66.41
	01/08/04			34.40	--	--	64.81
	05/10/04			34.79	--	--	64.42
	08/17/04			35.75	--	--	63.46
	01/14/05			38.75	--	--	60.46
	06/29/05			34.33	--	--	64.88
	09/16/05			30.59	--	--	68.62

-- = Not applicable
*Groundwater Elevation = [(Top of Casing Elevation) - (DTW)] + (0.78*Product Thickness) --- where applicable
NM = Not Measured

TABLE 2

Historical Groundwater Analytical Results

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Sample Location	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)
MW-1	01/06/03	**911**	**9,810**	**2,660**	**18,650**	**250**	**743**	**56**	<0.010
	04/02/03	**590**	**2,900**	960	7,400	27	**200**	**10**	<0.010
	08/26/03	**610**	1,200	640	4,800	**100**	**500**	**33**	<0.010
	01/08/04	**620**	850	340	3,800	**100**	**500**	**5.0**	0.170
	05/10/04	**330**	1,100	459	3,700	25	**130**	**40**	<0.010
	08/17/04	**380**	970	670	3,600	<25	**120**	**63**	<0.010
	01/14/05	**270**	1,440	900	5,620	<1.0	**268**	<5.0	0.090
	06/29/05	**273**	1,200	601	3,640	<20	**136**	**29.5**	<0.019
	09/16/05	**23,300**	**59,100**	**4,700**	**28,400**	<500	<1,000	N/S	**27.2**
	SSTL	**11**	**2,223**	**1,558**	**10,000**	**90**	**56**	**2.0**	**0.320**
MW-2	01/06/03	**18,400**	**31,100**	**3,180**	**18,920**	**395**	**514**	28	0.020
	04/02/03	**13,000**	1,800	**1,600**	9,500	**480**	**500**	**190**	**160**
	08/26/03	**16,000**	**26,000**	**2,200**	13,000	**480**	**540**	**190**	**120**
	01/08/04	**18,000**	**33,000**	**2,200**	12,000	**880**	**1,200**	**1,000**	**150**
	05/10/04	**17,000**	**24,000**	**2,000**	11,000	**750**	**2,500**	**1,200**	**260**
	08/17/04	**19,000**	**29,000**	**2,900**	14,000	**1,200**	**2,500**	**2,100**	**500**
	01/14/05	**20,600**	**36,400**	**2,960**	**17,200**	**940**	**862**	**1,230**	**186**
	06/29/05	**18,500**	**27,300**	**2,600**	14,400	**952**	<500	**792**	**151**
	09/16/05	**24,300**	**34,500**	**2,870**	**15,500**	**1,130**	**645**	N/S	0.083
	SSTL	**10**	**2,021**	**1,416**	**15,000**	**81**	**51**	**30**	**10**
MW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	350	<0.020
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010

TABLE 2 (continued)

Historical Groundwater Analytical Results

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Sample Location	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)
MW-3 (continued)	05/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	8.5	0.0
	01/14/05	Removed from Sampling Schedule							
	SSTL	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
MW-4	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	12	<0.020
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010
	05/10/04	Removed from Sampling Schedule							
	SSTL	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
MW-5	01/06/03	<1.0	<1.0	<1.0	5.4	<1.0	<1.0	12	<0.020
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	<5.0	<0.010
	05/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	5.4	<0.010
	01/14/05	Removed from Sampling Schedule							
	SSTL	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
MW-6	01/06/03	**4,840**	**20,400**	**3,540**	**19,020**	25	**640**	11	**7.0**
	04/02/03	**2,600**	**11,000**	**1,800**	**9,000**	**250**	**1,200**	**54**	2.6
	08/26/03	**1,400**	**5,800**	**1,100**	6,600	**250**	**1,200**	**37**	<0.010
	01/08/04	**350**	1,200	240	1,300	<1.0	**77**	<5.0	1.2
	05/10/04	**640**	**2,200**	300	1,900	<5.0	**150**	**36**	1.8
	08/17/04	**1,100**	**2,200**	730	3,400	<50	<250	13	<0.010

TABLE 2 (continued)

Historical Groundwater Analytical Results

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Sample Location	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)
MW-6 (continued)	01/14/05	**1,070**	**2,960**	718	3,990	<1.0	**116**	**107**	1.67
	06/29/05	**413**	500	290	1,480	<10	**77.3**	<5.0	0.55
	09/16/05	**323**	273	194	1,010	<10	**63.6**	N/S	0.76
	SSTL	**6.0**	**1,212**	**850**	**8,000**	**48**	**31**	**18**	**4.83**
MW-7	01/06/03	**1,020**	1.0	**2,290**	**16,940**	1.0	**826**	5.0	**1.7**
	04/02/03	**240**	110	120	38	**210**	**120**	**240**	**1.7**
	08/26/03	**740**	250	110	1,600	**50**	**250**	**160**	0.09
	01/08/04	**630**	**13,000**	**2,400**	**25,000**	**100**	**1,000**	5.0	**3.5**
	05/10/04	**700**	**10,000**	**3,400**	**23,000**	**200**	**1,000**	5.0	**6.8**
	08/17/04	**23**	49	21	140	<5.0	<25	**19**	<0.010
	01/14/05	**565**	**9,180**	**3,570**	**24,400**	<1.0	**1,370**	**24**	**1.75**
	06/29/05	**582**	**7,030**	**3,480**	**23,100**	<100	**890**	<5.0	**1.7**
	09/16/05	**610**	**5,770**	**3,280**	**21,600**	<50	**1,040**	N/S	**1.9**
	SSTL	**6.0**	**1,212**	**850**	**12,123**	**48**	**31**	**18**	**0.66**
MW-8	01/06/03	**6,770**	**84,600**	**3,560**	**24,740**	7.3	**362**	**24**	**1.9**
	04/02/03	**8,600**	**46,000**	**3,500**	**23,000**	**200**	**1,000**	**49**	**190**
	08/26/03	**3,800**	**10,000**	1,200	6,800	**100**	**500**	**81**	**58**
	01/08/04	**5,600**	**22,000**	**3,400**	**20,000**	**100**	**1,300**	**18**	**4.7**
	05/10/04	**4,500**	**18,000**	1,600	**18,000**	**200**	**1,000**	**67**	**6.3**
	08/17/04	**10,000**	**37,000**	**2,900**	**20,000**	<1,000	<5,000	**27**	**63**
	01/14/05	**6,780**	**38,200**	**4,340**	**28,200**	<1.0	**1,600**	<5.0	**2.33**
	06/29/05	**6,490**	**31,000**	**4,320**	**27,500**	<500	<1,000	<5.0	**2.6**
	09/16/05	**14,300**	**50,000**	**4,640**	**28,000**	54.6	**1,040**	N/S	**22.2**
	SSTL	**12**	**2,424**	**1,700**	**16,000**	**96**	**62**	**4.0**	**0.48**

TABLE 2 (continued)

Historical Groundwater Analytical Results
Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Sample Location	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)
MW-9	01/06/03	<1.0	2.2	5.7	579	<1.0	109	24	<0.020
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	01/08/04	<5.0	<1.0	<5.0	<3.0	<1.0	<5.0	36	<0.010
	05/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	08/17/04	540	12,000	2,800	23,000	<500	<2,500	19	8.4
	01/14/05	Removed from Sampling Schedule							
	RBSL	**5.0**	**1,000**	**700**	**10,000**	**40**	**25**	**15**	**0.050**
MW-10	01/06/03	7,980	24,900	3,540	18,180	25	299	35	78
	04/02/03	11,000	23,000	2,400	13,000	200	1,000	49	190
	08/26/03	12,000	33,000	3,200	17,000	250	1,200	210	450
	01/08/04	4,200	14,000	2,400	12,000	100	500	6.3	100
	05/10/04	8,600	21,000	2,400	14,000	<250	<1,200	5.7	210
	08/17/04	3,500	16,000	2,200	14,000	<500	<2,500	25	67
	01/14/05	10,200	34,600	3,150	18,400	<1.0	38	20	152
	06/29/05	9,040	26,000	3,040	16,600	<500	<1,000	6.3	115
	09/16/05	8,120	25,900	3,130	17,000	<200	<400	NS	143
	SSTL	**9.0**	**1,819**	**1,274**	**18,185**	**73**	**46**	**21**	**9.0**
MW-11	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	7.8	6.0	<0.020
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	26	<0.010
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	33	0.290
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	46	<0.010
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	17	<0.010

TABLE 2 (continued)

Historical Groundwater Analytical Results

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Sample Location	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)
MW-11 (continued)	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**10**	<0.010
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**37.1**	<0.019
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**N/S**	**0.070**
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**5.0**	**0.020**
MW-12	01/06/03	**720**	**17.2**	13.4	**1,550**	<1.0	**113**	6.0	**12**
	04/02/03	**12**	<5.0	<1.0	1.8	<1.0	<5.0	**38**	0.240
	08/26/03	**51**	<5.0	<1.0	72	<1.0	5.5	**37**	0.370
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	0.015
	05/10/04	**23**	<5.0	<1.0	43	<1.0	<5.0	6.8	0.110
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**12**	0.110
	01/14/05	**74.2**	<1.0	<1.0	67.6	<1.0	<5.0	6.0	0.230
	06/29/05	**28.4**	<1.0	<1.0	10.8	<1.0	<2.0	<5.0	0.027
	09/16/05	Not Sampled – Could Not Locate							
	SSTL	**7.0**	**5.0**	**68**	**730**	**5.0**	**36**	**7.0**	**7.0**
MW-13	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	1.3	<5.0	<0.020
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**40**	<0.010
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45**	<0.010
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36**	<0.010
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**10.9**	<0.018
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**N/S**	<0.019
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**5.0**	**0.020**

TABLE 2 (continued)

Historical Groundwater Analytical Results

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Sample Location	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)
MW-14	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**39**	<0.010
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**100**	<0.010
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**45**	<0.010
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**19**	<0.010
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**15**	<0.020
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**6.4**	<0.018
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	<0.019
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**5.0**	**0.510**
MW-15	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	9.0	<0.020
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36**	<0.010
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120**	<0.010
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**48**	<0.010
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26**	<0.010
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	8.0	<0.020
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	7.5	<0.018
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	0.038
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**15**	**0.050**
MW-16	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	**18**	<0.020
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**140**	<0.010

TABLE 2 (continued)

Historical Groundwater Analytical Results

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Sample Location	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)
MW-16 (continued)	05/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	13	<0.010
	01/14/05	Removed from Sampling Schedule							
	SSTL	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
MW-17	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	44	<0.020
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	17	<0.010
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	42	<0.010
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.020
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	7.3	<0.010
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	9.0	<0.020
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5.4	<0.019
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	<0.019
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**15**	**0.020**
MW-18	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<5.0	<0.020
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	50	<0.010
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	100	<0.010
	01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	97	<0.010
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.9	<0.010
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	17	<0.020
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.7	<0.018
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	<0.018
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**15**	**0.120**

TABLE 2 (continued)

Historical Groundwater Analytical Results

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Sample Location	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)
MW-19	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	6.0	<0.020
	04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18**	<0.010
	01/08/04	<1.0	<5.0	<1.0	<1.0	<1.0	<5.0	<1.0	<0.010
	05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18**	<0.010
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	<0.019
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**15**	**0.020**
MW-20	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	11	<0.020
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	130	<0.010
	05/10/04	Removed from Sampling Schedule							
	SSTL	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
TW-1	01/06/03	3,380	1,510	1,860	9,370	25	160	6.0	5.2
	04/02/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	08/26/03	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	01/08/04	2,000	2,500	1,100	5,800	50	250	5.0	0.380
	05/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	08/17/04	67	<50	<10	59	<10	<50	30	0.52
	01/14/05	700	7.8	82.9	1,700	8.1	79.8	<5.0	0.47

TABLE 2 (continued)

Historical Groundwater Analytical Results

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Sample Location	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)
TW-1 (continued)	06/29/05	400	5.3	22.6	759	8.6	72.8	<5.0	0.41
	09/16/05	457	13.2	13.2	989	<10	60.8	N/S	0.77
	SSTL	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
TW-2	01/06/03	**6,620**	**6,860**	**620**	**4,110**	**50.2**	**160**	**6.0**	**5.2**
	04/02/03	**3,300**	**1,500**	**220**	**2,000**	**50**	**250**	**10**	**1.1**
	08/26/03	**3,000**	**450**	**79**	**1,700**	**10**	**160**	**6.8**	**0.35**
	01/08/04	**2,800**	**460**	**14**	**1,000**	**22**	**34**	**5.4**	**1.1**
	05/10/04	**3,700**	**640**	**160**	**1,800**	**5.0**	**170**	<5.0	**1.2**
	08/17/04	**1,400**	<500	<100	**300**	<100	<500	**5.4**	**2.2**
	01/14/05	**3,100**	**605**	**175**	**1,490**	**31.9**	**172**	<5.0	**0.59**
	06/29/05	**3,670**	**241**	**148**	**1,710**	**16.1**	**228**	<5.0	**0.40**
	09/16/05	**3,540**	**876**	**237**	**1,010**	**36.9**	**160**	N/S	**0.86**
	SSTL	**5.0**	**8.0**	**5.0**	**180**	**5.0**	**18**	**2.0**	**0.05**
TW-3	01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	8.9	<5.0	0.130
	04/02/03	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<5.0	0.031
	08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
	01/08/04	<1.0	<1.0	<5.0	<1.0	<3.0	<5.0	<5.0	<0.010
	05/10/04	2.9	11	1.8	12	<1.0	<5.0	<5.0	0.050
	08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	0.040
	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.077
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	NS	0.044
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**2.0**	**0.230**

TABLE 2 (continued)

Historical Groundwater Analytical Results

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Sample Location		Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)
Strife (Water Well)		01/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	**28**	<0.020
		04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
		08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
		01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
		05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
		08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
Crook	pre	01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	0.07
	post		<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020
	pre	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.070
	post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.027
	pre	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	**368**
	post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	0.061
		SSTL	**2.0**	**2.0**	**2.0**	**2.0**	**5.0**	**5.0**	**5.0**	**5.0**
Swift (Water Well)		01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**10**	<0.020
		04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	23	<0.010
		08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9.8	<0.020
		01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
		05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.030
		08/17/04	12	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.019
	pre	01/14/05	**400**	<1.0	<1.0	**110**	<1.0	**12**	<5.0	2.24
	post		**22**	<1.0	<1.0	3.2	<1.0	<5.0	<5.0	0.090
	pre	06/29/05	**193**	ND	ND	**69.9**	ND	**9.6**	N/S	N/S
	post		**4.2**	ND	ND	3.7	ND	ND	N/S	N/S

TABLE 2 (continued)

Historical Groundwater Analytical Results

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Sample Location		Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)
Swift (conti.)	pre	09/16/05	**12.6**	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	0.046
	post		**342**	<10	<10	<30	<10	<20	N/S	3.8
		SSTL	**5.0**	**2.0**	**2.0**	**26**	**2.0**	**5.0**	**5.0**	**5.0**
Hill (Water Well)		01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	**9.0**	<0.020
		04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**23**	<0.010
		08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
		01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**22**	<0.010
		05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**6.1**	<0.010
		08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	N/S	<0.010
	pre	01/14/05	**2.8**	<1.0	<1.0	<1.0	<1.0	<5.0	**10**	0.11
	post		<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.020
	pre	06/29/05	**2.4**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.19
	post		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0.063
	pre	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	0.051
	post		**2.6**	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	0.160
		SSTL	**2.0**	**2.0**	**2.0**	**2.0**	**5.0**	**5.0**	**5.0**	**5.0**
Smith (Water Well)		01/06/03	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020
		04/02/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	<0.010
		08/26/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**5.2**	<0.010
		01/08/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**120**	<0.010
		05/10/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**41**	<0.010
		08/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	N/S	<0.010
		01/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**51**	<0.020

TABLE 2 (continued)

Historical Groundwater Analytical Results

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Sample Location	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)
Smith (continued)	06/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**57.4**	<0.018
	09/16/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	N/S	<0.018
	SSTL	**2.0**	**2.0**	**2.0**	**2.0**	**5.0**	**5.0**	**5.0**	**5.0**

µg/L - micrograms per liter
SSTL = Site Specific Target Levels
RBSL = Risk Based Screen Level
N/A = Not Applicable
N/S = Not Sampled
Bold denotes concentrations over respective SSTL & RBSL

TABLE 3

Summary of Field Observations – September 16, 2005

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well ID	Frequency	Depth to Product (feet)	Free Product Thickness (feet)	Depth to Groundwater (feet)	Total Well Depth (feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (°C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-1	Initial	–	–	28.10	35.00	5.38	165.4	19.4	0.94	3.31	
	1st Volume					5.47	189.4	18.5	0.69		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					5.60	214.9	18.6	0.63		
MW-2	Initial	–	–	30.61	38.00	5.31	137.6	20.2	0.92	3.54	
	1st Volume					5.19	116.5	19.8	1.05		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					5.40	147.0	19.6	0.91		
MW-6	Initial	–	–	30.81	37.00	5.08	36.3	19.6	1.51	2.97	
	1st Volume					5.00	34.0	18.8	1.79		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					4.98	33.3	18.5	1.84		
MW-7	Initial	–	–	29.66	36.00	5.15	68.6	18.9	1.01	3.04	
	1st Volume					5.28	93.6	18.4	0.88		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					5.38	105.1	18.1	1.11		
MW-8	Initial	–	–	30.76	38.00	5.17	98.9	21.0	0.99	3.48	
	1st Volume					5.51	165.1	19.4	0.88		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					5.61	189.5	19.5	0.70		

TABLE 3 (Continued)

Summary of Field Observations – September 16, 2005

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well ID	Frequency	Depth to Product (feet)	Free Product Thickness (feet)	Depth to Groundwater (feet)	Total Well Depth (feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (°C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-10	Initial	–	–	36.34	44.00	4.98	106.8	20.1	0.86	3.67	
	1st Volume					4.92	105.0	19.5	0.87		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					4.97	102.1	19.4	1.18		
MW-11	Initial	–	–	37.11	44.00	4.65	110.9	18.4	3.35	3.30	
	1st Volume					4.66	100.9	17.4	3.64		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					4.66	100.1	17.4	3.60		
MW-13	Initial	–	–	40.11	47.00	4.94	52.1	18.2	5.01	3.30	
	1st Volume					4.97	53.0	17.5	4.92		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					5.05	49.5	17.3	4.89		
MW-14	Initial	–	–	40.65	50.00	5.54	80.1	18.6	3.34	4.48	
	1st Volume					5.61	83.8	18.4	3.26		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					5.66	84.7	18.4	3.10		
MW-15	Initial	–	–	41.80	50.00	5.69	109.0	18.9	3.23	3.93	
	1st Volume					Dry					
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					–	–	–	–		

TABLE 3 (Continued)

Summary of Field Observations – September 16, 2005 Smith's Grocery 3176 Charlotte Highway (Highway 49) York, York County, South Carolina UST Permit Number: 09322 SEI Project Number: 300401											
Well ID	**Frequency**	**Depth to Product (feet)**	**Free Product Thickness (feet)**	**Depth to Groundwater (feet)**	**Total Well Depth (feet)**	**pH (S.U.)**	**Specific Conductivity (umhos/cm)**	**Water Temp. (°C)**	**Dissolved Oxygen (S.U.)**	**Volume Purged (Gal.)**	**Notes**
MW-17	Initial	–	–	33.84	40.00	5.15	20.0	18.3	4.55	2.96	
	1st Volume					5.04	19.7	17.6	4.64		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					5.09	18.3	17.4	5.18		
MW-18	Initial	–	–	39.77	45.00	5.91	73.9	18.7	2.23	2.99	
	1st Volume					6.15	72.1	17.6	1.69		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					6.18	83.2	17.4	1.10		
MW-19	Initial	–	–	42.25	50.00	5.31	78.4	18.6	5.77	3.72	
	1st Volume					5.38	76.1	17.8	6.06		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					5.41	76.0	17.6	6.12		
TW-1	Initial	–	–	30.76	61.00	5.49	106.6	20.3	1.81	14.52	
	1st Volume					5.53	102.1	19.3	1.69		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					5.50	100.7	19.3	1.83		
TW-2	Initial	–	–	30.81	88.00	6.72	116.5	20.9	3.83	27.45	
	1st Volume					6.87	105.6	19.4	3.35		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					6.85	112.7	19.5	1.92		

TABLE 3 (Continued)

Summary of Field Observations – September 16, 2005

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well ID	Frequency	Depth to Product (feet)	Free Product Thickness (feet)	Depth to Groundwater (feet)	Total Well Depth (feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (°C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
TW-3	Initial	–	–	35.58	71.00	5.63	71.4	19.6	2.06	17.00	
	1st Volume					5.61	70.3	19.6	2.05		
	2nd Volume					–	–	–	–		
	3rd Volume					–	–	–	–		
	Post					5.54	69.7	19.2	1.47		

N/A = Not Applicable
S.U. = Standard Units
umhos/cm = micromhos per centimeter

TABLE 4

Concentration Reduction Calculation – September 16, 2005

Smith's Grocery
3176 Charlotte Highway (Highway 49)
York, York County, South Carolina
UST Permit Number: 09322
SEI Project Number: 300401

Well ID		Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)	Concentration > SSTL (µg/L)
MW-1	Initial (01/06/03)	1,100	19,000	2,700	10,000	80	770	2.0	0.32	
	SSTL	**11**	**2,223**	**1,558**	**10,000**	**80**	**56**	**2.0**	**0.32**	
	Initial > SSTL	1,089	16,377	1,142	0.0	0.0	714	0.0	0.0	19,722
	Subsequent (09/16/05)	23,000	59,100	4,700	28,400	20*	136*	29.5**	27.20	
	Subsequent > SSTL	23,289	56,877	3,142	18,400	0.0	80	27.5	26.88	101,842.4
MW-2	Initial (01/06/03)	25,000	39,000	3,500	15,000	200	200	1,300	179	
	SSTL	**10**	**2,021**	**1,416**	**15,000**	**81**	**51**	**30**	**10**	
	Initial > SSTL	24,990	36,979	2,084	0.0	119	149	1,270	169	65,760
	Subsequent (09/16/05)	24,300	34,500	2,870	15,500	1,130	645	792**	0.08	
	Subsequent > SSTL	24,290	32,479	1,454	500	1,049	594	762	0.0	61,128
MW-6	Initial (01/06/03)	3,400	14,000	1,900	8,000	80	700	39	4.83	
	SSTL	**6.0**	**1,212**	**850**	**8,000**	**48**	**31**	**18**	**4.83**	
	Initial > SSTL	3,394	12,788	1,050	0.0	32	669	21	0.0	17,954
	Subsequent (09/16/05)	323	273	194	1,010	10	63.6	<5.0**	0.76	
	Subsequent > SSTL	317	0.0	0.0	0.0	0.0	32.6	0.0	0.0	349.6
MW-7	Initial (01/06/03)	2,000	4,100	3,100	15,000	200	1,400	110	0.66	
	SSTL	**6.0**	**1,212**	**850**	**12,123**	**48**	**31**	**18**	**0.66**	
	Initial > SSTL	1,994	2,888	2,250	2,877	152	1,369	92	0.0	11,622
	Subsequent (09/16/05)	610	5,770	3,280	21,600	50	1,040	<5.0**	1.90	
	Subsequent > SSTL	604	4,558	2,430	9,477	2.0	1,009	0.0	1.24	18,081.2
MW-8	Initial (01/06/03)	9,500	56,000	5,300	16,000	200	820	4.0	0.48	
	SSTL	**12**	**2,424**	**1,700**	**16,000**	**96**	**62**	**4.0**	**0.48**	
	Initial > SSTL	9,488	53,576	3,600	0.0	104	758	0.0	0.0	67,526
	Subsequent (09/16/05)	14,300	50,000	4,640	28,000	54.6	1,040	<5.0**	22.20	
	Subsequent > SSTL	14,288	47,576	2,940	12,000	0.0	978	1.0	21.72	77,804.7

TABLE 4 (Continued)

Concentration Reduction Calculation – September 16, 2005 Smith's Grocery 3176 Charlotte Highway (Highway 49) York, York County, South Carolina UST Permit Number: 09322 SEI Project Number: 300401										
Well ID		**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**Naph-thalene (µg/L)**	**Lead (µg/L)**	**EDB (µg/L)**	**Concentration > SSTL (µg/L)**
MW-10	Initial (01/06/03)	5,800	26,000	3,200	19,000	800	800	21	95.3	
	SSTL	**9.0**	**1,819**	**1,274**	**18,185**	**73**	**46**	**21**	**9.0**	
	Initial > SSTL	5,791	24,181	1,926	815	727	754	0.0	86.3	34,280.3
	Subsequent (09/16/05)	8,120	25,900	3,130	17,000	1.0*	38*	6.3**	143	
	Subsequent > SSTL	8,111	24,081	1,856	0.0	0.0	0.0	0.0	134	34,182
MW-11	Initial (01/06/03)	5.0	5.0	5.0	10	5.0	5.0	6.0	0.02	
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**5.0**	**0.02**	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0
	Subsequent (09/16/05)	<1.0	<1.0	<3.0	<1.0	<1.0	<2.0	37.1**	0.07	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	32.1	0.05	32.2
MW-12***	Initial (01/06/03)	390	5.0	68	730	5.0	52	7.0	20.8	
	SSTL	**7.0**	**5.0**	**68**	**730**	**5.0**	**36**	**7.0**	**7.0**	
	Initial > SSTL	383	0.0	0.0	0.0	0.0	16	0.0	0.0	412.8
	Subsequent (09/16/05)	28.4	<1.0	<1.0	10.8	<1.0	<2.0	<5.0**	0.027	
	Subsequent > SSTL	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.4
MW-13	Initial (01/06/03)	5.0	5.0	5.0	10	75	5.0	5.0	0.02	
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**5.0**	**0.02**	
	Initial > SSTL	0.0	0.0	0.0	0.0	70	0.0	0.0	0.0	70
	Subsequent (09/16/05)	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	10.9**	<0.019	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0	5.9
MW-14	Initial (01/06/03)	5.0	5.0	5.0	10	5.0	5.0	37	0.51	
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**5.0**	**0.51**	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	32	0.0	32
	Subsequent (09/16/05)	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	6.4**	<0.019	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	1.4

TABLE 4 (Continued)

Concentration Reduction Calculation – September 16, 2005 Smith's Grocery 3176 Charlotte Highway (Highway 49) York, York County, South Carolina UST Permit Number: 09322 SEI Project Number: 300401										
Well ID		**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**Naph-thalene (µg/L)**	**Lead (µg/L)**	**EDB (µg/L)**	**Concentration > SSTL (µg/L)**
MW-15	Initial (01/06/03)	5.0	5.0	5.0	10	5.0	5.0	39	0.51	
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**15**	**0.05**	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	24	0.46	24.46
	Subsequent (09/16/05)	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	7.5**	<0.018	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-17	Initial (01/06/03)	5.0	5.0	5.0	10	5.0	5.0	29	0.02	
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**15**	**0.02**	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	14	0.0	
	Subsequent (09/16/05)	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<2.0**	<0.019	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-18	Initial (01/06/03)	5.0	5.0	5.0	10	5.0	5.0	42	0.12	
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**15**	**0.12**	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	27	0.0	27
	Subsequent (09/16/05)	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8.7**	<0.018	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-19	Initial (01/06/03)	5.0	5.0	5.0	10	5.0	5.0	51	0.02	
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**15**	**0.02**	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	36	0.0	36
	Subsequent (09/16/05)	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0**	<0.019	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TW-2	Initial (01/06/03)	400	8.0	5.0	180	5.0	18	2.0	0.05	
	SSTL	**5.0**	**8.0**	**5.0**	**180**	**5.0**	**18**	**2.0**	**0.05**	
	Initial > SSTL	395	0.0	0.0	0.0	0.0	0.0	0.0	0.0	395
	Subsequent (09/16/05)	3,540	876	237	1,010	36.9	160	<5.0**	0.86	
	Subsequent > SSTL	3,535	868	232	830	31.9	142	3.0	0.81	5,642.7

TABLE 4 (Continued)

Concentration Reduction Calculation – September 16, 2005 Smith's Grocery 3176 Charlotte Highway (Highway 49) York, York County, South Carolina UST Permit Number: 09322 SEI Project Number: 300401										
Well ID		**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**Naph-thalene (µg/L)**	**Lead (µg/L)**	**EDB (µg/L)**	**Concentration > SSTL (µg/L)**
TW-3	Initial (01/06/03)	5.0	5.0	5.0	10	5.0	5.0	2.0	0.23	
	SSTL	**5.0**	**5.0**	**5.0**	**10**	**5.0**	**5.0**	**2.0**	**0.23**	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Subsequent (09/16/05)	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0**	0.23	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crook (pre-filter)	Initial (01/06/03)	2.0	2.0	2.0	2.0	2.0	5.0	5.0	5.0	
	SSTL	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**	**5.0**	**5.0**	**5.0**	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Subsequent (09/16/05)	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0**	368	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	363	363
Swift (pre-filter)	Initial (01/06/03)	5.0	2.0	2.0	26	2.0	5.0	5.0	5.0	
	SSTL	**5.0**	**2.0**	**2.0**	**26**	**2.0**	**5.0**	**5.0**	**5.0**	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Subsequent (09/16/05)	12.6	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0**	<5.0	
	Subsequent > SSTL	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
Hill (pre-filter)	Initial (01/06/03)	2.0	2.0	2.0	2.0	2.0	5.0	5.0	5.0	
	SSTL	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**	**5.0**	**5.0**	**5.0**	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Subsequent (09/16/05)	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0**	<0.019	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Smith	Initial (01/06/03)	5.0	5.0	5.0	15	5.0	5.0	5.0	5.0	
	SSTL	**5.0**	**5.0**	**5.0**	**15**	**5.0**	**5.0**	**5.0**	**5.0**	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Subsequent (09/16/05)	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	57.4**	<0.019	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	52.4	0.0	52.4

TABLE 4 (Continued)

Concentration Reduction Calculation – September 16, 2005 Smith's Grocery 3176 Charlotte Highway (Highway 49) York, York County, South Carolina UST Permit Number: 09322 SEI Project Number: 300401										
Well ID		Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naph-thalene (µg/L)	Lead (µg/L)	EDB (µg/L)	Concentration > SSTL (µg/L)
TOTALS	Initial > SSTL	(Sum of Initial Concentration Above SSTL for all Wells)								217,876.56
	Subsequent > SSTL	(Sum of Subsequent Concentration Above SSTL for all Wells)								299,514.5

* High MDL due to other compounds, data for calculation comes from June 29, 2005, sampling event
**Lead was not sampled, data for calculation comes from June 29, 2005, sampling event
*** MW-12 was not sampled, data for calculation comes from June 29, 2005, sampling event

µg/L - micrograms per liter
SSTL = Site Specific Target Levels
Results of Non-Detect and Negative Numbers are Treated as Zeros

Comparison of Analytical Data = [(217,876.56 – 299,514.5)/217,876.56]*100 = 37.47 %

$$\left[\frac{\text{[01/06/03 Sample Concentration Above SSTL]} - \text{[09/16/05 Sample Concentration Above SSTL]}}{\text{[01/06/03 Sample Concentration Above SSTL]}}\right] * 100 = \% \text{ Reduction}$$

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott, Rich
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter
serial no. /
pH=4.0 [illegible] C
pH=7.0
pH=10.0

Conductivity Meter
serial no. /
standard
standard
standard

AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith Grocery Job#
Site ID#: Monitoring Well # MW-1
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x (D/2)^2 for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: feet
Depth to Ground Water (DGW) 28.10' feet
Total Well Depth (TWD) 35' feet
Length of the water column (LWC=TWD-DGW) 6.90 feet

1 casing volume (CV=LWC X C)= X = gals
3 casing volume (3 X CV)= 3-3\ gals (standard purge volume)

Total Volume of Water Purged Before Sampling gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)	5.38	5.45	5.60				
Specific Conductivity (µmhos/cm)	165.4	189.4	214.9				
Water Temperature (°C)	19.4	18.5	18.6				
Dissolved Oxygen	0.94	0.69	0.63				
PID readings, if required							

Remarks:

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott Ritch
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter
serial no. /
pH=4.0 ~ °C
pH=7.0
pH=10.0

Conductivity Meter
serial no. /
standard
standard
standard

AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by Date/Time | Received by Date/Time

Facility Name: Smith Grocery Job#
Site ID#: Monitoring Well # MW-2
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x (D/2)^2 for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: feet
Depth to Ground Water (DGW) 30.61 feet
Total Well Depth (TWD) 38.11 feet
Length of the water column (LWC=TWD-DGW) 6.39 feet

1 casing volume (CV=LWC X C)= X = gals
3 casing volume (3 X CV)= 3.54 gals (standard purge volume)

Total Volume of Water Purged Before Sampling gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)	5.31	5.19					5.40
Specific Conductivity (µmhos/cm)	1378	1645					1420
Water Temperature (°C)	20.2	19.8					19.6
Dissolved Oxygen	0.98	1.05					.91
PID readings, if required							

Remarks:

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott, Rich
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	/	serial no.	/
pH=4.0		standard	
pH=7.0		standard	
pH=10.0		standard	

AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith Grocery Job#
Site ID#: Monitoring Well # MW-6
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x (D/2)^2 for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:		feet
Depth to Ground Water (DGW)	30.81	feet
Total Well Depth (TWD)	37.0	feet
Length of the water column (LWC=TWD-DGW)	6.19	feet

1 casing volume (CV=LWC X C)= ____ X ____ = ____ gals
3 casing volume (3 X CV)= 2.97 gals (standard purge volume)

Total Volume of Water Purged Before Sampling ____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.08	5.00	4.98					→
Specific Conductivity (µmhos/cm)	36.3	34.0	33.3					→
Water Temperature (°C)	19.6	18.8	18.5					→
Dissolved Oxygen	1.51	1.79	1.84					→
PID readings, if required								

Remarks:

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott, Rich
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	/	serial no.	/
pH=4.0	4	standard	4
pH=7.0		standard	
pH=10.0		standard	

AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith Grocery Job#
Site ID#: Monitoring Well # MW-10
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:		feet
Depth to Ground Water (DGW)	36-34'	feet
Total Well Depth (TWD)	44'	feet
Length of the water column (LWC=TWD-DGW)	7.66	feet

1 casing volume (CV=LWC X C)= ____ X ____ = ____ gals
3 casing volume (3 X CV)= 3-65 gals (standard purge volume)

Total Volume of Water Purged Before Sampling ____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	4.98	4.92	4.97					
Specific Conductivity (µmhos/cm)	106.8	105.0	102.1					
Water Temperature (°C)	20.1	19.5	19.4					
Dissolved Oxygen	0.86	0.87	1.18					
PID readings, if required								

Remarks:

10/10/05 11:52 FAX 704 596 3605 SEI ENVIRONMENTAL INC. → RAL SEI 010

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05

Field Personnel: Scott, Rich

General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	/	serial no.	/
pH=4.0		standard	
pH=7.0		standard	
pH=10.0		standard	

AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Smith Grocery Job#

Site ID#: Monitoring Well # MW-11

Water Supply Well Public / Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: feet
Depth to Ground Water (DGW) 37.11 feet
Total Well Depth (TWD) 44.0 feet
Length of the water column (LWC=TWD-DGW) 6.89 feet

1 casing volume (CV=LWC X C)= ____ X ____ = ____ gals
3 casing volume (3 X CV)= 3.30 gals (standard purge volume)

Total Volume of Water Purged Before Sampling ____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	4.65	4.66						4.66
Specific Conductivity (µmhos/cm)	100.9	100.9						100.1
Water Temperature (°C)	18.4	17.4						17.4
Dissolved Oxygen	3.35	3.64						3.60
PID readings, if required								

Remarks:

10/10/05 11:52 FAX 704 596 3605 SEI ENVIRONMENTAL INC. → RAL SEI 009

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott, Ritch
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter
serial no. /
pH=4.0 [illegible] °C
pH=7.0 _____
pH=10.0 _____

Conductivity Meter
serial no. /
standard _____
standard _____
standard _____

AUTO CAL. SOLUTION PROVIDED PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by Date/Time

Received by Date/Time

Facility Name: Smith Grocery Job#
Site ID#: _____ Monitoring Well # MW-13
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 40.11 _____ feet
Total Well Depth (TWD) 47.0 _____ feet
Length of the water column (LWC=TWD-DGW) 6.89 feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals
3 casing volume (3 X CV)= 3.30 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	4.94	4.97	[illegible]					5.05
Specific Conductivity (µmhos/cm)	52.4	53.0	[illegible]					69.5
Water Temperature (°C)	18.2	17.5	[illegible]					17.2
Dissolved Oxygen	5.01	4.90						4.88
PID readings, if required								

Remarks:

10/10/05 11:51 FAX 704 596 8605 SEI ENVIRONMENTAL INC. → RAL SEI 008

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott, Ritch
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	/	serial no.	/
pH=4.0	4	standard	4
pH=7.0		standard	
pH=10.0		standard	

AUTO CAL. SOLUTION PROVIDED PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by Date/Time

Received by Date/Time

Facility Name: Smith Grocery Job#
Site ID#: Monitoring Well # MW-14
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x (D/2)^2 for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: feet
Depth to Ground Water (DGW) 40.65' feet
Total Well Depth (TWD) 50' feet
Length of the water column (LWC=TWD-DGW) 9.35 feet

1 casing volume (CV=LWC X C)= ____ X ____ = ____ gals
3 casing volume (3 X CV)= 4.48 gals (standard purge volume)

Total Volume of Water Purged Before Sampling ____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)	5.54	5.61					5.66
Specific Conductivity (µmhos/cm)	80.4	83.8					84.7
Water Temperature (°C)	18.6	18.4					18.4
Dissolved Oxygen	3.34	3.26					3.10
PID readings, if required							

Remarks:

10/10/05 11:53 FAX 704 596 8605 SEI ENVIRONMENTAL INC. → RAL SEI 013

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott, Ritch
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	/	serial no.	/
pH=4.0		standard	
pH=7.0		standard	
pH=10.0		standard	

AUTO CAL. SOLUTION PROVIDED PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith Grocery Job#
Site ID#: Monitoring Well # MW-15
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x (D/2)^2 for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:		feet
Depth to Ground Water (DGW)	41.80'	feet
Total Well Depth (TWD)	50.0'	feet
Length of the water column (LWC=TWD-DGW)	8.20	feet

1 casing volume (CV=LWC X C)= ____ X ____ = ____ gals
3 casing volume (3 X CV)= 3.93 gals (standard purge volume)

Total Volume of Water Purged Before Sampling ____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.69							
Specific Conductivity (µmhos/cm)	109.0	Run	out	of	Water			J
Water Temperature (°C)	18.9							J
Dissolved Oxygen	3.23							J
PID readings, if required								

Remarks:

10/10/05 11:53 FAX 704 596 8605 SEI ENVIRONMENTAL INC. → RAL SEI 012

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott, Rich
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter
serial no. /
pH=4.0 _____ °C
pH=7.0 _____
pH=10.0 _____

Conductivity Meter
serial no. /
standard _____
standard _____
standard _____

AUTO CAL. SOLUTION PROVIDED PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by Date/Time

Received by Date/Time

Facility Name: Smith Grocery Job#
Site ID#: _____ Monitoring Well # MW-17
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x (D/2)^2 for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 33.84' _____ feet
Total Well Depth (TWD) 40' _____ feet
Length of the water column (LWC=TWD-DGW) 6.16 feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals
3 casing volume (3 X CV)= 2.96 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.15	5.04						5.09
Specific Conductivity (µmhos/cm)	20.0	19.7						18.3
Water Temperature (°C)	18.3	17.6						17.4
Dissolved Oxygen	4.55	4.64						5.18
PID readings, if required								

Remarks: _____

10/10/05 11:54 FAX 704 596 8605 SEI ENVIRONMENTAL INC. → RAL SEI 016

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott, Rich
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	/	serial no.	/
pH=4.0		standard	
pH=7.0		standard	
pH=10.0		standard	

AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: Smith Grocery Job#
Site ID#: Monitoring Well # MW-18
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:		feet
Depth to Ground Water (DGW)	39.77	feet
Total Well Depth (TWD)	46.0	feet
Length of the water column (LWC=TWD-DGW)	6.23	feet

1 casing volume (CV=LWC X C)= ____ X ____ = ____ gals
3 casing volume (3 X CV)= 2.99 gals (standard purge volume)

Total Volume of Water Purged Before Sampling ____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)	5.91	6.15	6.18				
Specific Conductivity (µmhos/cm)	73.9	72.1	83.2				
Water Temperature (°C)	18.7	17.6	17.4				
Dissolved Oxygen	2.23	1.69	1.6				
PID readings, if required							

Remarks:

10/10/05 11:54 FAX 704 596 3605 SEI ENVIRONMENTAL INC. → RAL SEI 015

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott, Ritch
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter
serial no. /
pH=4.0 [illegible] °C
pH=7.0
pH=10.0

Conductivity Meter
serial no. /
standard
standard
standard

AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by Date/Time
Received by Date/Time

Facility Name: Smith Grocery Job#
Site ID#: Monitoring Well # MW-19
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 42.25' _____ feet
Total Well Depth (TWD) 50' _____ feet
Length of the water column (LWC=TWD-DGW) 7.75 feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals
3 casing volume (3 X CV)= 3.72 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	5.31	5.38						5.41
Specific Conductivity (µmhos/cm)	78.4	76.1						76.0
Water Temperature (°C)	18.6	17.8						17.6
Dissolved Oxygen	5.77	6.06						6.12
PID readings, if required								

Remarks: _____

10/10/05 11:54 FAX 704 596 8605 SEI ENVIRONMENTAL INC. → RAL SEI 014

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott. Ritch
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter serial no. /
pH=4.0 = °C
pH=7.0 _____
pH=10.0 _____

Conductivity Meter serial no. /
standard _____
standard _____
standard _____

AUTO CAL. SOLUTION PROVIDED PINE ENVIRONMENTAL SERVICE FOR FLORIDA

Chain of Custody

Relinquished by Date/Time

Received by Date/Time

Facility Name: Smith Grocery Job#
Site ID#: _____ Monitoring Well # MW-1
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x (D/2)^2 for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 30.26 feet
Total Well Depth (TWD) 61' feet
Length of the water column (LWC=TWD-DGW) 30.24 feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals
3 casing volume (3 X CV)= 14.52 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)	5.49	5.53					5.50
Specific Conductivity (µmhos/cm)	106.6	102.1					100.7
Water Temperature (°C)	20.3	19.3					19.31
Dissolved Oxygen	1.81	1.69					1.83
PID readings, if required							

Remarks: _____

SEI ENVIRONMENTAL INC. - RAL SEI 10/10/05 11:58 FAX 704 596 8605 020

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott + Bitch
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter		Conductivity Meter	
serial no.	/	serial no.	/
pH=4.0	4.0 °C	standard	
pH=7.0		standard	
pH=10.0		standard	

AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time

Facility Name: SMITH Grocery Job#
Site ID#: Monitoring Well # TW-2
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x $(D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:			feet
Depth to Ground Water (DGW)	30.81'		feet
Total Well Depth (TWD)	88'		feet
Length of the water column (LWC=TWD-DGW)	57.19		feet

1 casing volume (CV=LWC X C)= ____ X ____ = ____ gals
3 casing volume (3 X CV)=~~37.45~~ gals (standard purge volume)

Total Volume of Water Purged Before Sampling ____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Inital	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	
Time (military)								
pH (s.u.)	6.72	6.85						6.85
Specific Conductivity (µmhos/cm)	116.9	105.6						112.7
Water Temperature (°C)	20.9	19.4						19.51
Dissolved Oxygen	3.83	3.35						1.92 MGL
PID readings, if required								

Remarks:

10/10/05 11:37 FAX 704 596 8605 SEI ENVIRONMENTAL INC. → RAL SEI 022

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 9/16/05
Field Personnel: Scott, Rich
General Weather Conditions: Hot

Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter
serial no. /
pH=4.0 — °C
pH=7.0
pH=10.0

Conductivity Meter
serial no. /
standard
standard
standard

AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA

Chain of Custody

Relinquished by Date/Time

Received by Date/Time

Facility Name: Smith Grocery Job#
Site ID#: Monitoring Well # TW-3
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): 3.14 x (D/2)^2 for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: feet
Depth to Ground Water (DGW) 35.58 feet
Total Well Depth (TWD) 71' feet
Length of the water column (LWC=TWD-DGW) 35.42 feet

1 casing volume (CV=LWC X C)= ____ X ____ = ____ gals
3 casing volume (3 X CV)= 17.0 gals (standard purge volume)

Total Volume of Water Purged Before Sampling ____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)	5.63	5.61	5.54				
Specific Conductivity (µmhos/cm)	71.4	70.3	69.7				
Water Temperature (°C)	19.6	19.6	19.2				
Dissolved Oxygen	2.86	2.05	1.47				
PID readings, if required							

Remarks:

10/10/05 11:52 FAX 704 596 3605 SEI ENVIRONMENTAL INC. → RAL SEI 011

SEI Environmental
Monitoring Well Purge Data

Site Name Smith Grocery WO# 300-401

Date 9/16/05

Well ID	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Well Dia. (in.)	Well Volume (gallons)	Calculated Purge Volume (gallons)	Actual Purge Volume (gallons)	DO (mg/l)	pH	Temp (°C)	Redox (mV)
MW-16		29.23									
MW-17		33.84									
MW-12		CNF									
MW-18		39.77									
MW-14		40.65									
MW-19		42.25									
MW-15		41.80									
MW-13		40.11									
MW-3		35.58									
MW-10		36.34									
MW-18		37.11									
MW-3		27.67									
MW-8 SDSW-1		30.76									
SDSW-5 MW-1		28.10									
MW-4		CNF									
TW-2 SDSW-2		30.67									
MW-2		30.61									
TW-1 SDSW-1		30.76									
MW-3		30.39									
SW-4		30.96									
MW-5		25.86									
MW-6		30.81									
MW-7		29.66									

2-inch diameter well: Well Volume = (water column) x (0.16 gallon/foot)
4-inch diameter well: Well Volume = (water column) x (0.65 gallon/foot)
Purge amount = Well Volume x 3

MW-9 26.38

MW-20 Do not know what well was what for MW-9 or MW-20 could only find one well. it did not have a tag in it

Sample Summary

SEI-Columbia, SC

Job No: F35032

Smith's Grocery; York, SC
Project No: 300401

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F35032-1	09/16/05	18:00	SS	09/20/05	AQ	Ground Water	TW-3
F35032-2	09/16/05	18:15	SS	09/20/05	AQ	Ground Water	MW-10
F35032-3	09/16/05	17:25	SS	09/20/05	AQ	Ground Water	MW-15
F35032-4	09/16/05	19:10	SS	09/20/05	AQ	Ground Water	MW-1
F35032-5	09/16/05	16:10	SS	09/20/05	AQ	Ground Water	MW-14
F35032-6	09/16/05	18:45	SS	09/20/05	AQ	Ground Water	MW-13
F35032-7	09/16/05	19:30	SS	09/20/05	AQ	Ground Water	WSW SMITH
F35032-8	09/16/05	17:45	SS	09/20/05	AQ	Ground Water	WSW SWIFT/PRE
F35032-9	09/16/05	17:45	SS	09/20/05	AQ	Ground Water	WSW SWIFT/POST
F35032-10	09/16/05	18:50	SS	09/20/05	AQ	Ground Water	WSW CROCK/PRE
F35032-11	09/16/05	18:30	SS	09/20/05	AQ	Ground Water	MW-11
F35032-12	09/16/05	14:00	SS	09/20/05	AQ	Ground Water	MW-2
F35032-13	09/16/05	13:45	SS	09/20/05	AQ	Ground Water	TW-2

Sample Summary
(continued)

SEI-Columbia, SC

Job No: F35032

Smith's Grocery; York, SC
Project No: 300401

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F35032-14	09/16/05	14:30	SS	09/20/05	AQ	Ground Water	TW-1
F35032-15	09/16/05	14:45	SS	09/20/05	AQ	Ground Water	MW-8
F35032-16	09/16/05	15:00	SS	09/20/05	AQ	Ground Water	MW-6
F35032-17	09/16/05	15:30	SS	09/20/05	AQ	Ground Water	MW-7
F35032-18	09/16/05	15:50	SS	09/20/05	AQ	Ground Water	MW-17
F35032-19	09/16/05	14:15	SS	09/20/05	AQ	Ground Water	MW-18
F35032-20	09/16/05	16:30	SS	09/20/05	AQ	Ground Water	MW-19
F35032-21	09/16/05	18:50	SS	09/20/05	AQ	Ground Water	WSW CROCK/POST
F35032-22	09/16/05	17:00	SS	09/20/05	AQ	Ground Water	WSW HILL/PRE
F35032-23	09/16/05	17:00	SS	09/20/05	AQ	Ground Water	WSW HILL/POST
F35032-24	09/16/05	00:00	SS	09/20/05	AQ	Trip Blank Water	TRIP BLANK
F35032-25	09/16/05	00:00	SS	09/20/05	AQ	Trip Blank Water	TRIP BLANK

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

OCT 20 2005

MS LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745-9802

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit #09322 CA #25790
Release 1 Reported June 30, 1993
Request from Donald Crook, 3035 Clover Circle on October 19, 2005
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) recognizes your commitment to continue work at this site utilizing your own contractor. SCDHEC has received a request from Mr. Donald Crook at 3035 Clover Circle to have the Granular Activated Carbon (GAC) unit removed from his residence. Mr. Crook understands the potential health effects associated with the consumption of water that may contain petroleum compounds and accepts responsibility for such. Mr. Crook requests that he be contacted at (803) 684-2858 by SEI Environmental so that he may be present during the removal of the unit. Cost Agreement **#25790** has been approved in the amount shown on the enclosed Approved Cost Agreement to complete the necessary work. SEI will still be required to collect a sample from the water supply well on a quarterly basis.

SEI Environmental, Inc. can submit an invoice for direct billing from the SUPERB Account. Please note that all applicable South Carolina certification requirements apply to the laboratory services, well installation, and report preparation. Please note that Sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that no costs will be allowed unless prior approval from the Department is obtained. If for any reason additional tasks will be completed, these additional tasks and the associated cost must be pre-approved by the Department for the cost to be paid. The SCDHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, SCDHEC reserves the right to question and/or reject costs if deemed unreasonable or excessive. The SCDHEC reserves the right to audit project records at any time during the project or after completion of work.

A report documenting the GAC removal is due within 30 days of the date of this letter, and the invoice is due within 90 days from the date of this letter. If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

On all correspondence concerning this site, please reference **UST Permit #09322 and Cost Agreement #25790**. If there are any questions concerning this project, please contact me at (803) 896-6397, via email at thomadl@dhec.sc.gov or by fax at (803) 896-6245.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

enc: Approved Cost Agreement (ACA)

cc: Hartford Hight, SEI Environmental, 6190 Regency Pkwy, Ste 308, Norcross, GA, 30071 (w/ enc.)
Donald Crook, 3035 Clover Cir., York, SC, 29745
Stephanie Briney, Assessment Section
Technical File

Approved Cost Agreement 25790

Facility: 09322 SMITHS GROCERY
THOMADL
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB					
		B PERSONNEL	1.0000	275.00	275.00
19 RPT/PROJECT MNGT & COORDINATIO					
		PCT PERCENT	0.1500	725.00	108.75
24 GAC SYSTEM					
		D SYST REMOVAL, CLEANING, REBUR	1.0000	450.00	450.00
			Total Amount		833.75

#09822
3035 Clover Cir

From: "Donald Crook" <donaldcrook@bellsouth.net>
To: "Debra L. Thoma" <THOMADL@dhec.sc.gov>
Date: 10/19/2005 2:07:47 PM
Subject: RE: Smith Grocery, SC Hwy 49, York, SC

Dear Debra,

I authorize you to remove the equipment.

I want to be around when the contractor removes the equipment. I know there have been prior problems with the equipment before I bought the house when freezing temperatures came about.

Please advise me on the date and time of removal.

I have no concern of you taking future samples from my well.

I appreciate continued advisement of your test/reports from my well and property (there are several (at least 2 not counting my well) collection sites on my property). I believe by removing the system we will reduce the cost of this remediation in the long term, it will reduce my concerns of further problems and it will provide me an outdoor spigot I can get to without physical exertion.

I feel more confident drinking the water from my well than any municipality.

Thank you for your help.

Best regards,

Donald Crook
803 684 2858

-----Original Message-----
From: Debra L. Thoma [mailto:THOMADL@dhec.sc.gov]
Sent: Wednesday, October 19, 2005 12:36 PM
To: donaldcrook@bellsouth.net
Subject: Re: Smith Grocery, SC Hwy 49, York, SC

Mr. Crook:

Due to the release from the former underground storage tanks at Smith Grocery, at some time during the course of the assessment or corrective action petroleum chemicals were detected in the supply well above the laboratory detection limit. As a precautionary measure, the granulated activated carbon filter was installed to remove the petroleum from the water. The UST Program policy is to offer the installation of a filter anytime a chemical is detected as the potential exists for the level to exceed the EPA drinking water standards. The UST Program can authorize costs for the contractor (SEI Environmental) to come out and remove the unit. There will no cost to you for removal of the unit. The most recent sample collected before the filter showed all compounds below laboratory detection limits except for EDB (Ethylene Dibromide) at 0.07 ppb. The EPA drinking

water standard is 0.05 ppb. By requesting the filter be removed, you are acknowledging that the consumption of water that may contain petroleum chemicals may cause adverse health effects and that you accept responsibility for such. The contractor still be collect a sample from you well on a quarterly basis until the cleanup of the release is completed and I will continue to provide you a copy of the reports for as long as you wish to receive them. Upon your confirmation that you still would like the filter removed, I will send through the necessary paperwork to get the unit removed. If I can be of any further assistance, please do not hesitate to contact me.

Sincerely,

Debra L. Thoma
Northeastern SC Corrective Action Section
Underground Storage Tank Program
Phone: (803) 896-6397
Email: thomadl@dhec.sc.gov

>>> "Donald Crook" <donaldcrook@bellsouth.net> 10/19/2005 1:05 PM >>>
Dear Debra,

Emailed you earlier. Guess my company's firewall prevents me from communicating to the government.

I reside at:

3035 Clover Circle
York, SC 29745

I bought the house in July 2004. Someone or you have a filtration system at my house. I'd like it removed.

1) It blocks one of 2 outside spigots I have.

2) I look at it as a potential problem in freezing weather and know it is just another thing to go wrong in supporting my house.

Can you explain why this filtration system is necessary when your report shows negligible concerns. Personally I feel the pine trees around my house are producing as much volatile chemical concerns as what came about in the report at my site. I do not see any concern with lead or any other heavey metal.

The cost of removing the devise now can save our state money by not sending people out to maintain it.

Yesterday they maintained it and my wife was concern because the water came out like looking like milk and fizzing. I knew what had happened. They back washed the thing and O2 was all in the system. It is still not out of the system.

I believe my water is better than any municipally can provide. I am pretty confident of this fact.

Bottom line. I want the system removed and appreciate your assistance on this matter.

Best regards,

Donald Crook
803 684 2858

BOARD:
Elizabeth M. Hagood
Chairman

Edwin H. Cooper, III
Vice Chairman

Steven G. Kisner
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Henry C. Scott

Paul C. Aughtry, III

Glenn A. McCall

Coleman F. Buckhouse, MD

October 13, 2005

Ms. Lois Smith
Smith's Grocery
3176 Charlotte Hwy
Yory, SC 29745

Re: Underground Injection Control Permit #563M
Smith's Grocery Site
York County

Dear Ms. Smith:

Enclosed is a Permit to Operate eighteen (18) Class V.A.-I. (Aquifer Remediation) injection wells at the Smith's Grocery Site, York County, SC.

The issuance of this **UIC Permit 563M** represents a final staff decision that may be appealed to the Administrative Law Court (ALC). Such appeal must be made pursuant to the amended Rules of Procedure for the Administrative Law Court that became effective on May 1, 2005. Pursuant to Rule 11 of the amended ALC Rules of Procedure, such appeal must be made by filing a request for a contested case hearing with the Clerk of the ALC within thirty (30) days after notice of this decision at the following address:

Clerk, Administrative Law Court
1205 Pendleton Street, Suite 224
P. O. Box 11667
Columbia, SC 29211

Pursuant to Rule 11(D), the following elements must, at a minimum, be included within the request:

1. The name of the party requesting the hearing and the issue(s) for which the hearing is requested;
2. The caption or other information sufficient to identify the decision, order, letter, determination, action, or inaction which is subject to the hearing;
3. A copy of the written agency decision, order, letter or determination, if any, which gave rise to the request;
4. The relief requested.

Furthermore, pursuant to ALC Rule 71, the Administrative Law Court requires that a party requesting a contested case hearing must submit a filing fee in the amount of $250 with the Administrative Law Court.

Finally, a copy of a request for the contested case hearing must also be served on each party, including but not limited to DHEC. Copies of a request for a contested case hearing should be mailed to the Clerk of the Board, DHEC, 2600 Bull Street, Columbia, SC 29201, (803) 898-3300.

If you have any question, please call Norman J. Dodson at (803) 898-3531.

Sincerely,

Norman J. Dodson, Hydrogeologist
Groundwater Management Section
Bureau of Water

cc: Debra Thoma, BLWM-USTP
Hartford Hight, 6190 Regency Pkwy, Suite 308, Norcross, GA 30071

BOARD:
Elizabeth M. Hagood
Chairman
Edwin H. Cooper, III
Vice Chairman
Steven G. Kisner
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Henry C. Scott
Paul C. Aughtry, III
Glenn A. McCall
Coleman F. Buckhouse, MD

WATER MONITORING ASSESSMENT & PROTECTION DIVISION

Injection Well Operating Approval
for

Class II, III, and V.A. Injection Well(s)

Permit #563M Date of Issue: October 13, 2005

In accordance with the provisions of Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, and pursuant to receiving a Permit to Operate eighteen (18) Class V.A.-I. (Aquifer Remediation) injection wells, authorization is granted to Smith's Grocery to operate eighteen (18) Class V.A.-I. (Aquifer Remediation) injection wells located at the Smith's Grocery Site, York County, SC, and are subject to the attached provisos noted for the operator.

The Class V.A.-I. injection wells are two (2) inches in diameter and approximately thirty to forty (30 to 40) feet deep

Pursuant to Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, this authorization may be rescinded if these injection wells should, at any time, contaminate, pollute, or otherwise adversely affect other water in the vicinity or for any other conditions contained in R61-87, Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended.

Expires: October 13, 2006

Rob Devlin, Manager
Groundwater Management Section
Bureau of Water

Date October 13, 2005

DHEC 2104 (6/88)

Provisions to the Injection Well Operating Approval
for
Underground Injection Well Permit #563M
Smith's Grocery
York County, S.C.
October 13, 2005

1) Construction of new or abandonment of existing wells must be reported to the Department within thirty (30) days of completion.

2) Only Potassium Triple Salt as described in the application dated September 30, 2005 may be injected into the subsurface at the eighteen (18) Class V.A.-I. (Aquifer Remediation) injection wells. Any changes in the system operation other than as presented in the UIC Permit Application must be reported to the Department prior to implementation.

SEI
Environmental, Inc.

6190 Regency Pkwy.
Suite 308
Norcross, GA 30071
770.263.2002 Ext. 252
Fax 770.263.7585

September 1, 2005

Mr. Reid Minor
SCDHEC
Underground Storage Tank Management Program
2600 Bull Street
Columbia, South Carolina 29201

RECEIVED
SEP 0 6 2005
UNDERGROUND STORAGE
TANK PROGRAM

Re: Smith's Grocery
176 Charlotte Highway
York, York County, South Carolina
Facility ID: 09322

Dear Mr. Minor:

SEI Environmental, Inc., on behalf of Smith's Grocery, presents the enclosed quarterly monitoring for the June 2005 sampling event for your review. Attached, please find one original of the report.

If you have any questions please call me at (770) 263-2002.

Sincerely,

Hartford W. Hight, P.G.
Sr. Project Manager

Cc: Ms. Louis Smith
SEI Store File

Enclosure

SUMMARY OF CORRECTIVE ACTION AND GAUGING RESULTS

Smith's Grocery

176 Charlotte Highway

York, South Carolina
Permit # 09322
York County

RECEIVED
SEP 0 6 2005
UNDERGROUND STORAGE
TANK PROGRAM

PREPARED FOR:

Ms. Lois B. Smith
3715 Charlotte Highway
York, South Carolina 29745

PREPARED BY:

SEI Environmental, Inc.

3021 McNaughton Drive, Suite 9

Columbia, South Carolina 29223

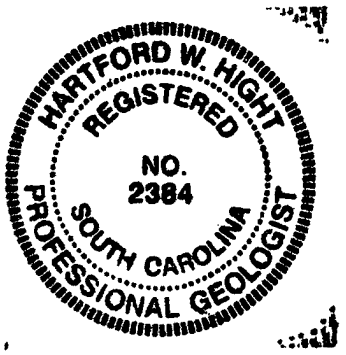
(803) 788-2535

UST Site Rehabilitation Contractor No. 41

Hartford W. Hight

P.G. No. 2384

August 29, 2005



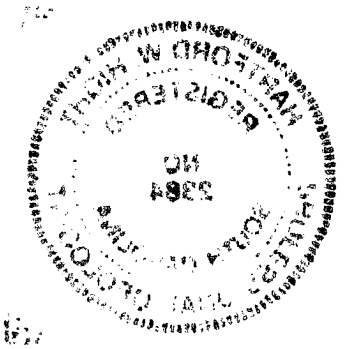


TABLE OF CONTENTS

GROUNDWATER SAMPLING REPORT SEAL PAGE

PROJECT SUMMARY 1

ACTIVTIES AND ASSESSMENT OF SITE CONDITIONS 1,2

CONCLUSIONS 3

LIST OF TABLES

TABLE 1	Historical Summary of Groundwater Elevation Data
TABLE 2	Historical Summary of Laboratory Analytical Data
TABLE 3	Summary of Field Observations
TABLE 4	Percent Concentration Reduction

LIST OF FIGURES

FIGURE 1	Site Topographic Map
FIGURE 2	Site Map with Well Locations
FIGURE 3	Potentiometric Map
FIGURE 4	Chemicals of Concern Site Map

LIST OF APPENDICES

APPENDIX A	Groundwater Parameters
APPENDIX B	Laboratory Analytical Data
APPENDIX C	Disposal Manifest

Project Summary

On June 29, 2005, SEI Environmental conducted a comprehensive, quarterly groundwater sampling and gauging event at Smith's Grocery. Attached is Figure 1, a topographic map and Figure 2, a site map depicting the locations of the existing monitoring wells and water supply well locations.

Activities and Assessment of Existing Conditions

A. Potentiometric Data:

On June 29, 2005 SEI personnel collected groundwater elevations from twenty-three (23) monitoring wells using an electronic water level indicator. Groundwater elevation data collected from the groundwater monitoring wells indicates groundwater flowing in a southeasterly direction. No free product was detected at the site. Table 1 is a historical summary of the site groundwater elevation data. Figure 3 is a groundwater potentiometric map based on the June 29, 2005 gauging observations.

B. Groundwater Analytical Data:

On June 29, 2005 SEI personnel mobilized to the site to gauge twenty-nine (29) monitoring wells and sample seventeen (17) monitoring wells, MW-1, MW-2, MW-6, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, MW-18 MW-19, TW-1, TW-2 and TW-3. Four (4) water supply wells, Crook, Hill, Swift, and Smith were also sampled during the event. These water supply samples were collected both before and after well water was filtered by the granular activated carbon (GAC) filters. Please note that the laboratory analytical report presents test results for the Swift water supply well inaccurately due to sampler error in labeling "pre and post" GAC filter samples. Table 2 presents the analytical data accurately for the Swift water supply well.

Field Data Information Sheet(s) for Ground Water Sampling are provided as Appendix A. One hundred and eight (108) gallons of purged groundwater were generated from the purging and field screening of the monitoring wells for later disposal at NU-WAY Environmental of Lexington, South Carolina.

Upon completion of gauging, purging, and collection of groundwater parameters, a representative sample was collected from the seventeen monitoring wells listed above, and the water supply wells. Each sample was submitted to Accutest Laboratories in Orlando, Florida for analysis of benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tert-butyl ether (MTBE), and naphthalene by EPA Method 8260B, ethylene dibromide (EDB) by EPA Method 8011, and lead by EPA Method 6010. The laboratory analytical report is provided as Appendix B.

A map depicting the Chemicals of Concern (CoC) for the June 29, 2005 sampling event is provided as Figure 1. A historical summary of the laboratory analytical data is provided as Table 2.

The following is a summary of the July 29, 2005 analytical test results trends of groundwater samples collected from compliance monitoring wells and water supply wells. The laboratory analytical test results indicate that ten (10) groundwater samples collected on June 29, 2005 exhibited benzene concentrations above the Site Specific Target Levels (SSTLs). Five (5) groundwater samples exhibited toluene concentrations above the SSTLs. Five (5) groundwater samples exhibited ethylbenzene concentrations above the SSTLs. Four (4) groundwater samples exhibited xylenes concentrations above the SSTLs.

Four (4) groundwater samples exhibited MTBE concentrations above the SSTLs. Eight (8) groundwater samples exhibited naphthalene concentrations above the SSTLs. Seven (7) groundwater samples exhibited lead concentrations above SSTLs. Five (5) groundwater samples exhibited EDB concentrations above the SSTLs.

C. Percent Reduction Calculation

The calculation of the June 29, 2005 Percent Concentration Reduction is determined through the comparison of the June 29, 2005 laboratory analytical data and the baseline data. The calculation is 25.59%. The formula for calculating the Percent Concentration Reduction is:

Percent of Concentration Reduction = ((Initial Mass Above SSTL) - (Current Mass Above SSTL)*100))/ (Initial Mass Above SSTL)

The rather low percentage of reduction of chemicals of concern at the site is due to the high level of contamination indicated in the Laboratory Analytical Report in the samples collected from the majority of compliance wells.

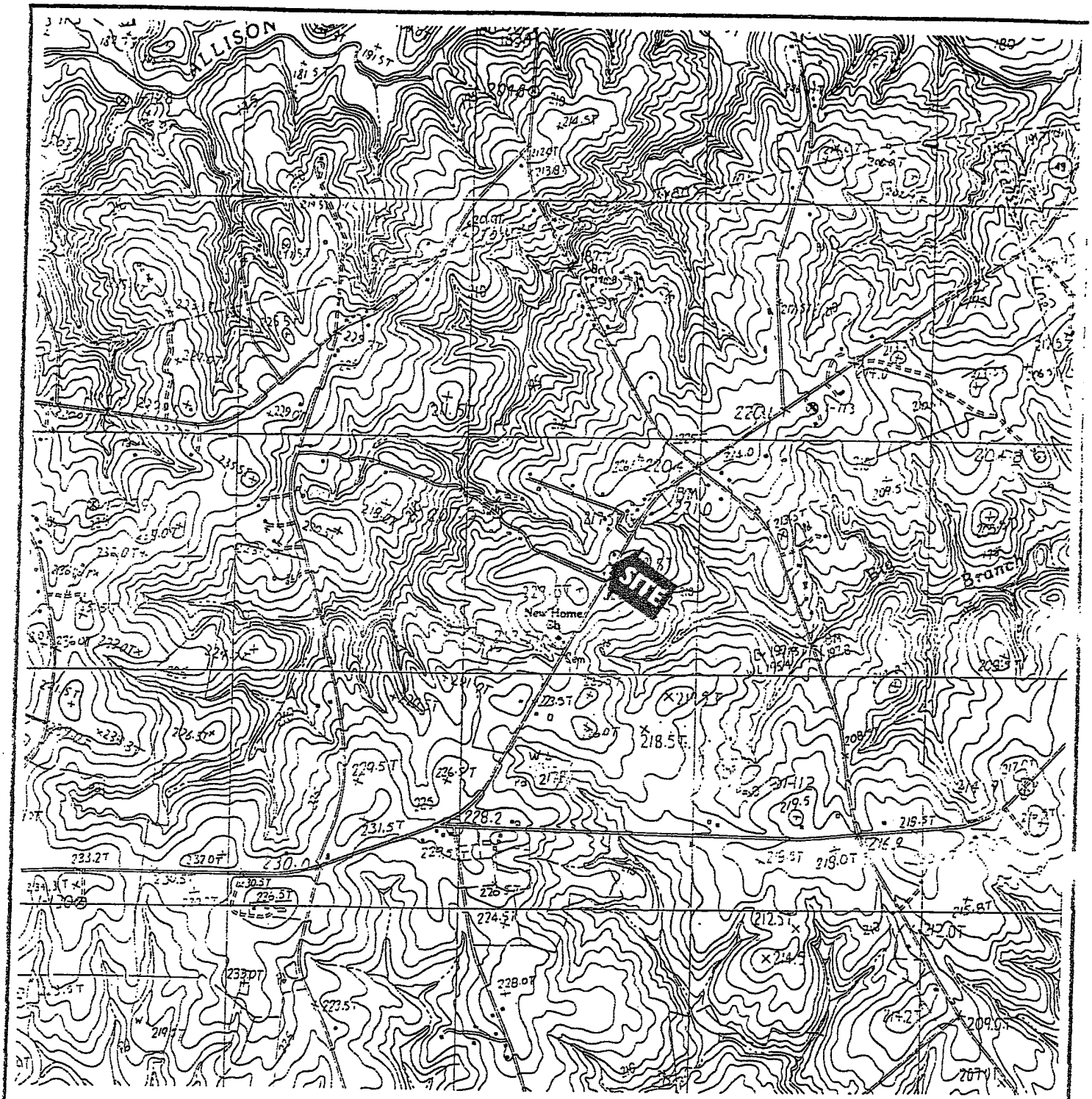
D. Summary of Disposal Activities

On July 14, 2005, SEI personnel transported the purged groundwater to NU-WAY Environmental, located in Lexington, South Carolina. A copy of the Non-Hazardous Waste Manifests is provided as Appendix C.

Conclusions

Based upon the field observations and the subsequent laboratory analytical data, SEI will continue corrective action and conduct groundwater monitoring and gauging at the next scheduled sampling period. SEI is currently considering alternative remediation technologies to implement more effective site cleanup at Smith's Grocery.

FIGURES



CBM
ENVIRONMENTAL SERVICES, INC.

LATITUDE: 35° 02' 30" N	
LONGITUDE: 81° 08' 48" W	
DATE: 02/11/99	
DRAWN BY: AWB	
CHECKED BY: JFH	

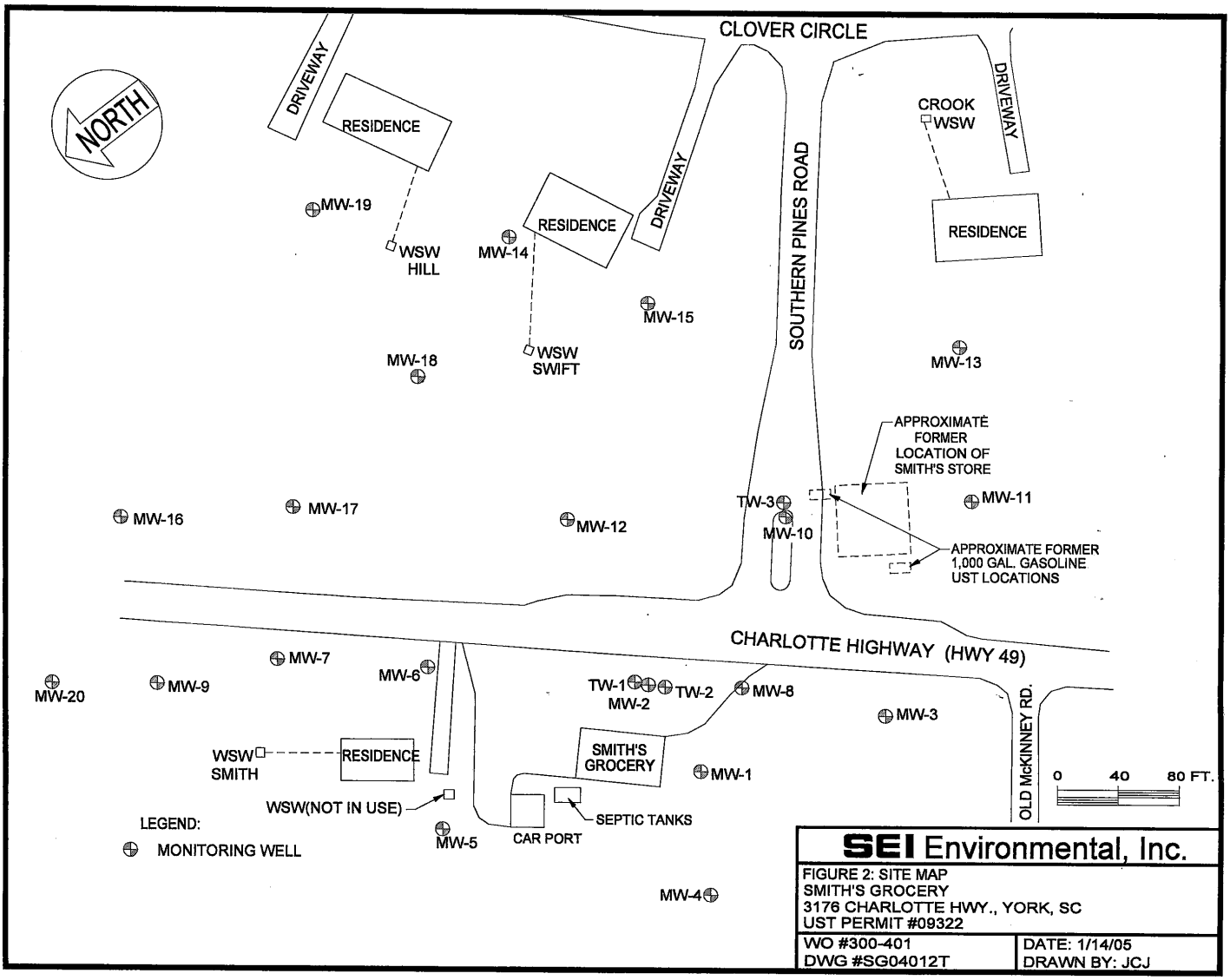
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SOUTH CAROLINA

SITE I.D. NO. 09322

FIGURE 1

USGS TOPOGRAPHIC MAP

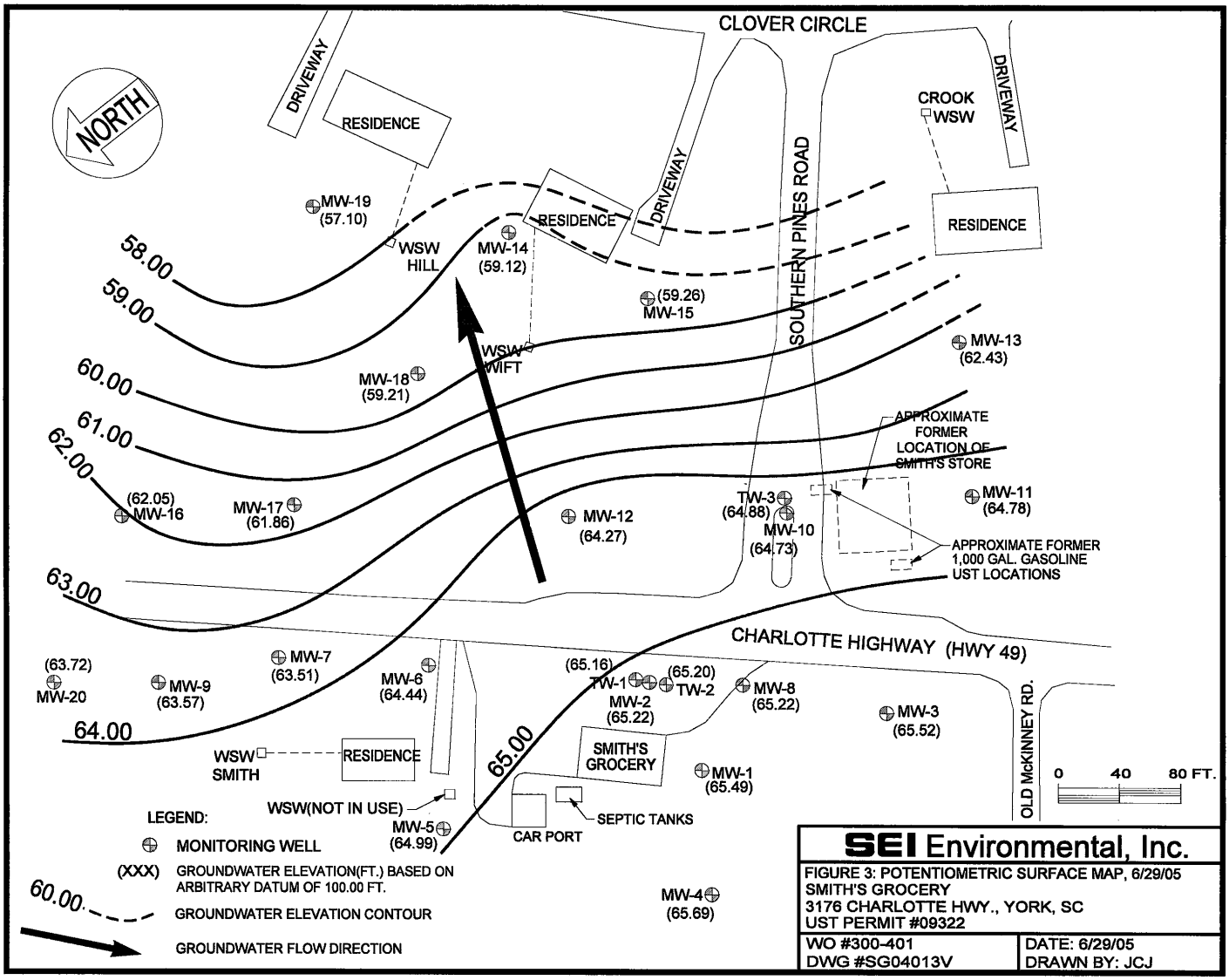
CBM PROJECT NO. 10629



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

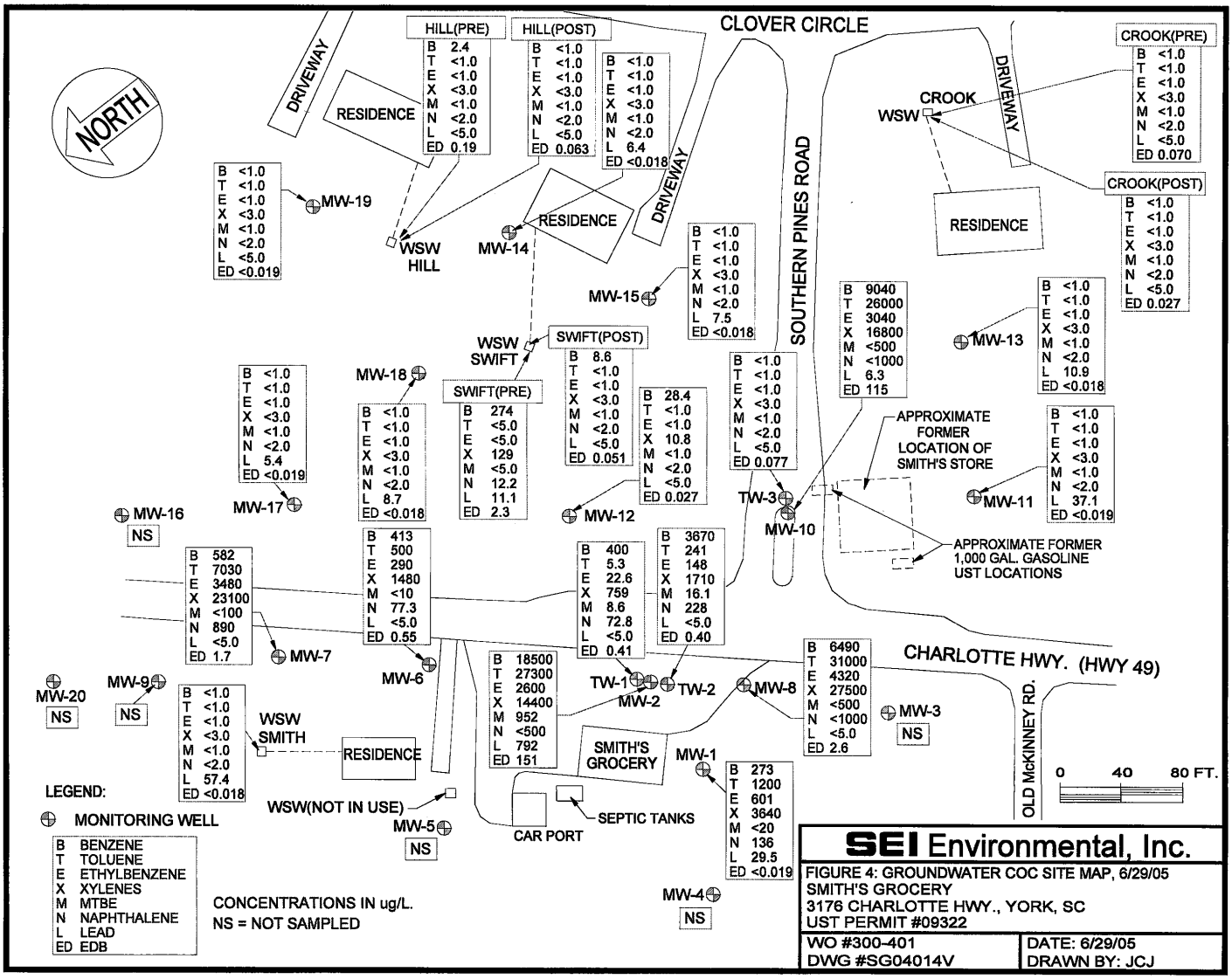
WO #300-401	DATE: 1/14/05
DWG #SG04012T	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: POTENTIOMETRIC SURFACE MAP, 6/29/05
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 6/29/05
DWG #SG04013V	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP, 6/29/05
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 6/29/05
DWG #SG04014V	DRAWN BY: JCJ

TABLES

Table 1

Historical Summary of Gauging Events

Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Top of Casing (Feet)	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Groundwater Elevation (Feet)
MW-1	01/06/03	91.16	35.00	29.88	N/A	N/A	61.28
	04/02/03			28.05	N/A	N/A	63.11
	08/26/03			24.07	N/A	N/A	67.09
	01/08/04			25.46	N/A	N/A	65.70
	05/10/04			26.90	N/A	N/A	64.26
	8/17-18/04			27.03	N/A	N/A	64.13
	01/14/05			27.06	N/A	N/A	64.10
	06/29/05			25.67	N/A	N/A	65.49
MW-2	01/06/03	94.57	38.00	33.76	N/A	N/A	60.81
	04/02/03			31.92	N/A	N/A	62.65
	08/26/03			27.81	N/A	N/A	66.76
	01/08/04			29.40	N/A	N/A	65.17
	05/10/04			26.68	N/A	N/A	67.89
	8/17-18/04			30.71	N/A	N/A	63.86
	01/14/05			30.78	N/A	N/A	63.79
	06/29/05			29.35	N/A	N/A	65.22
MW-3	01/06/03	91.91	35.00	30.87	N/A	N/A	61.04
	04/02/03			29.02	N/A	N/A	62.89
	08/26/03			25.98	N/A	N/A	65.93
	01/08/04			26.46	N/A	N/A	65.45
	05/10/04			28.83	N/A	N/A	63.08
	8/17-18/04			27.76	N/A	N/A	64.15
	01/14/05			27.86	N/A	N/A	64.05
	06/29/05			26.39	N/A	N/A	65.52
MW-4	01/06/03	86.20	27.00	24.58	N/A	N/A	61.62
	04/02/03			22.73	N/A	N/A	63.47
	08/26/03			15.07	N/A	N/A	71.13
	01/08/04			20.73	N/A	N/A	65.47
	05/10/04			25.94	N/A	N/A	60.26
	01/14/05			21.83	N/A	N/A	64.37
	06/29/05			20.51	N/A	N/A	65.69
MW-5	01/06/03	89.29	30.00	27.96	N/A	N/A	61.33
	04/02/03			25.00	N/A	N/A	64.29
	08/26/03			22.70	N/A	N/A	66.59
	01/08/04			24.49	N/A	N/A	64.80
	05/10/04			25.57	N/A	N/A	63.72
	8/17-18/04			25.75	N/A	N/A	63.54
	01/14/05			25.44	N/A	N/A	63.85
	06/29/05			24.30	N/A	N/A	64.99

Table 1
Historical Summary of Gauging Events
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Top of Casing (Feet)	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Groundwater Elevation (Feet)
MW-6	01/06/03	93.91	37.00	33.57	N/A	N/A	60.34
	04/02/03			31.66	N/A	N/A	62.25
	08/26/03			27.51	N/A	N/A	66.40
	01/08/04			29.58	N/A	N/A	64.33
	05/10/04			29.91	N/A	N/A	64.00
	8/17-18/04			29.50	N/A	N/A	64.41
	1/14/05			30.77	N/A	N/A	63.14
	06/29/05			29.47	N/A	N/A	64.44
MW-7	01/06/03	91.68	36.00	31.57	N/A	N/A	60.11
	04/02/03			29.40	N/A	N/A	62.28
	08/26/03			26.88	N/A	N/A	64.80
	01/08/04			28.40	N/A	N/A	63.28
	05/10/04			27.78	N/A	N/A	63.90
	8/17-18/04			29.85	N/A	N/A	61.83
	01/14/05			29.28	N/A	N/A	62.40
	06/29/05			28.17	N/A	N/A	63.51
MW-8	01/06/03	94.72	38.00	33.84	N/A	N/A	60.88
	04/02/03			32.02	N/A	N/A	62.70
	08/26/03			27.58	N/A	N/A	67.14
	01/08/04			29.47	N/A	N/A	65.25
	05/10/04			29.90	N/A	N/A	64.82
	8/17-18/04			30.88	N/A	N/A	63.84
	01/14/05			30.85	N/A	N/A	63.87
	06/29/05			29.50	N/A	N/A	65.22
MW-9	04/02/03	90.54	36.00	28.20	N/A	N/A	62.34
	01/06/03			30.41	N/A	N/A	60.13
	08/26/03			26.10	N/A	N/A	64.44
	01/08/04			27.33	N/A	N/A	63.21
	05/10/04			28.69	N/A	N/A	61.85
	8/17-18/04			29.50	N/A	N/A	61.04
	01/14/05			28.14	N/A	N/A	62.40
	06/29/05			26.97	N/A	N/A	63.57
MW-10	01/06/03	99.77	44.00	39.71	N/A	N/A	60.06
	04/02/03			37.77	N/A	N/A	62.00
	08/26/03			33.36	N/A	N/A	66.41
	01/08/04			35.04	N/A	N/A	64.73
	05/10/04			35.50	N/A	N/A	64.27
	8/17-18/04			36.49	N/A	N/A	63.28
	1/14/05			36.66	N/A	N/A	63.11
	06/29/05			35.04	N/A	N/A	64.73

Table 1
Historical Summary of Gauging Events
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Top of Casing (Feet)	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Groundwater Elevation (Feet)
MW-11	01/06/03	100.46	44.00	40.37	N/A	N/A	60.09
	04/02/03			38.36	N/A	N/A	62.10
	08/26/03			33.88	N/A	N/A	66.58
	01/08/04			35.70	N/A	N/A	64.76
	05/10/04			36.19	N/A	N/A	64.27
	8/17-18/04			37.17	N/A	N/A	63.29
	01/14/05			36.79	N/A	N/A	63.67
	06/29/05			35.68	N/A	N/A	64.78
MW-12	01/06/03	99.61	44.00	39.64	N/A	N/A	59.97
	04/02/03			37.78	N/A	N/A	61.83
	08/26/03			33.78	N/A	N/A	65.83
	01/08/04			35.44	N/A	N/A	64.17
	05/10/04			35.75	N/A	N/A	63.86
	8/17-18/04			36.72	N/A	N/A	62.89
	01/14/05			37.18	N/A	N/A	62.43
	06/29/05			35.34	N/A	N/A	64.27
MW-13	01/06/03	100.39	47.00	42.87	N/A	N/A	57.52
	04/02/03			41.13	N/A	N/A	59.26
	08/26/03			37.20	N/A	N/A	63.19
	01/08/04			38.70	N/A	N/A	61.69
	05/10/04			39.27	N/A	N/A	61.12
	8/17-18/04			40.27	N/A	N/A	60.12
	01/14/05			40.12	N/A	N/A	60.27
	06/29/05			37.96	N/A	N/A	62.43
MW-14	01/06/03	98.89	50.00	43.66	N/A	N/A	55.23
	04/02/03			42.10	N/A	N/A	56.79
	08/26/03			38.39	N/A	N/A	60.50
	01/08/04			39.40	N/A	N/A	59.49
	05/10/04			40.06	N/A	N/A	58.83
	8/17-18/04			41.12	N/A	N/A	57.77
	01/14/05			40.75	N/A	N/A	58.14
	06/29/05			39.77	N/A	N/A	59.12
MW-15	01/06/03	100.18	50.00	44.97	N/A	N/A	55.21
	04/02/03			43.24	N/A	N/A	56.94
	08/26/03			39.58	N/A	N/A	60.60
	01/08/04			46.55	N/A	N/A	53.63
	05/10/04			41.19	N/A	N/A	58.99
	8/17-18/04			42.11	N/A	N/A	58.07
	01/14/05			43.06	N/A	N/A	57.12
	06/29/05			40.92	N/A	N/A	59.26

Table 1
Historical Summary of Gauging Events
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Top of Casing (Feet)	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Groundwater Elevation (Feet)
MW-16	01/06/03	89.91	37.00	31.07	N/A	N/A	58.84
	04/02/03			29.00	N/A	N/A	60.91
	08/26/03			27.54	N/A	N/A	62.37
	01/08/04			28.03	N/A	N/A	61.88
	05/10/04			27.83	N/A	N/A	62.08
	8/17-18/04			29.23	N/A	N/A	60.68
	01/14/05			28.92	N/A	N/A	60.99
	06/29/05			27.86	N/A	N/A	62.05
MW-17	01/06/03	94.46	40.00	36.81	N/A	N/A	57.65
	04/02/03			34.63	N/A	N/A	59.83
	08/26/03			37.08	N/A	N/A	57.38
	01/08/04			32.56	N/A	N/A	61.90
	05/10/04			32.93	N/A	N/A	61.53
	8/17-18/04			34.87	N/A	N/A	59.59
	01/14/05			33.83	N/A	N/A	60.63
	06/29/05			32.60	N/A	N/A	61.86
MW-18	01/06/03	98.14	46.00	42.83	N/A	N/A	55.31
	04/02/03			41.26	N/A	N/A	56.88
	08/26/03			37.47	N/A	N/A	60.67
	01/08/04			38.14	N/A	N/A	60.00
	05/10/04			39.09	N/A	N/A	59.05
	8/17-18/04			35.43	N/A	N/A	62.71
	01/14/05			40.04	N/A	N/A	58.10
	06/29/05			38.93	N/A	N/A	59.21
MW-19	01/06/03	98.27	50.00	45.14	N/A	N/A	53.13
	04/02/03			43.31	N/A	N/A	54.96
	08/26/03			39.24	N/A	N/A	59.03
	01/08/04			40.83	N/A	N/A	57.44
	05/10/04			41.47	N/A	N/A	56.80
	8/17-18/04			42.01	N/A	N/A	56.26
	01/14/05			42.18	N/A	N/A	56.09
	06/29/05			41.17	N/A	N/A	57.10
MW-20	01/06/03	88.35	35.00	28.09	N/A	N/A	60.26
	04/02/03			25.79	N/A	N/A	62.56
	08/26/03			24.98	N/A	N/A	63.37
	01/08/04			25.10	N/A	N/A	63.25
	05/10/04			28.41	N/A	N/A	59.94
	01/14/05			25.85	N/A	N/A	62.50
	06/29/05			24.63	N/A	N/A	63.72

Table 1
Historical Summary of Gauging Events
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Top of Casing (Feet)	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Groundwater Elevation (Feet)
TW-1	01/06/03	94.72	61.00	34.33	N/A	N/A	60.39
	04/02/03			31.86	N/A	N/A	62.86
	08/26/03			27.96	N/A	N/A	66.76
	01/08/04			29.48	N/A	N/A	65.24
	05/10/04			30.31	N/A	N/A	64.41
	8/17-18/04			30.40	N/A	N/A	64.32
	01/14/05			30.75	N/A	N/A	63.97
	06/29/05			29.56	N/A	N/A	65.16
TW-2	01/06/03	94.72	88.00	33.91	N/A	N/A	60.81
	04/02/03			32.04	N/A	N/A	62.68
	08/26/03			27.54	N/A	N/A	67.18
	01/08/04			29.45	N/A	N/A	65.27
	05/10/04			29.89	N/A	N/A	64.83
	8/17-18/04			30.87	N/A	N/A	63.85
	01/14/05			30.94	N/A	N/A	63.78
	06/29/05			29.52	N/A	N/A	65.20
TW-3	01/06/03	99.21	71.00	38.81	N/A	N/A	60.40
	04/02/03			36.97	N/A	N/A	62.24
	08/26/03			32.80	N/A	N/A	66.41
	01/08/04			34.40	N/A	N/A	64.81
	05/10/04			34.79	N/A	N/A	64.42
	8/17-18/04			35.75	N/A	N/A	63.46
	01/14/05			38.75	N/A	N/A	60.46
	06/29/05			34.33	N/A	N/A	64.88

Notes: N/A Not Applicable

Table 2
Historical Summary of Laboratory Analysis
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)	Lead (ppb)	EDB (ppb)
SSTL		*11*	*2,223*	*1,558*	*10,000*	*80*	*56*	*2*	*0*
MW-1	1/6/03	**911**	**9,810**	**2,660**	**18,650**	**250**	**743**	**56**	0
	4/2/03	**590**	**2,900**	960	7,400	27	**200**	**10**	0
	8/26/03	**610**	1,200	640	4,800	**100**	**500**	**33**	0
	1/8/04	**620**	850	340	3,800	**100**	**500**	**5**	0
	8/17/04	**380**	970	670	3,600	<25	**120**	**63**	<0.010
	5/10/04	**330**	1,100	459	3,700	25	**130**	**40**	0
	1/14/05	**270**	1,440	900	5,620	<1.0	**268**	<5.0	0
	6/29/05	**273**	1,200	601	3,640	<20	**136**	**30**	<0.019
SSTL		*10*	*2,021*	*1,416*	*15,000*	*81*	*51*	*30*	*10*
MW-2	1/6/03	**18,400**	**31,100**	**3,180**	**18,920**	**395**	**514**	28	0
	4/2/03	**13,000**	1,800	**1,600**	9,500	**480**	**500**	**190**	**160**
	8/26/03	**16,000**	**26,000**	**2,200**	13,000	**480**	**540**	**190**	**120**
	1/8/04	**18,000**	**33,000**	**2,200**	12,000	**880**	**1,200**	**1,000**	**150**
	5/10/04	**17,000**	**24,000**	**2,000**	11,000	**750**	**2,500**	**1,200**	**260**
	8/17/04	**19,000**	**29,000**	**2,900**	14,000	**1,200**	**2,500**	**2,100**	**500**
	1/14/05	**20,600**	**36,400**	**2,960**	**17,200**	**940**	**862**	**1,230**	**186**
	6/29/05	**18,500**	**27,300**	**2,600**	14,400	**952**	**<500**	**792**	**151**
MW-3	1/6/03	1	1	1	3	1	1	350	0
	1/8/04	5	1	5	3	1	5	5	0
	5/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	9	0
	1/14/05	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	6/29/05	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
MW-4	1/6/03	1	1	1	3	1	1	12	0
	1/8/04	5	1	5	3	1	5	5	0
	5/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	8/17/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	1/14/05	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	6/29/05	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
MW-5	1/6/03	1	1	1	5	1	1	12	0
	1/8/04	5	1	5	3	1	5	5	0
	5/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	5	<0.010
	1/14/05	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	6/29/05	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
SSTL		*6*	*1,212*	*850*	*8,000*	*48*	*31*	*18*	*5*
MW-6	1/6/03	**4,840**	**20,400**	**3,540**	**19,020**	25	**640**	11	**7**
	4/2/03	**2,600**	**11,000**	**1,800**	**9,000**	**250**	**1,200**	**54**	3
	8/26/03	**1,400**	**5,800**	**1,100**	6,600	**250**	**1,200**	**37**	0
	1/8/04	**350**	1,200	240	1,300	1	**77**	5	1
	5/10/04	**640**	**2,200**	300	1,900	5	**150**	**36**	2
	8/17/04	**1,100**	**2,200**	730	3,400	**<50**	**<250**	13	<0.010
	1/14/05	**1,070**	**2,960**	718	3,990	<1.0	**116**	**107**	2
	6/29/05	**413**	500	290	1,480	<10	**77**	<5.0	1

Table 2
Historical Summary of Laboratory Analysis
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)	Lead (ppb)	EDB (ppb)
SSTL		*6*	*1,212*	*850*	*12,123*	*48*	*31*	*18*	*1*
MW-7	1/6/03	**1,020**	1	**2,290**	16,940	1	**826**	5	**2**
	4/2/03	**240**	110	120	38	**210**	**120**	**240**	**2**
	8/26/03	**740**	250	110	1,600	**50**	**250**	**160**	0
	1/8/04	**630**	**13,000**	**3,400**	**25,000**	**100**	**1,000**	5	**4**
	5/10/04	**700**	**10,000**	**3,400**	**23,000**	**200**	**1,000**	5	**7**
	8/17/04	**23**	49	21	140	<5.0	<25	**19**	<0.010
	1/14/05	**565**	**9,180**	**3,570**	**24,400**	<1.0	**1,370**	**24**	**2**
	6/29/05	**582**	**7,030**	**3,480**	**23,100**	<100	**890**	<5.0	**2**
SSTL		*12*	*2,424*	*1,700*	*16,000*	*96*	*62*	*4*	*0*
MW-8	1/6/03	**6,770**	**84,600**	**3,560**	**24,740**	7	**362**	**24**	**2**
	4/2/03	**8,600**	**46,000**	**3,500**	**23,000**	**200**	**1,000**	**49**	**190**
	8/26/03	**3,800**	**10,000**	1,200	6,800	**100**	**500**	**81**	**58**
	1/8/04	**5,600**	**22,000**	**3,400**	**20,000**	**100**	**1,300**	**18**	**5**
	5/10/04	**4,500**	**18,000**	1,600	**18,000**	**200**	**1,000**	**67**	**6**
	8/17/04	**10,000**	**37,000**	**2,900**	**20,000**	**<1000**	**<5000**	**27**	**63**
	1/14/05	**6,780**	**38,200**	**4,340**	**28,200**	<1.0	**1,600**	<5.0	**2**
	6/29/05	**6,490**	**31,000**	**4,320**	**27,500**	**<500**	**<1000**	<5.0	**3**
RBSL		*5*	*1,000*	*700*	*10,000*	*40*	*25*	*15*	*0*
MW-9	1/6/03	1	2	6	579	1	109	24	0
	1/8/04	5	1	5	3	1	5	36	0
	5/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	8/17/04	540	12,000	2,800	23,000	<500	<2500	19	8
	1/14/05	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	6/29/05	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
SSTL		*9*	*1,819*	*1,274*	*18,185*	*73*	*46*	*21*	*9*
MW-10	1/6/03	**7,980**	**24,900**	**3,540**	18,180	25	**299**	**35**	**78**
	4/2/03	**11,000**	**23,000**	**2,400**	13,000	**200**	**1,000**	**49**	**190**
	8/26/03	**12,000**	**33,000**	**3,200**	17,000	**250**	**1,200**	**210**	**450**
	1/8/04	**4,200**	**14,000**	**2,400**	12,000	**100**	**500**	6	**100**
	5/10/04	**8,600**	**21,000**	**2,400**	14,000	**<250**	**<1200**	6	**210**
	8/17/04	**3,500**	**16,000**	**2,200**	14,000	**<500**	**<2500**	**25**	**67**
	1/14/05	**10,200**	**34,600**	**3,150**	**18,400**	<1.0	**388**	20	**152**
	6/29/05	**9,040**	**26,000**	**3,040**	16,600	**<500**	**<1000**	6	**115**
SSTL		*5*	*5*	*5*	*10*	*5*	*5*	*5*	*0*
MW-11	1/6/03	1	1	1	3	1	8	**6**	0
	4/2/03	1	5	1	3	1	5	**26**	0
	8/26/03	1	5	1	3	1	5	**33**	**0**
	1/8/04	1	5	1	3	1	5	**46**	0
	5/10/04	1	5	1	3	1	5	5	0
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**17**	<0.010
	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**10**	0
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**37**	<0.019

Table 2
Historical Summary of Laboratory Analysis
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)	Lead (ppb)	EDB (ppb)
SSTL		*7*	*5*	*68*	*730*	*5*	*36*	*7*	*7*
MW-12	1/6/03	**720**	**17**	13	**1,550**	1	**113**	6	12
	4/2/03	**12**	5	1	2	1	5	**38**	0
	8/26/03	**51**	5	1	72	1	6	**37**	0
	1/8/04	1	5	1	3	1	5	5	0
	5/10/04	**23**	5	1	43	1	5	7	0
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	12	0
	1/14/05	**74**	<1.0	<1.0	68	<1.0	<5.0	6	0
	6/29/05	**28**	<1.0	<1.0	11	<1.0	<2.0	<5.0	0
SSTL		*5*	*5*	*5*	*10*	*5*	*5*	*5*	*0*
MW-13	1/6/03	1	1	1	3	1	1	5	0
	4/2/03	1	5	1	3	1	5	**40**	0
	8/26/03	1	5	1	3	1	5	**45**	0
	1/8/04	1	5	1	3	1	5	5	0
	5/10/04	1	5	1	3	1	5	5	0
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**36**	<0.010
	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**11**	<0.018
SSTL		*5*	*5*	*5*	*10*	*5*	*5*	*5*	*1*
MW-14	1/6/03	1	1	1	3	1	1	5	0
	4/2/03	1	5	1	3	1	5	**39**	0
	8/26/03	1	5	1	3	1	5	**100**	0
	1/8/04	1	5	1	3	1	5	**45**	0
	5/10/04	1	5	1	3	1	5	5	0
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**19**	<0.010
	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**15**	<0.02
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**6**	<0.018
SSTL		*5*	*5*	*5*	*10*	*5*	*5*	*15*	*0*
MW-15	1/6/03	1	1	1	3	1	1	9	0
	4/2/03	1	5	1	3	1	5	**36**	0
	8/26/03	1	5	1	3	1	5	**120**	0
	1/8/04	1	5	1	3	1	5	**48**	0
	5/10/04	1	5	1	3	1	5	5	0
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**26**	<0.010
	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	8	<0.02
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	8	<0.018
MW-16	1/6/03	1	1	1	3	1	1	18	0
	1/8/04	1	5	1	3	1	5	140	0
	5/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	13	<0.010
	1/14/05	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	6/29/05	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S

Table 2
Historical Summary of Laboratory Analysis
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)	Lead (ppb)	EDB (ppb)
SSTL		*5*	*5*	*5*	*10*	*5*	*5*	*15*	*0*
MW-17	1/6/03	1	1	1	3	1	1	44	0
	4/2/03	1	5	1	3	1	5	17	0
	8/26/03	1	5	1	3	1	5	42	0
	1/8/04	1	5	1	3	1	5	5	0
	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	9	<0.02
	5/10/04	1	5	1	3	1	5	5	0
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	7	<0.010
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	5	<0.019
SSTL		*5*	*5*	*5*	*10*	*5*	*5*	*15*	*0*
MW-18	1/6/03	1	1	1	3	1	1	5	0
	4/2/03	1	5	1	3	1	5	**50**	0
	8/26/03	1	5	1	3	1	5	**100**	0
	1/8/04	1	5	1	3	1	5	**97**	0
	8/17/05	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	10	<0.010
	5/10/04	1	5	1	3	1	5	5	0
	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**17**	<0.02
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	9	<0.018
SSTL		*5*	*5*	*5*	*10*	*5*	*5*	*15*	*0*
MW-19	1/6/03	1	1	1	3	1	1	6	0
	4/2/03	1	5	1	3	1	5	5	0
	8/26/03	1	5	1	3	1	5	**18**	0
	1/8/04	1	1	5	1	3	5	1	0
	5/10/04	1	5	1	3	1	5	5	0
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	**18**	<0.010
	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.02
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	<0.019
MW-20	1/6/03	1	1	1	3	1	1	11	0
	1/8/04	1	1	5	1	3	5	130	0
	5/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	8/17/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	1/14/05	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	6/29/05	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
TW-1	1/6/03	3,380	1,510	1,860	9,370	25	160	6	5
	1/8/04	2,000	2,500	1,100	5,800	50	250	5	0
	5/10/04	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	8/17/04	67	<50	<10	59	<10	<50	30	1
	1/14/05	700	8	83	1,700	8	80	<5.0	0
	6/29/05	400	5	23	759	9	73	<5.0	0

Table 2
Historical Summary of Laboratory Analysis
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)	Lead (ppb)	EDB (ppb)
SSTL		*5*	*8*	*5*	*180*	*5*	*18*	*2*	*0*
TW-2	1/6/03	6,620	6,860	620	4,110	50	160	6	5
	4/2/03	3,300	1,500	220	2,000	50	250	10	1
	8/26/03	3,000	450	79	1,700	10	160	7	0
	1/8/04	2,800	460	14	1,000	22	34	5	1
	8/17/05	1,400	<500	<100	300	<100	<500	5	2
	5/10/04	3,700	640	160	1,800	5	170	5	1
	1/14/05	3,100	605	175	1,490	32	172	<5.0	1
	6/29/05	3,670	241	148	1,710	16	228	<5.0	0
SSTL		*5*	*5*	*5*	*10*	*5*	*5*	*2*	*0*
TW-3	1/6/04	1	1	1	3	1	9	5	0
	4/2/03	1	5	1	3	5	5	5	0
	8/26/03	1	5	1	3	1	5	5	0
	1/8/04	1	1	5	1	3	5	5	0
	5/10/04	3	11	2	12	1	5	5	0
	8/17/05	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	<5.0	0
	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	0
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0
SSTL		*2*	*2*	*2*	*2*	*5*	*5*	*5*	*5*
Strife	1/6/03	1	1	1	3	1	1	28	0
	4/2/03	1	5	1	3	1	5	5	0
	8/26/03	1	5	1	3	1	5	5	0
	1/8/04	1	5	1	3	1	5	5	0
	5/10/04	1	5	1	3	1	5	5	0
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0
Crook (pre)	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0
Crook (post)		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0
Crook (pre)	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	0
Crook (post)		<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.02
SSTL		*5*	*2*	*2*	*26*	*2*	*5*	*5*	*5*
Swift	1/6/03	1	1	1	2	1	1	10	0
	4/2/03	1	5	1	3	1	5	23	0
	8/26/03	1	5	1	3	1	5	10	0
	1/8/04	1	5	1	3	1	5	5	0
	5/10/04	1	5	1	3	1	5	5	0
	8/17/04	12	<5.0	<1.0	<3.0	<1.0	<5.0		0
Swift (pre)	1/14/05	400	<1.0	<1.0	110	<1.0	12	<5.0	2
Swift (post)		22	<1.0	<1.0	3	<1.0	<5.0	<5.0	0
Swift (pre)	2/9/05	193	ND	ND	70	ND	10	N/S	N/S
Swift (post)		4	ND	ND	4	ND	ND	N/S	N/S
Swift(post)	3/8/05	7	<1.0	2	5	<1.0	<2.0		
Swift (pre)*	6/29/05	274	<5.0	<5.0	129	<5.0	12	11	2
Swift (post)*		9	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0

Table 2
Historical Summary of Laboratory Analysis
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)	Lead (ppb)	EDB (ppb)
Vickery to Swift in 6-02									
SSTL		*2*	*2*	*2*	*2*	*5*	*5*	*5*	*5*
Hill	1/6/03	1	1	1	2	1	5	9	0
	4/2/03	1	5	1	3	1	5	23	0
	8/26/03	1	5	1	3	1	5	5	0
	1/8/04	1	5	1	3	1	5	22	0
	5/10/04	1	5	1	3	1	5	6	0
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0
Hill (pre)	1/14/05	**3**	<1.0	<1.0	<1.0	<1.0	<5.0	**10**	0
Hill (post)		<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<0.02
Hill (pre)	6/29/05	**2**	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0
Hill (post)		<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<5.0	0
SSTL		*2*	*2*	*2*	*2*	*5*	*5*	*5*	*5*
Smith	1/6/03	1	1	1	2	1	1	1	0
	4/2/03	1	5	1	3	1	5	5	0
	8/26/03	1	5	1	3	1	5	5	0
	1/8/04	1	5	1	3	1	5	120	0
	5/10/04	1	5	1	3	1	5	41	0
	8/17/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0
	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	51	<0.02
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	**57**	<0.018

Bolded Values Indicate Analytical Results above SSTL for Complience Wells
* Pre and post GAC samples were mis-labled.

Table 3
Summary of Field Observations - January 14, 2005
Smith's Grocery
York , South Carolina
Site ID No.09322

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-1				27.06	35.00	N/A	N/A	N/A	N/A	3.50	Petroleum Odor
MW-2				30.78	38.00	N/A	N/A	N/A	N/A	3.54	Petroleum Odor
MW-3				27.76	35.00	N/A	N/A	N/A	N/A	N/A	Not Sampled
MW-4				21.83	27.00	N/A	N/A	N/A	N/A	N/A	Not Sampled
MW-5				25.44	30.00	N/A	N/A	N/A	N/A	N/A	Not Sampled
MW-6				30.77	37.00	N/A	N/A	N/A	N/A	3.06	Petroleum Odor
MW-7				29.28	36.00	N/A	N/A	N/A	N/A	3.30	Petroleum Odor
MW-8				30.85	38.00	N/A	N/A	N/A	N/A	3.51	Petroleum Odor
MW-9				28.14	36.00	N/A	N/A	N/A	N/A	N/A	Not Sampled
MW-10				36.66	44.00	N/A	N/A	N/A	N/A	3.60	Petroleum Odor
MW-11	Initial			37.17	44.00	4.83	0.061	15.6	5.85		
	1st Volume					4.71	0.055	16.0	7.37	1.18	
	2nd Volume					4.99	0.049	16.1	8.05	1.18	
	3rd Volume					4.87	0.047	16.1	8.47	1.18	
	Post Sampling					4.86	0.045	16.0	8.32		
MW-12				37.18	44.00	N/A	N/A	N/A	N/A	2.37	Petroleum Odor
MW-13	Initial			40.12	47.00	4.71	0.054	15.5	6.65		
	1st Volume					4.66	0.040	15.9	8.62	1.12	
	2nd Volume					5.01	0.046	15.8	8.33	1.12	
	3rd Volume					4.73	0.042	15.8	8.53	1.12	
MW-14	Initial			40.75	50.00	5.99	0.062	15.3	8.59		
	1st Volume					6.04	0.058	15.8	8.35	1.5	
	2nd Volume					5.98	0.053	15.6	8.63	1.5	
	3rd Volume					6.01	0.051	15.9	8.59	1.5	
	Post Sampling					6.09	0.054	15.4	8.60		

Table 3
Summary of Field Observations - January 14, 2005
Smith's Grocery
York , South Carolina
Site ID No.09322

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-15	Initial			43.06	50.00	5.60	0.700	15.4	7.76		
	1st Volume					5.53	0.069	15.8	9.33	1.13	
	2nd Volume					5.59	0.071	16.0	9.16	1.13	
	3rd Volume					5.64	0.068	15.8	9.41	1.13	
	Post Sampling					5.65	0.068	16.0	9.34		
MW-16	2nd Volume			28.92	37.00	6.15	N/A	N/A	N/A	N/A	Not Sampled
MW-17	Initial			33.83	40.00	5.02	0.014	15.3	7.97		
	1st Volume					5.02	0.011	15.7	9.10	1.01	
	2nd Volume					5.04	0.011	15.8	9.00	1.01	
	3rd Volume					5.04	0.011	15.7	9.70	1.01	
	Post Sampling					5.03	0.011	15.8	9.00		
MW-18	Initial			40.04	46.00	5.73	0.049	14.9	4.20		
	1st Volume					5.89	0.057	15.6	7.00	0.97	
	2nd Volume					5.86	0.050	15.7	6.80	0.97	
	3rd Volume					5.92	0.054	15.7	8.92	0.97	
	Post Sampling					5.97	0.050	149.0	7.35		
MW-19	Initial			42.18	50.00	5.21	0.069	15.4	8.51		
	1st Volume					5.08	0.056	15.7	9.01	1.27	
	2nd Volume					5.14	0.054	15.4	9.80	1.27	Bailed Dry
	3rd Volume					N/A	N/A	N/A	N/A	N/A	
	Post Sampling					5.34	0.066	15.7	9.75		

Table 3
Summary of Field Observations - January 14, 2005
Smith's Grocery
York , South Carolina
Site ID No.09322

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-20				25.85	35.00	N/A	N/A	N/A	N/A	N/A	Not Sampled
TW-1				30.75	61.00	N/A	N/A	N/A	N/A	14.79	Petroleum Odor
TW-2				30.94	88.00	N/A	N/A	N/A	N/A	27.90	Petroleum Odor
TW-3	Initial			38.75	71.00	5.69	0.085	17.9	5.95		
	1st Volume					5.66	0.056	17.5	4.57	5.26	
	2nd Volume					5.65	0.074	17.3	4.56	5.26	
	3rd Volume					5.57	0.064	17.3	5.29	5.26	
	Post Sampling					5.55	0.063	17.4	4.04		

Notes: N/A - Not Applicable

Table 4

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
Swift pre-filter)	Initial	5.0	2.0	2.0	26	2.0	5.0	5.0	5.0	
	SSTL	5.0	2.0	2.0	26	2.0	5.0	5.0	5.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6/29/05	**274**	5.0	5.0	129	5.0	11.1	2.3	12.2	
	Subsequent > SSTL	269	0.0	0.0	103	0.0	0.0	0.0	7.2	379.2
Hill (pre-filter)	Initial	2.0	2.0	2.0	2.0	5.0	5.0	5.0	5.0	
	SSTL	2.0	2.0	2.0	2.0	5.0	5.0	5.0	5.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6/29/05	**2.4**	1.0	1.0	3.0	1.0	**5.0**	0.190	2.0	
	Subsequent > SSTL	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Crook (pre-filter, formerly Strife)	Initial	2.0	2.0	2.0	2.0	2.0	5.0	**5.0**	5.0	
	SSTL	2.0	2.0	2.0	2.0	2.0	5.0	5.0	5.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	0.07	<2.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Smith	Initial	**5.0**	5.0	5.0	15	5.0	5.0	**5.0**	5.0	
	SSTL	5.0	5.0	5.0	15	5.0	5.0	5.0	5.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	**57.4**	0.0	2.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	52.4	0.0	0.0	52.4
MW-1	Initial	**1,100**	**19,000**	**2,700**	**10,000**	**80**	2.0	**0.32**	**770**	
	SSTL	11	2,223	1,558	10,000	80	2.0	0.32	56	
	Initial > SSTL	1,089	16,777	1,142	0.0	0.0	0.0	0.0	714	19,722
	6/29/05	**273**	1200	601	3,640	20	29.5	0.019	**136**	
	Subsequent > SSTL	262	0.0	0.0	0.0	0.0	27.5	0.0	80	369.5

Table 4

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-2	Initial	**25,000**	**39,000**	**3,500**	**15,000**	**200**	**1,300**	**179**	**200**	
	SSTL	10	2,021	1,416	15,000	81	30	10	51	
	Initial > SSTL	24,990	36,979	2,084	0.00	119	1,270	169	149	65,760
	6/29/05	**18,500**	**27,300**	**2,600**	**14,400**	**952**	**792**	**151**	**500**	
	Subsequent > SSTL	18,490	25,279	1,184	0.00	871	762	141	449	47,176
MW-6	Initial	**3,400**	**14,000**	**1,900**	8,000	**80**	**39**	**4.83**	**700**	
	SSTL	6.0	1,212	850	8,000	48	18	4.83	31	
	Initial > SSTL	3,394	12,788	1,050	0.0	32	21	0.0	669	17,954
	6/29/05	**413**	**500**	290	1,480	10	**5.0**	0.55	**77.3**	
	Subsequent > SSTL	407	0.0	0.0	0.0	0.0	0.0	0.0	46.3	453.3
MW-7	Initial	**2,000**	**4,100**	**3,100**	**15,000**	**200**	**110**	**0.66**	**1,400**	
	SSTL	6.0	1,212	850	12,123	48	18	0.66	31	
	Initial > SSTL	1,994	2,888	2,250	2,877	152	92	0.0	1,369	11,622
	6/29/05	**582**	**7,030**	**3,480**	**23,100**	100	**5.0**	**1.7**	**890**	
	Subsequent > SSTL	576	5,818	2,630	10,977	0.0	0.0	1.04	859	20,861.04
MW-8	Initial	**9,500**	**56,000**	**5,300**	16,000	**200**	4.0	0.48	**820**	
	SSTL	12	2,424	1,700	16,000	96	4.0	0.48	62	
	Initial > SSTL	9,488	53,576	3,600	0.0	104	0.0	0.0	758	67526
	6/29/05	**6,490**	**31,000**	**4,320**	**27,500**	500	<5.0	**2.6**	**1,000**	
	Subsequent > SSTL	6,478	28,576	2,620	11,500	404	0.0	2.12	938	50,518.12
MW-10	Initial	**5,800**	**26,000**	**3,200**	**19,000**	**800**	21	**95.3**	**800**	
	SSTL	9.0	1,819	1,274	18,185	73	21	9.00	46	
	Initial > SSTL	5,791	24,181	1,926	815	727	0.0	86.3	754	34,280.3
	6/29/05	**9,040**	**26,000**	**3,040**	**16,600**	500	6.3	**115**	**1,000**	
	Subsequent > SSTL	9,031	24,181	1,766	0.0	427	0.0	106	954	36465

Table 4

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-11	Initial	5.0	5.0	5.0	10	5.0	6.0	0.02	5.0	
	SSTL	5.0	5.0	5.0	10	5.0	5.0	0.02	5.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	1.0	0.00	0.0	1.0
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	37.1	0.019	2.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	32.1	0.00	0.0	32.1
MW-12	Initial	**390**	5.0	68	730	5.0	7.0	**20.8**	**52**	
	SSTL	7.0	5.0	68	730	5.0	7.0	7.0	36	
	Initial > SSTL	383	0.0	0.0	0.0	0.0	0.0	13.8	16	412.8
	6/29/05	**28.4**	<1.0	<1.0	10.8	<1.0	<5.0	0.027	<2.0	
	Subsequent > SSTL	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.4
MW-13	Initial	5.0	5.0	5.0	10	**75**	5.0	0.02	5.0	
	SSTL	5.0	5.0	5.0	10	5.0	5.0	0.02	5.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	70	0.0	0.0	0.0	70
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	**10.9**	<0.018	<2.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	6	0.0	0.0	6
MW-14	Initial	5.0	5.0	5.0	10	5.0	**37**	0.51	5.0	
	SSTL	5.0	5.0	5.0	10	5.0	5.0	0.51	5.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	32	0.0	0.0	32
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	**6.4**	<0.018	<2.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	1	0.0	0.0	1
MW-15	Initial	5.0	5.0	5.0	10	5.0	**39**	**0.51**	5.0	
	SSTL	5.0	5.0	5.0	10	5.0	15	0.05	5.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	24	0.46	0.0	24.46
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	7.5	<0.018	<2.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0

Table 4

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-17	Initial	5.0	5.0	5.0	10	5.0	**29**	0.02	5.0	
	SSTL	5.0	5.0	5.0	10	5.0	15	0.02	5.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	14	0.0	0.0	14
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	5.4	<0.019	<2.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-18	Initial	5.0	5.0	5.0	10	5.0	**42**	0.12	5.0	
	SSTL	5.0	5.0	5.0	10	5.0	15	0.12	5.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	27	0.0	0.0	27
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	**8.7**	<0.018	<2.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-19	Initial	5.0	5.0	5.0	10	5.0	**51**	0.02	5.0	
	SSTL	5.0	5.0	5.0	10	5.0	15	0.02	5.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	36	0.00	0.0	36
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<0.019	<2.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0

Table 4

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
TW-2	Initial	**400**	8.0	5.0	180	5.0	2.0	0.05	18	
	SSTL	5.0	8.0	5.0	180	5.0	2.0	0.05	18	
	Initial > SSTL	395	0.0	0.0	0.0	0.0	0.0	0.00	0.0	395
	6/29/05	**3,670**	**241**	**148**	**1,710**	**16.1**	<5.0	**0.40**	**228**	
	Subsequent > SSTL	3,665	233	143	1,530	11.1	0.0	0.35	210	5,792.45
TW-3	Initial	5.0	5.0	5.0	10	5.0	2.0	**0.23**	5.0	
	SSTL	5.0	5.0	5.0	10	5.0	2.0	0.23	5.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6/29/05	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<0.077	<2.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Totals	Initial > SSTL	(Sum of Initial Concentration Above SSTL for all Wells)								217,876.56
	Subsequent > SSTL	(Sum of Subsequent Concentration Above SSTL for all Wells)								162,128.2

Note: Bold Concentrations are greater than the respective SSTL.
CoC Mass Reduction = (Sum of Initial Conc. > SSTL - Sum of Subsequent Conc. > SSTL)/
(Sum of Initial Conc. > SSTL) * 100
CoC Mass Reduction = (217,876.56 - 162,128.2) / (217,876.56) * 100
CoC Mass Reduction = 25.59%

APPENDIX A

Groundwater Parameters

August 2, 2005
SEI Project #: 300401
Smith Grocery

APPENDIX B

Laboratory Analytical Report and Chain-of-Custody

August 2, 2005
SEI Project #: 300401
Smith Grocery

APPENDIX C

Disposal Manifest

TO REORDER CALL 1-800-327-6868

843 200-9455

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . | Manifest Doc. No. . . . . | 2. Page ~~1~~ 3 of 3 | 1354

3. Generator's Name and Mailing Address: SEI Environmental, Inc
3021 McNaughton Dr Ste 9
Columbia, SC 29223

4. Generator's Phone (803) 788-2535

5. Transporter 1 Company Name: SEI Environmental, Inc | 6. US EPA ID Number . . . . . | A. Transporter's Phone: (803)788-2535

7. Transporter 2 Company Name | 8. US EPA ID Number . . . . . | B. Transporter's Phone

9. Designated Facility Name and Site Address:
US Water Recovery
435 Old Mount Holly Rd
Goose Creek, SC 29445 | 10. US EPA ID Number . . . . . | C. Facility's Phone: (843)744-0118

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Scotchman #133 Conway,SC (305007) Non-Haz petroleum contact water (man#1023)			87	gal
b. Smith Grocery York,SC (300401) Non-Haz petroleum Contact water (man#1020)			108	gal
c. Hyman Oil Pamplico,SC(304010) Non-haz petroleum contact water (man#1022)			50	gal
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Timothy Richards | Signature: Timothy Richards | Month 07 Day 14 Year 05

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Timothy Richards | Signature: Timothy Richards | Month 07 Day 14 Year 05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month . Day . Year .

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Paul Goodson | Signature: Paul Goodson | Month 7 Day 14 Year 05

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 12/98

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

OCT 0 5 2005

LOUIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Plan Addendum received October 3, 2005
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the Corrective Action Plan Addendum submitted by SEI Environmental, Inc. The information has been forwarded to the Bureau of Water for a modification to the existing UIC Permit. Upon approval for the Bureau of Water, SEI may commence with the implementation of the addendum by injecting Potassium Triple Salt into the subsurface.

If there are any questions concerning this project, please contact me at (803) 896-6397, via email at thomadl@dhec.sc.gov or by fax at (803) 896-6245.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Copy of CAP Addendum

cc: Hartford Hight, SEI Environmental, 6190 Regency Pkwy, Ste 308, Norcross, GA, 30071
Technical file

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
2600 Bull Street
Columbia, SC 29201
Telephone (803) 896-6240
Fax (803) 896-6245

MEMORANDUM

DATE: October 3, 2005

TO: Norman Dodson
Water Monitoring, Assessment & Protection Division
Bureau of Water

FROM: Debra L. Thoma
Assessment & Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Corrective Action Plan received July 17, 2001
Corrective Action Plan Addendum received October 3, 2005
York County

Attached for your review and approval is a request from SEI Environmental to modify their UIC Permit at the above referenced site from hydrogen peroxide to Potassium Triple Salt. Initial review by this Department indicates the proposed addendum is approvable, with the exception of utilizing the existing monitoring wells that is prohibited under the terms and conditions of the contract. Please send the completed modified Permit to my attention once your review and approval is completed.

Questions may be referred to my attention at (803) 896-6397.

Enc: Corrective Action Plan Addendum

Cc: Technical File

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

SEP 0 8 2005

FRONTIS HEMPHILL
2146 OLD MCKINNEY RD
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received September 1, 2005
York County

Dear Mr. Hemphill

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Monitoring Well MW-3 was sampled and no petroleum compounds were detected. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

SEP 0 8 2005

LOUIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received September 6, 2005
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the report submitted by SEI Environmental, Inc. SEI Environmental received Corrective Action Plan approval in September 2001. Based on the proposed time frame of 30 months, corrective action activities should have been completed in March 2004; however, there is only a 25 % reduction in the petroleum concentrations. SEI should evaluate the current remediation methodology and propose any necessary modifications in order to expedite the remediation. Please note, the report was to be submitted by June 15, 2005 but was not submitted until September 6, 2005. The next corrective action status evaluation report documenting the results from the September sampling event should be submitted on or before October 30, 2005.

The UST Program also requests that information concerning the carbon changes be included in all future reports. This information may be in tabular format and must contain the date water samples were collected, the date the analytical results were received, and the date the carbon unit was changed out. This information must also contain historical information for all affected water supply wells. SEI must ensure that the carbon is being changed on a frequent enough basis such to minimize any breakthrough or provide an alternative source of potable water.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Hartford Hight, SEI Environmental, 6190 Regency Pkwy, Ste 308, Norcross, GA, 30071
Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

SEP 0 8 2005

TONY & SUSAN HILL
3049 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received September 1, 2005
York County

Dear Mr. & Mrs. Hill:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

SEP 0 8 2005

EVERETTE & JANET CROOK
3035 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received September 1, 2005
York County

Dear Mr. & Mrs. Crook:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

SEP 0 8 2005

GARY WIGGAM
3043 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received September 1, 2005
York County

Dear Mr. Wiggam:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

AUG 18 2005

LOUIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Notice of Alleged Violation
Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control directed you to have your contractor submit a Corrective Action Status Evaluation Report on or before June 30, 2005. To date the required report has not been received. In accordance with Section 280.65 of the South Carolina Underground Storage Tank Regulations, the corrective action must be conducted as chemicals of concern are above the risk-based-screening levels.

Please submit the report within 30 days from the date of this letter. Should you not submit the report on or before September 29, 2005 this office will be forced to initiate enforcement action.

On all correspondence regarding this facility, please reference UST Permit #09322. If you have any questions regarding this correspondence, feel free to contact me at (803) 896-6397, (800) 826-5435 (within SC only), or via e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Hartford Hight, SEI Environmental, 6190 Regency Pkwy, Ste 308, Norcross, Georgia, 30071
Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

APR 28 2005

09322

MR BILL WOOD
SEI ENVIRONMENTAL INC
3021 MCNAUGHTON DR STE 9
COLUMBIA SC 29223

Re: SEI Environmental Pay For Performance Projects
Meeting on March 23, 2005

Dear Mr. Wood:

On behalf of Lee Monts and the staff of the Assessment and Corrective Action Division, I would like to express our thanks for you and your colleagues taking the time to meet and discuss SEI Environmental's current situation regarding pay for performance (PfP) cleanups.

As we discussed, it is the Department's desire to see SEI accomplish the following three objectives in relation to these projects:

1. Return projects to a regular sampling and reporting schedule;
2. Re-establish reductions at sites where levels of chemicals of concern (CoC) have rebounded; and,
3. Begin closing out those projects that have achieved 95+ percent reduction of CoC but progress is no longer occurring.

In response to the first objective, you indicated that all projects would be back on schedule by the end of April, at the latest. You also stated that SEI has hired staff in the Columbia office and has reallocated personnel resources in other offices to assist with this effort.

In order to accomplish the other two objectives, SEI provided several proposals:

1. In order to limit some short-term costs, SEI proposes to drop historically clean monitoring wells from the sampling schedules of appropriate sites;
2. On some projects, especially the older ones, SEI would like to confirm/update the receptor surveys and possibly re-model the SSTLs;
3. On selected sites SEI will implement changes in technology, to include chemical oxidation. Mr. Mark Martin will meet with DHEC staff in the next few weeks to provide a detailed overview of his technology.

All site-specific proposals should be submitted to the individual project managers for review. Changes in technology will require a new public notice period.

You also raised the subject of monitoring wells that formerly contained free phase product. As we understand your hypothesis, the free phase product has been smeared in the well and is producing significant levels of CoC in subsequent sampling events that are not representative of the aquifer. In order to correct this condition, you would like to propose some method to "sterilize" these monitoring wells. You are asked to provide whatever data you may have to support your hypothesis along with your proposal. While treatment of monitoring wells is not allowed under the terms and conditions of the PfP agreements, the UST Program will consider your proposal.

We were encouraged by the statements of Mr. McAllen Finley that SEI has every intention of completing the work at all of these sites. We appreciate that Mr. Finley traveled from Nashville to attend this meeting.

Please feel free to contact me at (803) 896-6585 if you have any questions or need additional information.

Sincerely,

Christopher S. Doll, P.G., Manager
Northeastern SC Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

Cc: McAllen Finley, SEI Environmental, 2506 Grandview Ave., Nashville, TN 37211
Kent Coleman, Director, Assessment and Corrective Action Division
Lee Monts, Manager, Southwestern SC Corrective Action Section
Technical Files

DHEC/UST/032805

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

FEB 25 2005

FRONTIS HEMPHILL
2146 OLD MCKINNEY RD
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received February 18, 2005
York County

Dear Mr. Hemphill

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Monitoring Well MW-3 was sampled and no petroleum compounds were detected. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

FEB 25 2005

GARY WIGGAM
3043 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received February 18, 2005
York County

Dear Mr. Wiggam:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

FEB 25 2005

TONY & SUSAN HILL
3049 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received February 18, 2005
York County

Dear Mr. & Mrs. Hill:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

FEB 25 2005

LOUIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received February 18, 2005
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the report submitted by SEI Environmental, Inc. SEI Environmental received Corrective Action Plan approval in September 2001. Based on the proposed time frame of 30 months, corrective action activities should have been completed in March 2004; however, there is less than a 10% reduction in the petroleum concentrations. SEI should evaluate the current remediation methodology and propose any necessary modifications in order to expedite the remediation. Please note, the report was to be submitted by December 15, 2004 but was not submitted until February 18, 2005. Due to the fact that the laboratory data is from January 2005, the UST Program will not require submittal of the March 2005 report. The next corrective action status evaluation report should be submitted on or before June 15, 2005.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: William Wood, Jr., SEI Environmental, Inc., 3021 McNaughton Dr, Ste 9, Columbia, SC 29223
Technical file

RECEIVED
FEB 18 2005
UNDERGROUND STORAGE TANK PROGRAM

February 16, 2005

Ms. Debra Thoma, Hydrogeologist
SCDHEC - UST Program
Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201

Re: Summary of Corrective Action and Gauging Results
Smith's Grocery, Fourth Quarter 2004
#176 Charlotte Highway (Highway 49)
York, South Carolina 29745
UST Permit # 09322

Dear Ms. Thoma;

SEI Environmental, Inc. (SEI) submits the following summary of gauging results and laboratory analytical results for samples collected on January 14, 2005. On June 14, 2004, SCDHEC submitted to Ms. Lois Smith the a directive letter for the Corrective Action Plan. Included in this report are Figure 1, a topographic map depicting the location of the site, and Figure 2, a site map illustrating the location of the monitoring wells.

On January 14, 2005 SEI personnel were on site to gauge water levels, and check for the presence of free product. No free product was observed in any of the existing monitoring wells. Twenty three (23) monitoring wells were gauged. Appendix B contains Table 1 which summarizes the January 14, 2005 gauging results and Table 2 which is a historical summary of groundwater elevations at the site. A potentiometric surface map based on the current data is labeled as Figure 3.

Upon completion of gauging, seventeen (17) monitoring wells (MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, MW-18, MW-19, TW-1, TW-2, and TW-3) were sampled along with four (4) water supply wells. All monitoring wells were purged prior to sampling using a new, disposable bailer. Purging consisted of removing well volumes of groundwater until the parameter readings stabilized and three volumes were removed, or until the well was dry. Please note that petroleum odor was observed at MW-1, MW-2, MW-6 through MW-8, MW-10, MW-12, TW-1, and TW-2, and therefore no field parameter measurements were taken. Appendix C contains Table 3, which summarizes the January 14, 2005 gauging field information and includes copies of the Field Data Information Sheet(s) for Ground Water Sampling. Upon completion of purging activities, a representative sample was collected from each sample point, placed in the appropriate labeled sample containers, and placed on ice in a cooler. Three of the water supply wells (Hill, Swift, and Strife) were sampled both before and after the GAC filter unit in order to determine the effectiveness of the water filtration system.

Each sample was then submitted to TestAmerica Analytical Testing Corporation following strict chain-of-custody procedures. Each sample submitted was analyzed for benzene, toluene, ethylbenzene, xylene (BTEX), MtBE, and naphthalene by EPA method 8260B, lead by EPA method 200.7, and ethylene dibromide (EDB) by EPA method 8011.

After a review of the current analytical data, it was noted that the "post filtration" sample from the Swift water supply well had a benzene concentration of 22.0 µg/L. The carbon in the GAC unit was replaced on February 9, 2005. Following the carbon change, pre and post filtration samples were taken at the Swift residence the same day. The analytical data from the February 9, 2005 samples show that the filtration system is working properly and the carbon change was successful. All concentrations post-filtration are unable to be detected or below RBSL. It should also be noted that the Strife residence has been sold and is now the Crook residence. Included in Appendix D are Table 4, which summarizes the current laboratory analytical results; Table 5, a historical summary of the laboratory analytical data; copies of the laboratory analytical results, and a copy of the Chain of Custody. Also included in Appenix A is Figure 4, which is a groundwater CoC map reflecting the current analytical data.

On January 21, 2005 the 44 gallons of petroleum-impacted water, which was generated by the sampling and purging activities on January 14, 2005, was disposed at G&K Tank Service in Sumter, SC. Appendix E contains copies of the Non-Hazardous Waste Manifest and Certificate of Disposal.

The evaluation of the corrective action activities' effectiveness consists of comparing the Fourth Quarter 2004 laboratory analytical data against the baseline SSTL concentrations and determining the percent of total concentration reduction. The percent of total concentration reduction is calculated by using the following formula:

> Percent of Total Concentration Reduction =((Initial Mass Above SSTL) – (Current Mass Above SSTL) / (Initial Mass Above SSTL))*100

The calculation for the January 14, 2005 sampling event's Percent of Total Concentration Reduction was found to be 7.90 %. This calculation can be found on Table 6 in Appendix F.

SEI will collect groundwater samples in the first quarter of 2005 for further evaluation of the corrective action activities. Upon receipt of the laboratory analytical data, SEI will submit a report summarizing the findings.

If you have any questions or comments concerning the information provided in this document, please contact Owen Astwood at (803) 788-2535.

Sincerely,

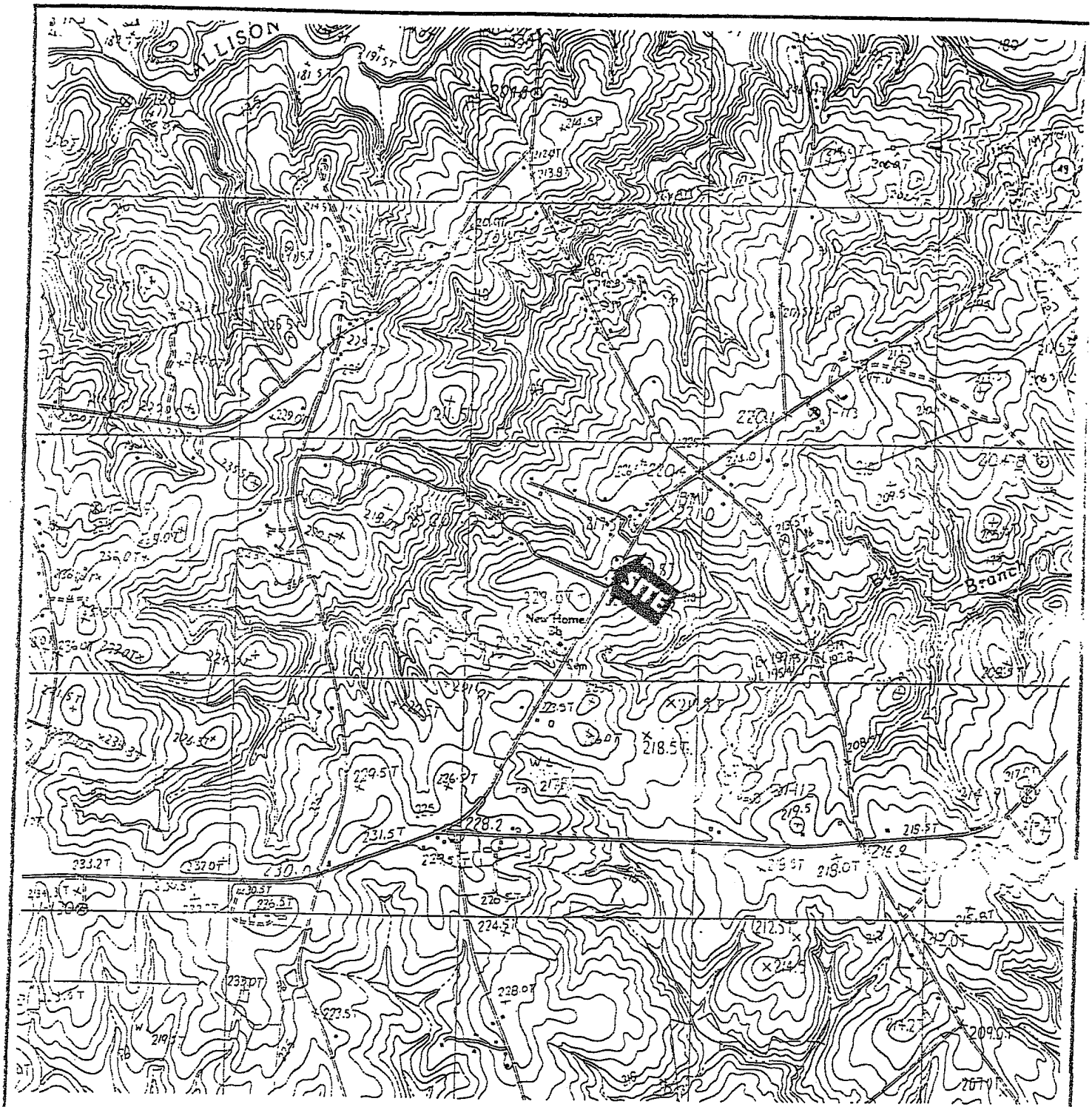
Owen Astwood
Staff Geologist
SEI – Columbia Office

William D. Wood, Jr., P.G.
SC Reg #2116

Attachment(s)

cc: Ms. Lois B. Smith, 3715 Charlotte Highway, York, South Carolina 29745
SEI Files

Appendix A
Figures



SCALE 1:24,000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

CONTOUR INTERVAL 3 METERS

QUADRANGLE LOCATION

CLOVER, SC QUADRANGLE

CBM ENVIRONMENTAL SERVICES, INC.

LATITUDE: 35° 02' 30" N	
LONGITUDE: 81° 08' 48" W	
DATE: 02/11/99	
DRAWN BY: AWB	
CHECKED BY: JFH	

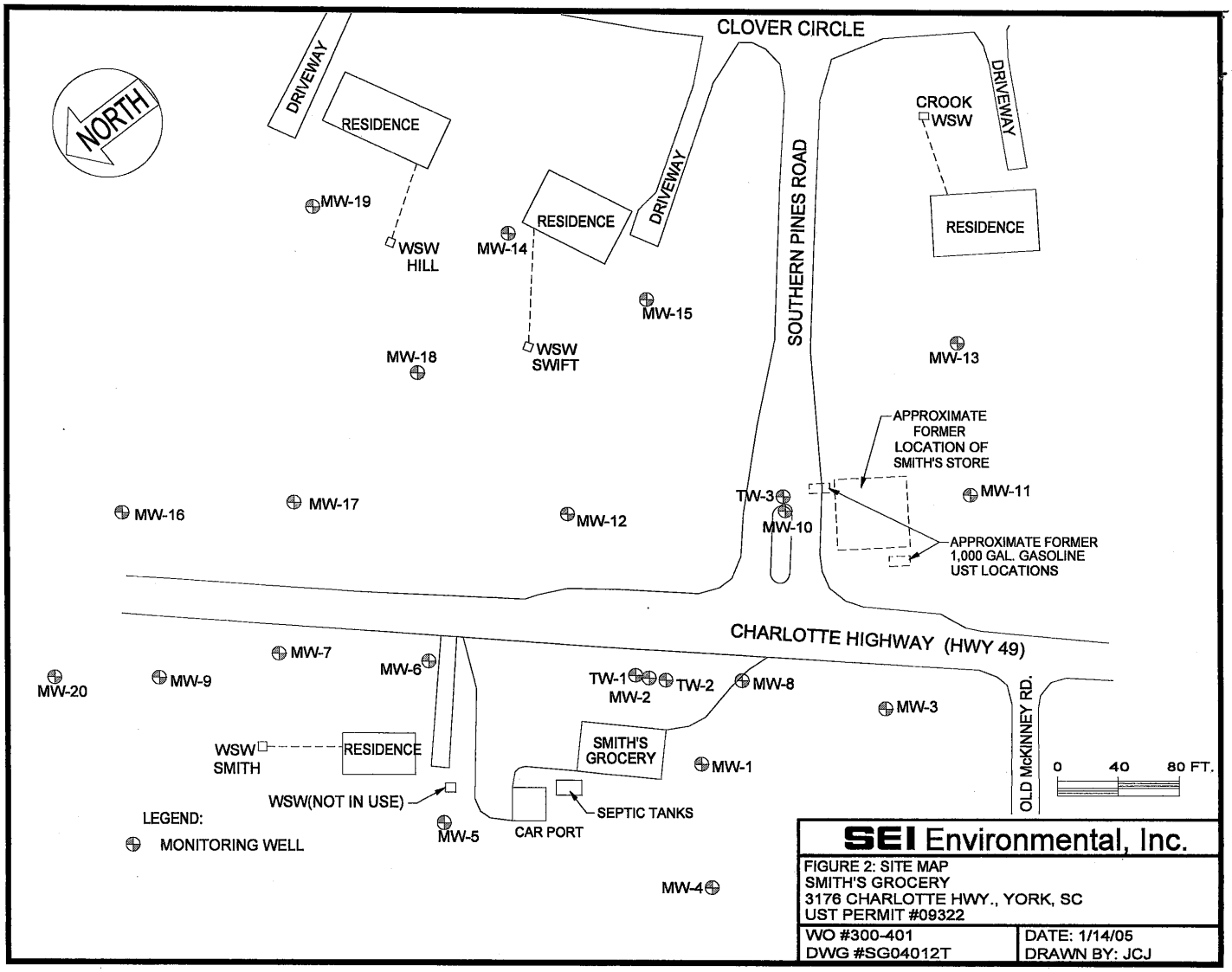
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SOUTH CAROLINA

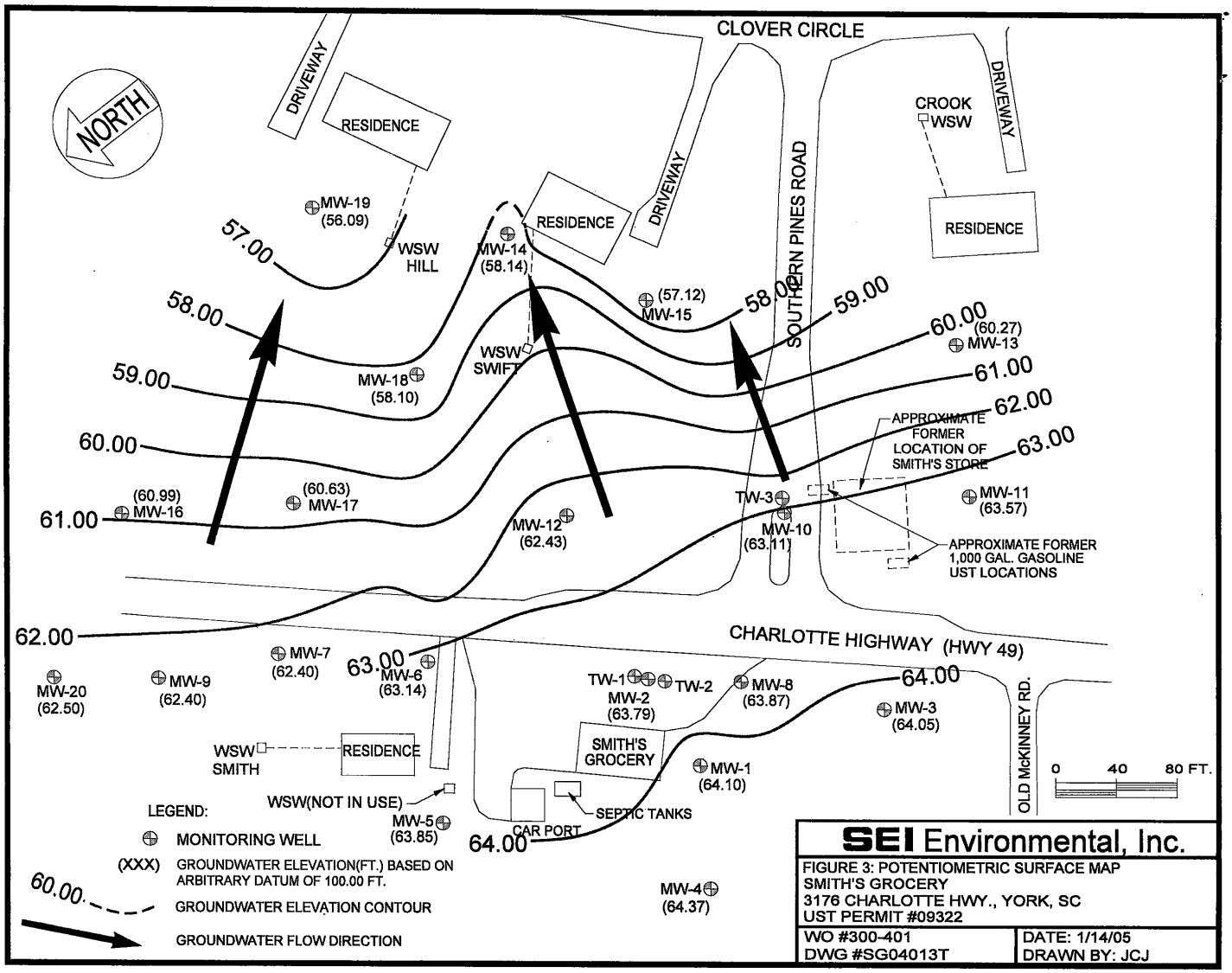
SITE I.D. NO. 09322

FIGURE 1

USGS TOPOGRAPHIC MAP

CBM PROJECT NO. 10629

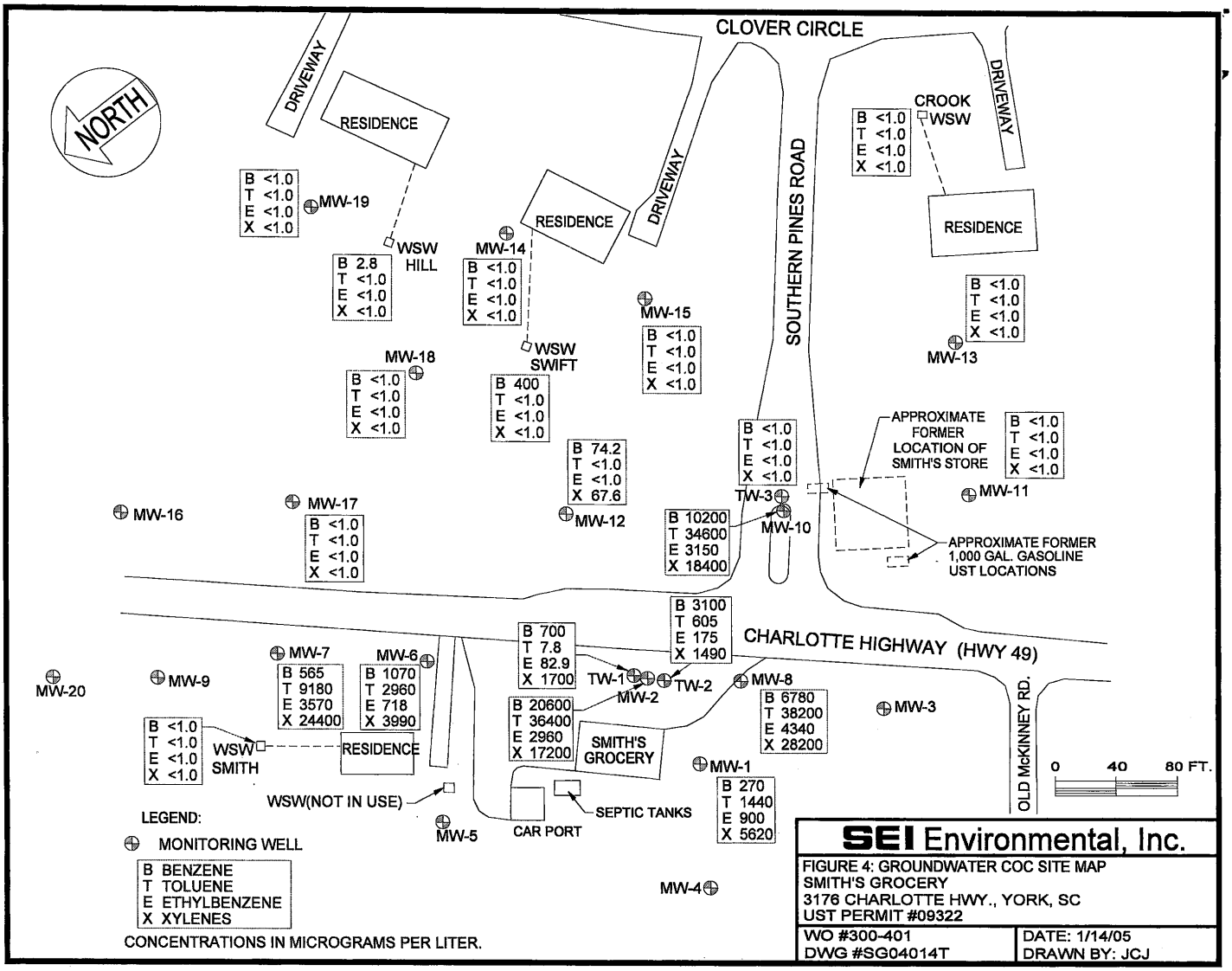

CLOVER CIRCLE
NORTH
DRIVEWAY
RESIDENCE
MW-19
WSW HILL
MW-14
RESIDENCE
DRIVEWAY
SOUTHERN PINES ROAD
CROOK WSW
DRIVEWAY
RESIDENCE
MW-15
WSW SWIFT
MW-18
MW-13
APPROXIMATE FORMER LOCATION OF SMITH'S STORE
MW-16
MW-17
MW-12
TW-3
MW-10
MW-11
APPROXIMATE FORMER 1,000 GAL. GASOLINE UST LOCATIONS
CHARLOTTE HIGHWAY (HWY 49)
MW-7
MW-6
MW-20
MW-9
TW-1
MW-2
TW-2
MW-8
MW-3
WSW SMITH
RESIDENCE
SMITH'S GROCERY
MW-1
OLD McKINNEY RD.
0 40 80 FT.
WSW(NOT IN USE)
SEPTIC TANKS
LEGEND:
MONITORING WELL
MW-5
CAR PORT
MW-4
SEI Environmental, Inc.
FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322
WO #300-401
DWG #SG04012T
DATE: 1/14/05
DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: POTENTIOMETRIC SURFACE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

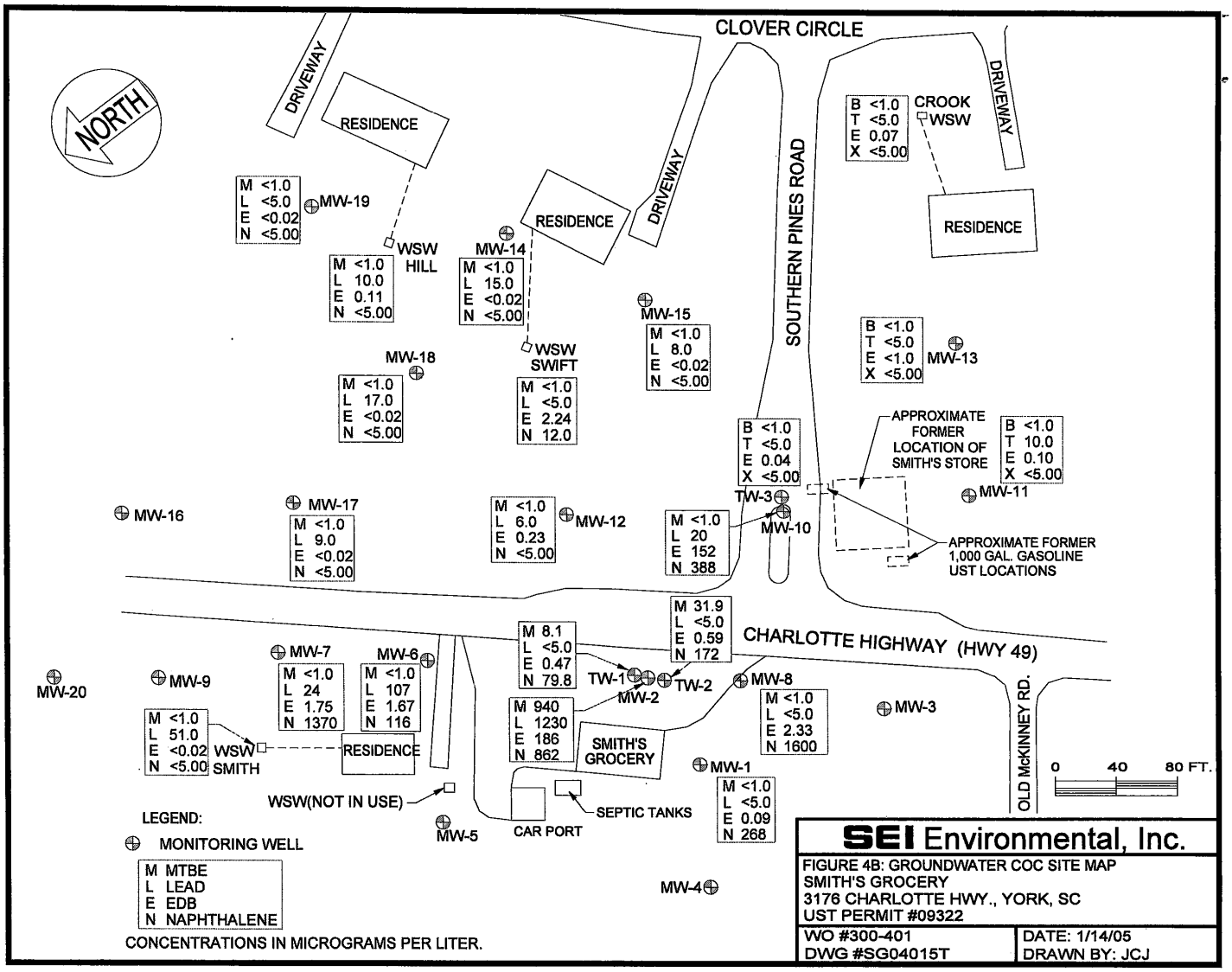
WO #300-401	DATE: 1/14/05
DWG #SG04013T	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 1/14/05
DWG #SG04014T	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4B: GROUNDWATER COC SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 1/14/05
DWG #SG04015T	DRAWN BY: JCJ

Appendix B

Table 1 – January 14, 2005 Gauging Results

Table 2 – Historical Summary of Gauging Results

Table 1

Summary of Groundwater Elevations - January 15, 2005

Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth to Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-1	01/14/05	35.00	27.06	N/A	N/A	91.16	64.10
MW-2	01/14/05	38.00	30.78	N/A	N/A	94.57	63.79
MW-3	01/14/05	35.00	27.86	N/A	N/A	91.91	64.05
MW-4	01/14/05	27.00	21.83	N/A	N/A	86.20	64.37
MW-5	01/14/05	30.00	25.44	N/A	N/A	89.29	63.85
MW-6	01/14/05	37.00	30.77	N/A	N/A	93.91	63.14
MW-7	01/14/05	36.00	29.28	N/A	N/A	91.68	62.40
MW-8	01/14/05	38.00	30.85	N/A	N/A	94.72	63.87
MW-9	01/14/05	36.00	28.14	N/A	N/A	90.54	62.40
MW-10	01/14/05	44.00	36.66	N/A	N/A	99.77	63.11
MW-11	01/14/05	44.00	36.79	N/A	N/A	100.46	63.67
MW-12	01/14/05	44.00	37.18	N/A	N/A	99.61	62.43
MW-13	01/14/05	47.00	40.12	N/A	N/A	100.39	60.27
MW-14	01/14/05	50.00	40.75	N/A	N/A	98.89	58.14
MW-15	01/14/05	50.00	43.06	N/A	N/A	100.18	57.12
MW-16	01/14/05	37.00	28.92	N/A	N/A	89.91	60.99
MW-17	01/14/05	40.00	33.83	N/A	N/A	94.46	60.63
MW-18	01/14/05	46.00	40.04	N/A	N/A	98.14	58.10
MW-19	01/14/05	50.00	42.18	N/A	N/A	98.27	56.09
MW-20	01/14/05	35.00	25.85	N/A	N/A	88.35	62.50
TW-1	01/14/05	61.00	30.75	N/A	N/A	94.72	63.97
TW-2	01/14/05	88.00	30.94	N/A	N/A	94.72	63.78
TW-3	01/14/05	71.00	38.75	N/A	N/A	99.21	60.46

Table 2
Historical Summary of Gauging Events
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-1	01/14/05	35.00	27.06	N/A	N/A	91.16	64.10
	8/17-18/04		27.03	N/A	N/A		64.13
	05/10/04		26.90	N/A	N/A		64.26
	01/08/04		25.46	N/A	N/A		65.70
	08/26/03		24.07	N/A	N/A		67.09
	04/02/03		28.05	N/A	N/A		63.11
	01/06/03		29.88	N/A	N/A		61.28
MW-2	01/14/05	38.00	30.78	N/A	N/A	94.57	63.79
	8/17-18/04		30.71	N/A	N/A		63.86
	05/10/04		26.68	N/A	N/A		67.89
	01/08/04		29.40	N/A	N/A		65.17
	08/26/03		27.81	N/A	N/A		66.76
	04/02/03		31.92	N/A	N/A		62.65
	01/06/03		33.76	N/A	N/A		60.81
MW-3	01/14/05	35.00	27.86	N/A	N/A	91.91	64.05
	8/17-18/04		27.76	N/A	N/A		64.15
	05/10/04		28.83	N/A	N/A		63.08
	01/08/04		26.46	N/A	N/A		65.45
	08/26/03		25.98	N/A	N/A		65.93
	04/02/03		29.02	N/A	N/A		62.89
	01/06/03		30.87	N/A	N/A		61.04
MW-4	01/14/05	27.00	21.83	N/A	N/A	86.20	64.37
	05/10/04		25.94	N/A	N/A		60.26
	01/08/04		20.73	N/A	N/A		65.47
	08/26/03		15.07	N/A	N/A		71.13
	04/02/03		22.73	N/A	N/A		63.47
	01/06/03		24.58	N/A	N/A		61.62
MW-5	01/14/05	30.00	25.44	N/A	N/A	89.29	63.85
	8/17-18/04		25.75	N/A	N/A		63.54
	05/10/04		25.57	N/A	N/A		63.72
	01/08/04		24.49	N/A	N/A		64.80
	08/26/03		22.70	N/A	N/A		66.59
	04/02/03		25.00	N/A	N/A		64.29
	01/06/03		27.96	N/A	N/A		61.33

Table 2 - Continued
Historical Summary of Gauging Events
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-6	1/14/2005	37.00	30.77	N/A	N/A	93.91	63.14
	8/17-18/04		29.50	N/A	N/A		64.41
	05/10/04		29.91	N/A	N/A		64.00
	01/08/04		29.58	N/A	N/A		64.33
	08/26/03		27.51	N/A	N/A		66.40
	04/02/03		31.66	N/A	N/A		62.25
	01/06/03		33.57	N/A	N/A		60.34
MW-7	01/14/05	36.00	29.28	N/A	N/A	91.68	62.40
	8/17-18/04		29.85	N/A	N/A		61.83
	05/10/04		27.78	N/A	N/A		63.90
	01/08/04		28.40	N/A	N/A		63.28
	08/26/03		26.88	N/A	N/A		64.80
	04/02/03		29.40	N/A	N/A		62.28
	01/06/03		31.57	N/A	N/A		60.11
MW-8	01/14/05	38.00	30.85	N/A	N/A	94.72	63.87
	8/17-18/04		30.88	N/A	N/A		63.84
	05/10/04		29.90	N/A	N/A		64.82
	01/08/04		29.47	N/A	N/A		65.25
	08/26/03		27.58	N/A	N/A		67.14
	04/02/03		32.02	N/A	N/A		62.70
	01/06/03		33.84	N/A	N/A		60.88
MW-9	01/14/05	36.00	28.14	N/A	N/A	90.54	62.40
	8/17-18/04		29.50	N/A	N/A		61.04
	05/10/04		28.69	N/A	N/A		61.85
	01/08/04		27.33	N/A	N/A		63.21
	08/26/03		26.10	N/A	N/A		64.44
	04/02/03		28.20	N/A	N/A		62.34
	01/06/03		30.41	N/A	N/A		60.13

Table 2 - Continued
Historical Summary of Gauging Events
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-10	1/14/2005	44.00	**36.66**	**N/A**	**N/A**	99.77	**63.11**
	8/17-18/04		36.49	N/A	N/A		63.28
	05/10/04		35.50	N/A	N/A		64.27
	01/08/04		35.04	N/A	N/A		64.73
	08/26/03		33.36	N/A	N/A		66.41
	04/02/03		37.77	N/A	N/A		62.00
	01/06/03		39.71	N/A	N/A		60.06
MW-11	01/14/05	44.00	36.79	N/A	N/A	100.46	63.67
	8/17-18/04		37.17	N/A	N/A		63.29
	05/10/04		36.19	N/A	N/A		64.27
	01/08/04		35.70	N/A	N/A		64.76
	08/26/03		33.88	N/A	N/A		66.58
	04/02/03		38.36	N/A	N/A		62.10
	01/06/03		40.37	N/A	N/A		60.09
MW-12	01/14/05	44.00	37.18	N/A	N/A	99.61	62.43
	8/17-18/04		36.72	N/A	N/A		62.89
	05/10/04		35.75	N/A	N/A		63.86
	01/08/04		35.44	N/A	N/A		64.17
	08/26/03		33.78	N/A	N/A		65.83
	04/02/03		37.78	N/A	N/A		61.83
	01/06/03		39.64	N/A	N/A		59.97
MW-13	01/14/05	47.00	40.12	N/A	N/A	100.39	60.27
	8/17-18/04		40.27	N/A	N/A		60.12
	05/10/04		39.27	N/A	N/A		61.12
	01/08/04		38.70	N/A	N/A		61.69
	08/26/03		37.20	N/A	N/A		63.19
	04/02/03		41.13	N/A	N/A		59.26
	01/06/03		42.87	N/A	N/A		57.52
MW-14	01/14/05	50.00	40.75	N/A	N/A	98.89	58.14
	8/17-18/04		41.12	N/A	N/A		57.77
	05/10/04		40.06	N/A	N/A		58.83
	01/08/04		39.40	N/A	N/A		59.49
	08/26/03		38.39	N/A	N/A		60.50
	04/02/03		42.10	N/A	N/A		56.79
	01/06/03		43.66	N/A	N/A		55.23

Table 2 - Continued

Historical Summary of Gauging Events

Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-15	01/14/05	50.00	43.06	N/A	N/A	100.18	57.12
	8/17-18/04		42.11	N/A	N/A		58.07
	05/10/04		41.19	N/A	N/A		58.99
	01/08/04		46.55	N/A	N/A		53.63
	08/26/03		39.58	N/A	N/A		60.60
	04/02/03		43.24	N/A	N/A		56.94
	01/06/03		44.97	N/A	N/A		55.21
MW-16	01/14/05	37.00	28.92	N/A	N/A	89.91	60.99
	8/17-18/04		29.23	N/A	N/A		60.68
	05/10/04		27.83	N/A	N/A		62.08
	01/08/04		28.03	N/A	N/A		61.88
	08/26/03		27.54	N/A	N/A		62.37
	04/02/03		29.00	N/A	N/A		60.91
	01/06/03		31.07	N/A	N/A		58.84
MW-17	01/14/05	40.00	33.83	N/A	N/A	94.46	60.63
	8/17-18/04		34.87	N/A	N/A		59.59
	05/10/04		32.93	N/A	N/A		61.53
	01/08/04		32.56	N/A	N/A		61.90
	08/26/03		37.08	N/A	N/A		57.38
	04/02/03		34.63	N/A	N/A		59.83
	01/06/03		36.81	N/A	N/A		57.65
MW-18	01/14/05	46	40.04	N/A	N/A	98.14	58.10
	8/17-18/04		35.43	N/A	N/A		62.71
	05/10/04		39.09	N/A	N/A		59.05
	01/08/04		38.14	N/A	N/A		60.00
	08/26/03		37.47	N/A	N/A		60.67
	04/02/03		41.26	N/A	N/A		56.88
	01/06/03		42.83	N/A	N/A		55.31
MW-19	01/14/05	50.00	42.18	N/A	N/A	98.27	56.09
	8/17-18/04		42.01	N/A	N/A		56.26
	05/10/04		41.47	N/A	N/A		56.80
	01/08/04		40.83	N/A	N/A		57.44
	08/26/03		39.24	N/A	N/A		59.03
	04/02/03		43.31	N/A	N/A		54.96
	01/06/03		45.14	N/A	N/A		53.13

Table 2 - Continued
Historical Summary of Gauging Events
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-20	01/14/05	35.00	25.85	N/A	N/A	88.35	62.50
	05/10/04		28.41	N/A	N/A		59.94
	01/08/04		25.10	N/A	N/A		63.25
	08/26/03		24.98	N/A	N/A		63.37
	04/02/03		25.79	N/A	N/A		62.56
	01/06/03		28.09	N/A	N/A		60.26
TW-1	01/14/05	61.00	30.75	N/A	N/A	94.72	63.97
	8/17-18/04		30.40	N/A	N/A		64.32
	05/10/04		30.31	N/A	N/A		64.41
	01/08/04		29.48	N/A	N/A		65.24
	08/26/03		27.96	N/A	N/A		66.76
	04/02/03		31.86	N/A	N/A		62.86
	01/06/03		34.33	N/A	N/A		60.39
TW-2	01/14/05	88.00	30.94	N/A	N/A	94.72	63.78
	8/17-18/04		30.87	N/A	N/A		63.85
	05/10/04		29.89	N/A	N/A		64.83
	01/08/04		29.45	N/A	N/A		65.27
	08/26/03		27.54	N/A	N/A		67.18
	04/02/03		32.04	N/A	N/A		62.68
	01/06/03		33.91	N/A	N/A		60.81
TW-3	01/14/05	71.00	38.75	N/A	N/A	99.21	60.46
	8/17-18/04		35.75	N/A	N/A		63.46
	05/10/04		34.79	N/A	N/A		64.42
	01/08/04		34.40	N/A	N/A		64.81
	08/26/03		32.80	N/A	N/A		66.41
	04/02/03		36.97	N/A	N/A		62.24
	01/06/03		38.81	N/A	N/A		60.40

Notes: N/A Not Applicable

Appendix C

Table 3- Gauging and Field Screenings

&

Field Data Information Sheet(s) for Ground Water Sampling

Table 3

Summary of Field Observations - January 14, 2005

Smith's Grocery
York , South Carolina
Site ID No.09322

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-1				27.06	35.00	N/A	N/A	N/A	N/A	3.50	Petroleum Odor
MW-2				30.78	38.00	N/A	N/A	N/A	N/A	3.54	Petroleum Odor
MW-3				27.76	35.00	N/A	N/A	N/A	N/A	N/A	Not Sampled
MW-4				21.83	27.00	N/A	N/A	N/A	N/A	N/A	Not Sampled
MW-5				25.44	30.00	N/A	N/A	N/A	N/A	N/A	Not Sampled
MW-6				30.77	37.00	N/A	N/A	N/A	N/A	3.06	Petroleum Odor
MW-7				29.28	36.00	N/A	N/A	N/A	N/A	3.30	Petroleum Odor
MW-8				30.85	38.00	N/A	N/A	N/A	N/A	3.51	Petroleum Odor
MW-9				28.14	36.00	N/A	N/A	N/A	N/A	N/A	Not Sampled
MW-10				36.66	44.00	N/A	N/A	N/A	N/A	3.60	Petroleum Odor
MW-11	Initial			37.17	44.00	4.83	0.061	15.6	5.85		
	1st Volume					4.71	0.055	16.0	7.37	1.18	
	2nd Volume					4.99	0.049	16.1	8.05	1.18	
	3rd Volume					4.87	0.047	16.1	8.47	1.18	
	Post Sampling					4.86	0.045	16.0	8.32		
MW-12				37.18	44.00	N/A	N/A	N/A	N/A	2.37	Petroleum Odor
MW-13	Initial			40.12	47.00	4.71	0.054	15.5	6.65		
	1st Volume					4.66	0.040	15.9	8.62	1.12	
	2nd Volume					5.01	0.046	15.8	8.33	1.12	
	3rd Volume					4.73	0.042	15.8	8.53	1.12	
MW-14	Initial			40.75	50.00	5.99	0.062	15.3	8.59		
	1st Volume					6.04	0.058	15.8	8.35	1.5	
	2nd Volume					5.98	0.053	15.6	8.63	1.5	
	3rd Volume					6.01	0.051	15.9	8.59	1.5	
	Post Sampling					6.09	0.054	15.4	8.60		

Table 3 - Continued

Summary of Field Observations - January 14, 2005

Smith's Grocery

York , South Carolina

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-15	Initial			43.06	50.00	5.60	0.700	15.4	7.76		
	1st Volume					5.53	0.069	15.8	9.33	1.13	
	2nd Volume					5.59	0.071	16.0	9.16	1.13	
	3rd Volume					5.64	0.068	15.8	9.41	1.13	
	Post Sampling					5.65	0.068	16.0	9.34		
MW-16	2nd Volume			28.92	37.00	6.15	N/A	N/A	N/A	N/A	Not Sampled
MW-17	Initial			33.83	40.00	5.02	0.014	15.3	7.97		
	1st Volume					5.02	0.011	15.7	9.10	1.01	
	2nd Volume					5.04	0.011	15.8	9.00	1.01	
	3rd Volume					5.04	0.011	15.7	9.70	1.01	
	Post Sampling					5.03	0.011	15.8	9.00		
MW-18	Initial			40.04	46.00	5.73	0.049	14.9	4.20		
	1st Volume					5.89	0.057	15.6	7.00	0.97	
	2nd Volume					5.86	0.050	15.7	6.80	0.97	
	3rd Volume					5.92	0.054	15.7	8.92	0.97	
	Post Sampling					5.97	0.050	149.0	7.35		
MW-19	Initial			42.18	50.00	5.21	0.069	15.4	8.51		
	1st Volume					5.08	0.056	15.7	9.01	1.27	
	2nd Volume					5.14	0.054	15.4	9.80	1.27	Bailed Dry
	3rd Volume					N/A	N/A	N/A	N/A	N/A	
	Post Sampling					5.34	0.066	15.7	9.75		
MW-20				25.85	35.00	N/A	N/A	N/A	N/A	N/A	Not Sampled

Table 3 - Continued

Summary of Field Observations - January 14, 2005

Smith's Grocery

York , South Carolina

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
TW-1				30.75	61.00	N/A	N/A	N/A	N/A	14.79	Petroleum Odor
TW-2				30.94	88.00	N/A	N/A	N/A	N/A	27.90	Petroleum Odor
TW-3	Initial			38.75	71.00	5.69	0.085	17.9	5.95		
	1st Volume					5.66	0.056	17.5	4.57	5.26	
	2nd Volume					5.65	0.074	17.3	4.56	5.26	
	3rd Volume					5.57	0.064	17.3	5.29	5.26	
	Post Sampling					5.55	0.063	17.4	4.04		

Notes: N/A - Not Applicable

Appendix D

Table 4 – January 14, 2005 Summary of Laboratory Analytical Results

Table 5 – Historical Summary of Laboratory Analytical Results

Laboratory Analytical Results

&

Chain of Custody

Table 4

Summary of Laboratory Analysis - January 15, 2005

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX	MTBE (µg/L)	Lead (µg/L)	EDB (µg/L)	Naphthalene (µg/L)
RBSL		*5.0*	*1000.0*	*700.0*	*10000.0*	*N/A*	*40.0*	*15.0*	*0.05*	*25.0*
MW-1	1/14/2005	**270.0**	**1440.0**	**900.0**	5620.0	8230.0	<1.0	<5.0	**0.09**	**268.0**
MW-2	1/14/2005	**20600.0**	**36400.0**	**2960.0**	**17200.0**	77160.0	**940.0**	**1230.0**	**186.00**	**862.0**
MW-3	1/14/2005	N/S								
MW-4	1/14/2005	N/S								
MW-5	1/14/2005	N/S								
MW-6	1/14/2005	**1070.0**	**2960.0**	**718.0**	3990.0	8738.0	<1.0	**107.0**	**1.67**	**116.0**
MW-7	1/14/2005	**565.0**	**9180.0**	**3570.0**	**24400.0**	37715.0	<1.0	**24.0**	**1.75**	**1370.0**
MW-8	1/14/2005	**6780.0**	**38200.0**	**4340.0**	**28200.0**	77520.0	<1.0	<5.0	**2.33**	**1600.0**
MW-9	1/14/2005	N/S								
MW-10	1/14/2005	**10200.0**	**34600.0**	**3150.0**	18400.0	66350.0	<1.0	**20.0**	**152.00**	**388.0**
MW-11	1/14/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	10.0	**0.10**	<5.00
MW-12	1/14/2005	**74.2**	<1.0	<1.0	67.6	141.8	<1.0	6.0	**0.23**	<5.00
MW-13	1/14/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<5.00
MW-14	1/14/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**15.0**	<0.02	<5.00
MW-15	1/14/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8.0	<0.02	<5.00
MW-16	1/14/2005	N/S								
MW-17	1/14/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	9.0	<0.02	<5.00
MW-18	1/14/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**17.0**	<0.02	<5.00
MW-19	1/14/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<0.02	<5.00
MW-20	1/14/2005	N/S								
TW-1	1/14/2005	**700.0**	7.8	82.9	1700.0	2490.7	8.1	<5.0	**0.47**	**79.8**
TW-2	1/14/2005	**3100.0**	605.0	175.0	**1490.0**	5370.0	31.9	<5.0	**0.59**	**172.0**
TW-3	1/14/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	0.04	<5.00

Notes: N/S - Not Sampled

Bold numbers indicate concentrations above RBSL

Table 4 - Continued
Summary of Laboratory Analysis, August 17-18, 2004
Smith's Grocery
York, South Carolina
Site ID No.09322

WSW ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX	MTBE (µg/L)	Lead (µg/L)	EDB (µg/L)	Naphthalene (µg/L)
RBSL		*5.0*	*1000.0*	*700.0*	*10000.0*	*N/A*	*40.0*	*15.0*	*0.05*	*25.0*
Smith	1/14/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**51.0**	<0.02	<5.00
Hill (pre)	1/14/2005	2.8	<1.0	<1.0	<1.0	2.8	<1.0	10.0	**0.11**	<5.00
Hill (post)	1/14/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<0.02	<5.00
Swift (pre)	1/14/2005	**400.0**	<1.0	<1.0	110.0	510.0	<1.0	<5.0	**2.24**	12.00
Swift (post)	1/14/2005	**22.0**	<1.0	<1.0	3.2	25.2	<1.0	<5.0	**0.09**	<5.00
Swift (pre)	2/9/2005	**193.00**	ND	ND	69.90	262.90	ND	N/S	N/S	9.60
Swift (post)	2/9/2005	4.20	ND	ND	3.70	7.90	ND	N/S	N/S	ND
Crook (pre)	1/14/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	**0.07**	<5.00
Crook (post)	1/14/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<0.02	<5.00

Note: Bold numbers indicate concentrations above RBSL

Table 5

Historical Summary of Laboratory Analysis

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*11.00*	*2,223.00*	*1,558.00*	*10,000.00*	*NA*	*80.00*	*2.00*	*0.32*	*56.00*
MW-1	1/14/05	**270.00**	1,440.00	900.00	5,620.00	8,230.00	<1.0	<1.0	0.090	**268.00**
	5/10/04	**330.00**	1,100.00	459.00	3,700.00	30,299.00	25.00	**40.00**	0.010	**130.00**
	1/8/04	**620.00**	850.00	340.00	3,800.00	56,741.00	**100.00**	**5.00**	0.170	**500.00**
	8/26/03	**610.00**	1,200.00	640.00	4,800.00	7,250.00	**100.00**	**33.00**	0.010	**500.00**
	4/2/03	**590.00**	**2,900.00**	960.00	7,400.00	19,100.00	27.00	**10.00**	0.010	**200.00**
	1/6/03	**911.00**	**9,810.00**	**2,660.00**	**18,650.00**	51,131.00	**250.00**	**56.00**	0.010	**743.00**
SSTL		*10.00*	*2,021.00*	*1,416.00*	*15,000.00*	*NA*	*81.00*	*30.00*	*10.000*	*51.00*
MW-2	1/14/05	**20,600.00**	**36,400.00**	**2,960.00**	**17,200.00**	77,160.00	**940.00**	**1,230.00**	**186.00**	**862.00**
	5/10/04	**17,000.00**	**24,000.00**	**2,000.00**	11,000.00	202,300.00	**750.00**	**1,200.00**	**260.000**	**2,500.00**
	1/8/04	**18,000.00**	**33,000.00**	**2,200.00**	12,000.00	219,900.00	**880.00**	**1,000.00**	**150.000**	**1,200.00**
	8/26/03	**16,000.00**	**26,000.00**	**2,200.00**	13,000.00	154,700.00	**480.00**	**190.00**	**120.000**	**540.00**
	4/2/03	**13,000.00**	1,800.00	**1,600.00**	9,500.00	97,500.00	**480.00**	**190.00**	**160.000**	**500.00**
	1/6/03	**18,400.00**	**31,100.00**	**3,180.00**	**18,920.00**	71,600.00	**395.00**	28.00	0.020	**514.00**
MW-3	1/14/05	N/S								
	1/8/04	5.00	1.00	5.00	3.00	20.00	1.00	5.00	0.010	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	**350.00**	0.020	1.00
MW-4	1/14/05	N/S								
	1/8/04	5.00	1.00	5.00	3.00	20.00	1.00	5.00	0.010	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	12.00	0.020	1.00
MW-5	1/14/05	N/S								
	1/8/04	5.00	1.00	5.00	3.00	22.40	1.00	5.00	0.010	5.00
	1/6/03	1.00	1.00	1.00	5.40	8.40	1.00	12.00	0.020	1.00

Table 5 - Continued

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*6.00*	*1,212.00*	*850.00*	*8,000.00*	*NA*	*48.00*	*18.00*	*4.83*	*31.00*
MW-6	1/14/05	**1,070.00**	**2,960.00**	718.00	3,990.00	8,738.00	<1.0	**107.00**	1.67	**116.00**
	5/10/04	**640.00**	**2,200.00**	300.00	1,900.00	5,040.00	5.00	**36.00**	1.80	**150.00**
	1/8/04	**350.00**	1,200.00	240.00	1,300.00	3,090.00	1.00	5.00	1.20	**77.00**
	8/26/03	**1,400.00**	**5,800.00**	**1,100.00**	6,600.00	14,900.00	**250.00**	**37.00**	0.01	**1,200.00**
	4/2/03	**2,600.00**	**11,000.00**	**1,800.00**	9,000.00	24,400.00	**250.00**	**54.00**	2.60	**1,200.00**
	1/6/03	**4,840.00**	**20,400.00**	**3,540.00**	**19,020.00**	47,800.00	25.00	11.00	**7.00**	**640.00**
SSTL		*6.00*	*1,212.00*	*850.00*	*12,123.00*	*NA*	*48.00*	*18.00*	*0.66*	*31.00*
MW-7	1/14/05	**565.00**	**9,180.00**	**3,570.00**	**24,400.00**	37,715.00	<1.0	**24.00**	**1.75**	**1,370.00**
	5/10/04	**700.00**	**10,000.00**	**3,400.00**	**23,000.00**	37,100.00	**200.00**	5.00	**6.80**	**1,000.00**
	1/8/04	**630.00**	**13,000.00**	**3,400.00**	**25,000.00**	42,030.00	**100.00**	5.00	**3.50**	**1,000.00**
	8/26/03	**740.00**	250.00	110.00	1,600.00	2,700.00	**50.00**	**160.00**	0.09	**250.00**
	4/2/03	**240.00**	110.00	120.00	38.00	508.00	**210.00**	**240.00**	**1.70**	**120.00**
	1/6/03	**1,020.00**	1.00	**2,290.00**	**16,940.00**	20,251.00	1.00	5.00	**1.70**	**826.00**
SSTL		*12.00*	*2,424.00*	*1,700.00*	*16,000.00*	*NA*	*96.00*	*4.00*	*0.48*	*62.00*
MW-8	1/14/05	**6,780.00**	**38,200.00**	**4,340.00**	**28,200.00**	77,520.00	<1.0	<5.0	**2.33**	**1,600.00**
	5/10/04	**4,500.00**	**18,000.00**	1,600.00	**18,000.00**	42,100.00	**200.00**	**67.00**	**6.30**	**1,000.00**
	1/8/04	**5,600.00**	**22,000.00**	**3,400.00**	**20,000.00**	51,000.00	**100.00**	**18.00**	**4.70**	**1,300.00**
	8/26/03	**3,800.00**	**10,000.00**	1,200.00	6,800.00	21,800.00	**100.00**	**81.00**	**58.00**	**500.00**
	4/2/03	**8,600.00**	**46,000.00**	**3,500.00**	**23,000.00**	81,100.00	**200.00**	**49.00**	**190.00**	**1,000.00**
	1/6/03	**6,770.00**	**84,600.00**	**3,560.00**	**24,740.00**	119,670.00	7.30	**24.00**	**1.90**	**362.00**
RBSL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
MW-9	1/14/05	N/S								
	1/8/04	5.00	1.00	5.00	3.00	14.00	1.00	**36.00**	0.010	5.00
	1/6/03	1.00	2.20	5.70	579.00	587.90	1.00	**24.00**	0.020	**109.00**
SSTL		*9.00*	*1,819.00*	*1,274.00*	*18,185.00*	*NA*	*73.00*	*21.00*	*9.00*	*46.00*
MW-10	1/14/05	**10,200.00**	**34,600.00**	**3,150.00**	**18,400.00**	66,350.00	<1.0	20.00	**152.00**	**388.00**
	1/8/04	**4,200.00**	**14,000.00**	**2,400.00**	12,000.00	32,600.00	**100.00**	6.30	**100.00**	**500.00**
	8/26/03	**12,000.00**	**33,000.00**	**3,200.00**	17,000.00	65,200.00	**250.00**	**210.00**	**450.00**	**1,200.00**
	4/2/03	**11,000.00**	**23,000.00**	**2,400.00**	13,000.00	49,400.00	**200.00**	**49.00**	**190.00**	**1,000.00**
	1/6/03	**7,980.00**	**24,900.00**	**3,540.00**	18,180.00	54,600.00	25.00	**35.00**	**78.00**	**299.00**

Table 5 - Continued

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.02*	*5.00*
MW-11	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**10.00**	**0.10**	<5.00
	5/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	1/8/04	1.00	5.00	1.00	3.00	10.00	1.00	**46.00**	0.010	5.00
	8/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**33.00**	**0.290**	5.00
	4/2/03	1.00	5.00	1.00	3.00	10.00	1.00	**26.00**	0.010	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	**6.00**	0.020	**7.80**
SSTL		*7.00*	*5.00*	*68.00*	*730.00*	*NA*	*5.00*	*7.00*	*7.00*	*36.00*
MW-12	1/14/05	**74.20**	<1.0	<1.0	67.60	141.80	<1.0	6.00	0.23	<5.00
	5/10/04	**23.00**	5.00	1.00	43.00	72.00	1.00	6.80	0.110	5.00
	1/8/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.015	5.00
	8/26/03	**51.00**	5.00	1.00	72.00	129.00	1.00	**37.00**	0.370	5.50
	4/2/03	**12.00**	5.00	1.00	1.80	19.80	1.00	**38.00**	0.240	5.00
	1/6/03	**720.00**	**17.20**	13.40	**1,550.00**	2,300.60	1.00	6.00	**12.00**	**113.00**
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.02*	*5.00*
MW-13	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<5.00
	5/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	1/8/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	8/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**45.00**	0.010	5.00
	4/2/03	1.00	5.00	1.00	3.00	10.00	1.00	**40.00**	0.010	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	5.00	0.020	1.30

Table 5 - Continued

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.51*	*5.00*
MW-14	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**15.00**	<0.02	<5.00
	5/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	1/8/04	1.00	5.00	1.00	3.00	10.00	1.00	**45.00**	0.010	5.00
	8/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**100.00**	0.010	5.00
	4/2/03	1.00	5.00	1.00	3.00	10.00	1.00	**39.00**	0.010	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	5.00	0.020	1.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.05*	*5.00*
MW-15	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8.0	<0.02	<5.00
	5/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	1/8/04	1.00	5.00	1.00	3.00	10.00	1.00	**48.00**	0.010	5.00
	8/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**120.00**	0.010	5.00
	4/2/03	1.00	5.00	1.00	3.00	10.00	1.00	**36.00**	0.010	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	9.00	0.020	1.00
MW-16	1/14/05	N/S								
	1/8/04	1.00	5.00	1.00	3.00	10.00	1.00	**140.00**	0.010	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	**18.00**	0.020	1.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.02*	*5.00*
MW-17	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	9.0	<0.02	<5.00
	5/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	1/8/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.020	5.00
	8/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**42.00**	0.010	5.00
	4/2/03	1.00	5.00	1.00	3.00	10.00	1.00	**17.00**	0.010	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	**44.00**	0.020	1.00

Table 5 - Continued

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.12*	*5.00*
MW-18	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**17.0**	<0.02	<5.00
	5/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	1/8/04	1.00	5.00	1.00	3.00	10.00	1.00	**97.00**	0.010	5.00
	8/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**100.00**	0.010	5.00
	4/2/03	1.00	5.00	1.00	3.00	10.00	1.00	**50.00**	0.010	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	5.00	0.020	1.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.02*	*5.00*
MW-19	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<0.02	<5.00
	5/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	1/8/04	1.00	1.00	5.00	1.00	8.00	3.00	1.00	0.010	5.00
	8/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**18.00**	0.010	5.00
	4/2/03	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	6.00	0.020	1.00
MW-20	1/14/05	N/S								
	1/8/04	1.00	1.00	5.00	1.00	8.00	3.00	**130.00**	0.010	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	11.00	0.020	1.00
TW-1	1/14/05	**700.0**	7.8	82.9	1700.0	2490.7	8.1	<5.0	**0.47**	**79.8**
	1/8/04	**2,000.00**	**2,500.00**	**1,100.00**	5,800.00	11,400.00	**50.00**	5.00	**0.380**	**250.00**
	1/6/03	**3,380.00**	**1,510.00**	**1,860.00**	9,370.00	16,120.00	25.00	6.00	**5.200**	**160.00**
SSTL		*5.00*	*8.00*	*5.00*	*180.00*	*NA*	*5.00*	*2.00*	*0.05*	*18.00*
TW-2	1/14/05	**3,100.00**	**605.00**	**175.00**	**1,490.00**	5,370.00	**31.90**	<5.0	**0.59**	**172.00**
	5/10/04	**3,700.00**	**640.00**	**160.00**	**1,800.00**	6,300.00	5.00	**5.00**	**1.20**	**170.00**
	1/8/.04	**2,800.00**	**460.00**	**14.00**	**1,000.00**	4,274.00	**22.00**	**5.40**	**1.10**	**34.00**
	8/26/03	**3,000.00**	**450.00**	**79.00**	**1,700.00**	5,229.00	**10.00**	**6.80**	**0.35**	**160.00**
	4/2/03	**3,300.00**	**1,500.00**	**220.00**	**2,000.00**	7,020.00	**50.00**	**10.00**	**1.10**	**250.00**
	1/6/03	**6,620.00**	**6,860.00**	**620.00**	**4,110.00**	18,210.00	**50.20**	**6.00**	**5.20**	**160.00**

Table 5 - Continued

SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Crook (pre)	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	0.07	<5.00
Crook (post)	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<0.02	<5.00
Strife	5/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	1/8/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	8/26/03	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	4/2/03	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	**28.00**	0.020	1.00
SSTL		*5.00*	*2.00*	*2.00*	*26.00*	*NA*	*2.00*	*5.00*	*5.00*	*5.00*
Swift (pre)	2/9/2005	**193.00**	ND	ND	**69.90**	262.90	ND	N/S	N/S	9.60
Swift (post)	2/9/2005	4.20	ND	ND	3.70	7.90	ND	N/S	N/S	ND
Swift (pre)	1/14/05	**400.0**	<1.0	<1.0	**110.0**	510.0	<1.0	<5.0	2.24	**12.00**
Swift (post)	1/14/05	**22.0**	<1.0	<1.0	3.2	25.2	<1.0	<5.0	0.09	<5.00
Swift	5/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.03	5.00
	1/8/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.01	5.00
	8/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**9.80**	0.02	5.00
	4/2/03	1.00	5.00	1.00	3.00	10.00	1.00	**23.00**	0.01	4.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	10.00	0.02	1.00
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Hill (pre)	1/14/05	**2.8**	<1.0	<1.0	<1.0	2.8	<1.0	**10.0**	0.11	<5.00
Hill (post)	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<0.02	<5.00
Hill	5/10/04	1.00	5.00	1.00	3.00	10.00	1.00	**6.10**	0.01	5.00
	1/8/04	1.00	5.00	1.00	3.00	10.00	1.00	**22.00**	0.01	5.00
	8/26/03	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.01	5.00
	4/2/03	1.00	5.00	1.00	3.00	10.00	1.00	**23.00**	0.01	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	**9.00**	0.02	4.80
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Smith	1/14/05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**51.0**	<0.02	<5.00
	5/10/04	1.00	5.00	1.00	3.00	10.00	1.00	**41.00**	0.01	5.00
	1/8/04	1.00	5.00	1.00	3.00	10.00	1.00	**120.00**	0.01	5.00
	8/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**5.20**	0.01	5.00
	4/2/03	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.01	5.00
	1/6/03	1.00	1.00	1.00	3.00	6.00	1.00	5.00	0.02	1.00

Appendix E

Non-Hazardous Waste Manifest and Certificate of Disposal

Please print or type
(Form designed for use on elite (12-pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	
	GK7290		01/21/05

3. Generator's Name and Mailing Address: SMITH'S GROCERY
3176 CHARLOTTE HWY
YORK, SC

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
SEI ENVRIONMENTAL, INC		803-788-2535
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address	US EPA ID Number	C. Facility's Phone
G & K TANK SERVICES PO BOX 1384 SUMTER, SC 29151	987573557	800-800-6840

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED WATER PROFILE #313			44.0	gal
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
S. Collett	S. Collett	1	21	05

GENERATOR

TRANSPORTER

FACILITY

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL - RETURN TO GENERATOR

G & K
TANK SERVICES, INC.
Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-4593 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 44.0 gallons
Smith's Grocery
York, SC

Contaminant NonHazardous Petroleum
Contaminated Water

This is to certify the above ~~soil~~ water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. Smith

Date 01/21/05

Appendix F

Table 6- Fourth Quarter 2004 Concentration Reduction Calculation

Table 6

Concentration Reduction Calculations for 4th Quarter 2004
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
Swift pre-filter)	Initial	5.00	2.00	2.00	26.00	2.00	5.00	5.00	5.00	
	SSTL	5.00	2.00	2.00	26.00	2.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	**400.00**	<1.0	<1.0	110.00	<1.0	<5.0	2.240	12.00	
	Subsequent > SSTL	395.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	402.00
Hill (pre-filter)	Initial	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	**2.80**	<1.0	<1.0	<1.0	<1.0	**10.00**	0.110	<5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	5.00
Crook (pre-filter, formerly Strife)	Initial	2.00	2.00	2.00	2.00	2.00	5.00	**5.00**	5.00	
	SSTL	2.00	2.00	2.00	2.00	2.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	0.07	<5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Smith	Initial	**5.00**	5.00	5.00	15.00	5.00	5.00	**5.00**	5.00	
	SSTL	5.00	5.00	5.00	15.00	5.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	<1.0	<1.0	<1.0	<1.0	<1.0	**51.00**	<0.02	<5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	46.00	0.00	0.00	46.00

Table 6- Continued

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-1	Initial	**1,100.00**	**19,000.00**	**2,700.00**	**10,000.00**	**80.00**	2.00	**0.32**	**770.00**	
	SSTL	11.00	2,223.00	1,558.00	10,000.00	80.00	2.00	0.32	56.00	
	Initial > SSTL	1,089.00	16,777.00	1,142.00	0.00	0.00	0.00	0.00	714.00	19,722.00
	Subsequent	**270.00**	1,440.00	900.00	5,620.00	<1.0	<5.0	0.09	**268.00**	
	Subsequent > SSTL	259.00	0.00	0.00	0.00	0.00	0.00	0.00	212.00	471.00
MW-2	Initial	**25,000.00**	**39,000.00**	**3,500.00**	**15,000.00**	**200.00**	**1,300.00**	**179.00**	**200.00**	
	SSTL	10.00	2,021.00	1,416.00	15,000.00	81.00	30.00	10.00	51.00	
	Initial > SSTL	24,990.00	36,979.00	2,084.00	0.00	119.00	1,270.00	169.00	149.00	65,760.00
	Subsequent	**20,600.00**	**36,400.00**	**2,960.00**	**17,200.00**	**940.00**	**1,230.00**	**186.00**	**862.00**	
	Subsequent > SSTL	20,590.00	34,379.00	1,544.00	2,200.00	859.00	1,200.00	176.00	811.00	61,759.00
MW-6	Initial	**3,400.00**	**14,000.00**	**1,900.00**	8,000.00	**80.00**	**39.00**	**4.83**	**700.00**	
	SSTL	6.00	1,212.00	850.00	8,000.00	48.00	18.00	4.83	31.00	
	Initial > SSTL	3,394.00	12,788.00	1,050.00	0.00	32.00	21.00	0.00	669.00	17,954.00
	Subsequent	**1,070.00**	**2,960.00**	718.00	3,990.00	<1.0	**107.00**	1.67	**116.00**	
	Subsequent > SSTL	1,064.00	1,748.00	0.00	0.00	0.00	89.00	0.00	85.00	2,986.00
MW-7	Initial	**2,000.00**	**4,100.00**	**3,100.00**	**15,000.00**	**200.00**	**110.00**	**0.66**	**1,400.00**	
	SSTL	6.00	1,212.00	850.00	12,123.00	48.00	18.00	0.66	31.00	
	Initial > SSTL	1,994.00	2,888.00	2,250.00	2,877.00	152.00	92.00	0.00	1,369.00	11,622.00
	Subsequent	**565.00**	**9,180.00**	**3,570.00**	**24,400.00**	<1.0	**24.00**	**175.00**	**1,370.00**	
	Subsequent > SSTL	559.00	7,968.00	2,720.00	12,277.00	0.00	6.00	174.34	1,339.00	25,043.34

Table 6 - Continued

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-8	Initial	**9,500.00**	**56,000.00**	**5,300.00**	16,000.00	**200.00**	4.00	0.48	**820.00**	
	SSTL	12.00	2,424.00	1,700.00	16,000.00	96.00	4.00	0.48	62.00	
	Initial > SSTL	9,488.00	53,576.00	3,600.00	0.00	104.00	0.00	0.00	758.00	67,526.00
	Subsequent	**6,780.00**	**38,200.00**	**4,340.00**	**28,200.00**	<1.0	<5.0	**2.33**	**1,600.00**	
	Subsequent > SSTL	6,768.00	35,776.00	2,640.00	12,200.00	0.00	0.00	1.85	1,538.00	58,923.85
MW-10	Initial	**5,800.00**	**26,000.00**	**3,200.00**	**19,000.00**	**800.00**	21.00	**95.30**	**800.00**	
	SSTL	9.00	1,819.00	1,274.00	18,185.00	73.00	21.00	9.00	46.00	
	Initial > SSTL	5,791.00	24,181.00	1,926.00	815.00	727.00	0.00	86.30	754.00	34,280.30
	Subsequent	**10,200.00**	**34,600.00**	**3,150.00**	**18,400.00**	<1.0	20.00	**152.00**	**388.00**	
	Subsequent > SSTL	10,191.00	32,781.00	1,876.00	215.00	0.00	0.00	143.00	342.00	45,548.00
MW-11	Initial	5.00	5.00	5.00	10.00	5.00	6.00	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.02	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
	Subsequent	<1.0	<1.0	<1.0	<1.0	<1.0	10.00	0.10	<5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	5.00
MW-12	Initial	**390.00**	5.00	68.00	730.00	5.00	7.00	**20.80**	**52.00**	
	SSTL	7.00	5.00	68.00	730.00	5.00	7.00	7.00	36.00	
	Initial > SSTL	383.00	0.00	0.00	0.00	0.00	0.00	13.80	16.00	412.80
	Subsequent	**74.20**	<1.0	<1.0	67.60	<1.0	6.00	0.23	<5.00	
	Subsequent > SSTL	67.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.20

Table 6 - Continued

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-13	Initial	5.00	5.00	5.00	10.00	**75.00**	5.00	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.02	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	70.00	0.00	0.00	0.00	70.00
	Subsequent	<1.0	<1.0	<1.0	<1.0	<1.0	**26.00**	<0.02	<5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	21.00	0.00	0.00	21.00
MW-14	Initial	5.00	5.00	5.00	10.00	5.00	**37.00**	0.51	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.51	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	32.00	0.00	0.00	32.00
	Subsequent	<1.0	<1.0	<1.0	<1.0	<1.0	**15.00**	<0.02	<5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	10.00
MW-15	Initial	5.00	5.00	5.00	10.00	5.00	**39.00**	**0.51**	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.05	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	24.00	0.46	0.00	24.46
	Subsequent	<1.0	<1.0	<1.0	<1.0	<1.0	8.00	<0.02	<5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-17	Initial	5.00	5.00	5.00	10.00	5.00	**29.00**	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.02	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	14.00	0.00	0.00	14.00
	Subsequent	<1.0	<1.0	<1.0	<1.0	<1.0	9.00	<0.02	<5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 6 - Continued

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-18	Initial	5.00	5.00	5.00	10.00	5.00	**42.00**	0.12	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.12	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	27.00	0.00	0.00	27.00
	Subsequent	<1.0	<1.0	<1.0	<1.0	<1.0	**17.00**	<0.02	<5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-19	Initial	5.00	5.00	5.00	10.00	5.00	**51.00**	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.02	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	36.00	0.00	0.00	36.00
	Subsequent	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<0.02	<5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TW-2	Initial	**400.00**	8.00	5.00	180.00	5.00	2.00	0.05	18.00	
	SSTL	5.00	8.00	5.00	180.00	5.00	2.00	0.05	18.00	
	Initial > SSTL	395.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	395.00
	Subsequent	**3,100.00**	**605.00**	**175.00**	**1,490.00**	**31.90**	<5.0	**0.59**	**172.00**	
	Subsequent > SSTL	3,095.00	597.00	170.00	1,310.00	26.90	0.00	0.54	154.00	5,353.44
TW-3	Initial	5.00	5.00	5.00	10.00	5.00	2.00	**0.23**	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	2.00	0.23	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<0.02	<5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals	Initial > SSTL	(Sum of Initial Concentration Above SSTL for all Wells)								217,876.56
	Subsequent > SSTL	(Sum of Subsequent Concentration Above SSTL for all Wells)								200,640.83

Note: Bold Concentrations are greater than the respective SSTL.
CoC Mass Reduction = (Sum of Initial Conc. > SSTL - Sum of Subsequent Conc. > SSTL)/
(Sum of Initial Conc. > SSTL) * 100
CoC Mass Reduction = (217,876.56 - 200,640.83) / (217,876.56) * 100
CoC Mass Reduction = 7.91%

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

FEB 14 2005

MR BILL WOOD
SEI ENVIRONMENTAL
3021 MCNAUGHTON DR STE 9
COLUMBIA SC 29223

Re: **Notice of Complaint**
UST Permit #09319, Sunoco 0616-1293, 1754 Saluda St., Rock Hill, SC
UST Permit #09322, Smith's Grocery, SC Hwy 49, York, SC
UST Permit #14457, Captain Dick's Marina, 4123 US Bus 17 S., Murrells Inlet, SC
UST Permit #14541, Neely's Country Corner, 2150 Neely Store Rd., Rock Hill, SC

Dear Mr. Wood:

In accordance with the specifications and conditions of the contracts for the corrective action at the referenced facilities, a Corrective Action Status Evaluation (CASE) Report is to be submitted on a quarterly basis. To date the required reports have not been received. The CASE Report for UST Permit #09319 was to be submitted by December 15, 2004. The CASE Report for UST Permit #09322 was to be submitted by December 15, 2004. The CASE Report for UST Permit #14457 was to be submitted by January 15, 2005. The CASE Report for UST Permit #14541 was to be submitted by January 15, 2005. If the required reports are not received within thirty days from the date of this letter, the UST Program may take further action based upon the specifications and conditions of the contracts.

Please feel free to contact me at (803) 896-6397, if you have any questions or need additional information.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Cc: Technical Files

D H E C
PROMOTE PROTECT PROSPER
C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

NOV 29 2004

DAVID PITTMAN
SEI ENVIRONMENTAL INC
3021 MCNAUGHTON DR
SUITE 9
COLUMBIA SC 29223

Re: Progress of Pay For Performance Cleanups
UST Permits #02476, 02542, 02724, 03467, 03713, 08376, 09322, 11585, 11732, 11756, 14457, 14541

Dear Mr. Pittman:

As you know, SEI Environmental (SEI) is entered into a number of Pay for Performance (PFP) contracts with the State of South Carolina to perform active corrective action (ACA) activities at facilities with petroleum releases. These contracts state in detail how the ACA process and reporting procedure are to be implemented. Based upon a review of recent Corrective Action System Evaluation (CASE) reports for the above referenced sites, the Department has noted a lack of progress toward the corrective action goals established for the referenced sites. SEI should be aware of these and take appropriate measures to ensure that these projects get on track for completion. Although we appreciate your recent communication and diligence in the preparation of late CASE reports, it seems that meeting the requirements of the existing corrective action contracts is an ongoing struggle. Recently the SEI office in Columbia experienced some loss of personnel. The Department is concerned with the apparent shortage of personnel working on DHEC UST correctives action contracts as it relates to the lack of progress. Please provide a specific strategy to address each of the projects listed below.

mit #02724 – Minutemen Amoco 2
The CASE Report received on June 30, 2004 documented this project to be 61% complete. As the corrective action started in June 1999, this project is significantly behind schedule. Appropriate actions are needed to move this project to completion.

mit #14457 – Captain Dick's Marina
The CASE Report received on July 14, 2004 documented the continued presence of free product at the site. As the corrective action started in May 2001, this project is significantly behind schedule. Appropriate actions are needed to move this project to completion.

mit #03713 – Pantry 3229 dba Food Chief
The CASE Report received on August 25, 2004 documented the continued presence of free product at the site. As the corrective action started in October 2000, this project is significantly behind schedule. Appropriate actions are needed to move this project to completion.

mit #09322 – Smith's Grocery
The CASE Report received on June 9, 2004 documented this project to be 40% complete. As the corrective action was started in October 2001, this project is significantly behind schedule. Appropriate actions are needed to move this project to completion.

mit #14541 – Neely's Country Store

The CASE Report received on July 7, 2004 documented that no mass reduction has occurred on this project after three quarters of treatment. As there are impacted water supply wells associated with this release, the lack of progress is unacceptable. Immediate action is needed to move this project forward.

mit #11585 – Country Store

The CASE Report received on April 13, 2004 documented this project to be 57% complete. As the corrective action was started in September 2000, this project is significantly behind schedule. Appropriate actions are needed to move this project to completion.

mit #08376 – Abernathy Grocery

The CASE Report received on July 7, 2004 documented this project to be 63% complete. As the corrective action was started in April 1998, this project is significantly behind schedule. Appropriate actions are needed to move this project to completion.

mit #03467 – Cash and Carry Country Store

As the corrective action was started in October 2001, this project is behind schedule. Appropriate actions are needed to move this project to completion.

A response to this correspondence is requested no later than January 2, 2005.
Please feel free to contact me at (803) 896-6249 if you have any questions or need additional information.

Sincerely,

Kent M. Coleman

Kent M.Coleman, P.G., Director
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

Cc: Lee Monts, Manager, Southwestern SC Corrective Action Section
Chris Doll, Manager, Northeastern SC Corrective Action Section
Technical Files #02476, 02542, 02724, 03467, 03713, 08376, 09322, 11585, 11732, 11756, 14457, 14541

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

OCT 14 2004

LOUIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received October 12, 2004
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the report submitted by SEI Environmental, Inc. This report documents the results of the sampling activities. All future sampling activities should include pre- and post-GAC analyses so that the UST Program can ensure that the carbon units are being maintained in accordance with the bid specifications. In addition, the UST Program is concerned about the lack of progress. SEI Environmental received Corrective Action Plan approval in September 2001. Based on the proposed time frame of 30 months, corrective action activities should have been completed in March 2004; however, there is only a 37% reduction in the petroleum concentrations. SEI should evaluate the current remediation methodology and propose any necessary modifications in order to expedite the remediation. The next corrective action status evaluation report should be submitted on or before December 15, 2004.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: SEI Environmental, Inc., 3021 McNaughton Dr, Ste 9, Columbia, SC 29223
Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

OCT 14 2004

ROBERT STRIFE
3035 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received October 12, 2004
York County

Dear Mr. Strife:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

OCT 14 2004

TONY & SUSAN HILL
3049 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received October 12, 2004
York County

Dear Mr. & Mrs. Hill:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

OCT 14 2004

SHAUN SWIFT
3043 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received October 12, 2004
York County

Dear Mr. Swift:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

OCT 14 2004

FRONTIS HEMPHILL
2146 OLD MCKINNEY RD
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received October 12, 2004
York County

Dear Mr. Hemphill

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Monitoring Well MW-3 was sampled and no petroleum compounds were detected. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
OCT 12 2004
UNDERGROUND STORAGE
TANK PROGRAM

September 27, 2004

Ms. Debra Thoma, Hydrogeologist
SCDHEC - UST Program
Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201

Re: Summary of Corrective Action and Gauging Results
Smith's Grocery, First Quarter 2004
#176 Charlotte Highway (Highway 49)
York, South Carolina 29745
UST Permit # 09322

Dear Ms. Th0ma;

SEI Environmental, Inc. (SEI) submits the following summary of gauging results and laboratory analytical results for samples collected on August 17-18, 2004. On June 14, 2004, SCDHEC submitted to Ms. Lois Smith the attached directive letter for the Corrective Action Plan. A copy of the directive letter can be found in Appendix A. Attached is Figure 1, a topographic map depicting the location of the site and Figure 2, a site map illustrating the location of the monitoring wells.

August 17-18, 2004 SEI personnel were on site to gauge water levels, and check for the presence of free product. No free product was observed in Monitor Well MW-1. Please note that MW-4 and MW-20 could not be located. Attached in Appendix B is Table 1, which summarizes the August 17-18, 2004 gauging results. Attached is Figure 3, is a potentiometric map based upon the August 17-18, 2004 data.

August 17-18, 2004 SEI personnel were on site to gauge the monitoring wells, remove free product, if applicable, and collect groundwater samples. Twenty-one (21) monitoring wells were gauged. Upon completion of gauging, thirteen (13) monitoring wells, MW-3, MW-5, MW-11, MW-13 through MW-19, and TW-1 through TW-3 were purged and field screened. The remaining monitoring wells were not purged. Please note that petroleum odor was observed at MW-1, MW-2, MW-6 through MW-8, MW-9, MW-10, MW-12, and TW-2, a total of eight (8) monitoring wells. No free product was observed. Attached in Appendix B is Table 2, an historical summary of gauging results including groundwater elevation data. One Hundred and thirty-five(135) gallons of petroleum-impacted water was generated from the purging of the thirteen(13) monitoring wells. Attached in Appendix C is Table 3, which summarizes the August 17-18, 2004

SEI
Environmental, Inc.

gauging field information and copies of the Field Data Information Sheet(s) for Ground Water Sampling. Upon completion of purging activities, a representative sample was collected from each sample point. Each sample was submitted to Environmental Science Laboratory in Mt. Joliet Tennessee for analysis for Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) by EPA method 8260B, Methyl Tert-butyl Ether (MTBE) by EPA method 8260B, Naphthalene by EPA method 8260B, Lead by EPA method 6010B, and Ethylene Dibromide (EDB) by EPA method 8011. Attached in Appendix D is Table 4, which summarizes the August 17-18, 2004 laboratory analytical results; Table 5, a historical summary of the laboratory analytical data; copies of the laboratory analytical results, and a copy of the Chain of Custody. Attached is Figure 4, a CoC map illustrating the August 17-18, 2004 laboratory analytical data.

August 19, 2004 the 135 gallons of petroleum-impacted water, which was generated from the purging of the sample points on August 17-18, 2004, was disposed at G & K Tank Services, Inc. in Sumter, SC. Attached in Appendix E are copies of the Non-Hazardous Waste Manifest and Certificate of Disposal.

The evaluation of the corrective action activities' effectiveness consists of comparing the March 8, 2004 laboratory analytical data against the baseline SSTL concentrations and determining the percent of total concentration reduction. The percent of total concentration reduction is calculated by using the following formula:

> Percent of Total Concentration Reduction = (Initial Mass Above SSTL) – (Current Mass Above SSTL) *(100)) / (Initial Mass Above SSTL)

The calculation for the August 7-18, 2004 Percent of Total Concentration Reduction was found to be 37.34 %. Attached in Appendix F is Table 6, which illustrates the concentration reduction calculation.

SEI will collect groundwater samples in the fourth quarter 2004 for further evaluation of the corrective action activities. Upon receipt of the laboratory analytical data, SEI will submit a report summarizing the findings.

If you have any questions and / or comments, concerning the information provided in this document, please contact David Pittman at (803) 788-2535.

Sincerely,

David B. Pittman
Project Manager
SEI – Columbia Office

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 21054 RANDY R. CASEY

9/22/04

Randy Casey
P.E. # 21054

Attachment(s)

cc: Ms. Lois B. Smith, 3715 Charlotte Highway, York, South Carolina 29745
SEI Files

SEI
Environmental, Inc.

Appendix A

SCDHEC Directive Letter

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

RECEIVED
JUN 16 2004

JUN 14 2004

LOUIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received June 9, 2004
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the report submitted by SEI Environmental, Inc. This report documents the results of the sampling activities. All future sampling activities should include pre- and post-GAC analyses so that the UST Program can ensure that the carbon units are being maintained in accordance with the bid specifications. In addition, the UST Program is concerned about the lack of progress. SEI Environmental received Corrective Action Plan approval in September 2001. Based on the proposed time frame of 30 months, corrective action activities should have been completed in March 2004; however, there is only a 40% reduction in the petroleum concentrations. SEI should evaluate the current remediation methodology and propose any necessary modifications in order to expedite the remediation. The next corrective action status evaluation report should be submitted on or before August 15, 2004.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma

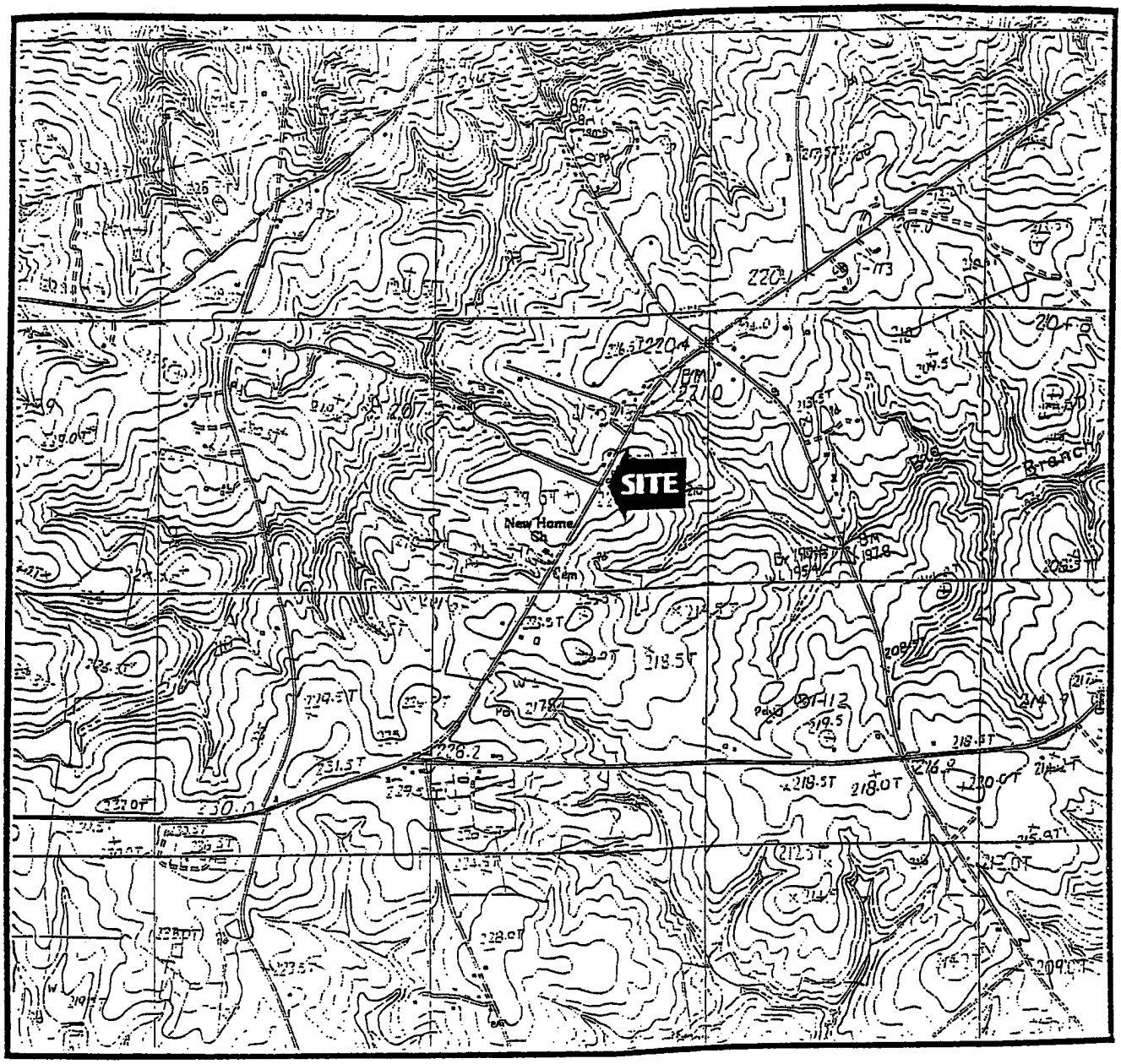
Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

emailed to
9/1/04 PM
as per
PBP 6/18/04

cc: Paul Bekish, SEI Environmental, Inc., 3021 McNaughton Dr, Ste 9, Columbia, SC 29223
Technical file

7.5 MINUTE SERIES(TOPOGRAPHIC)

CLOVER QUADRANGLE



SCALE 1:24000

1 MILE

1 0

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

1 .5 0

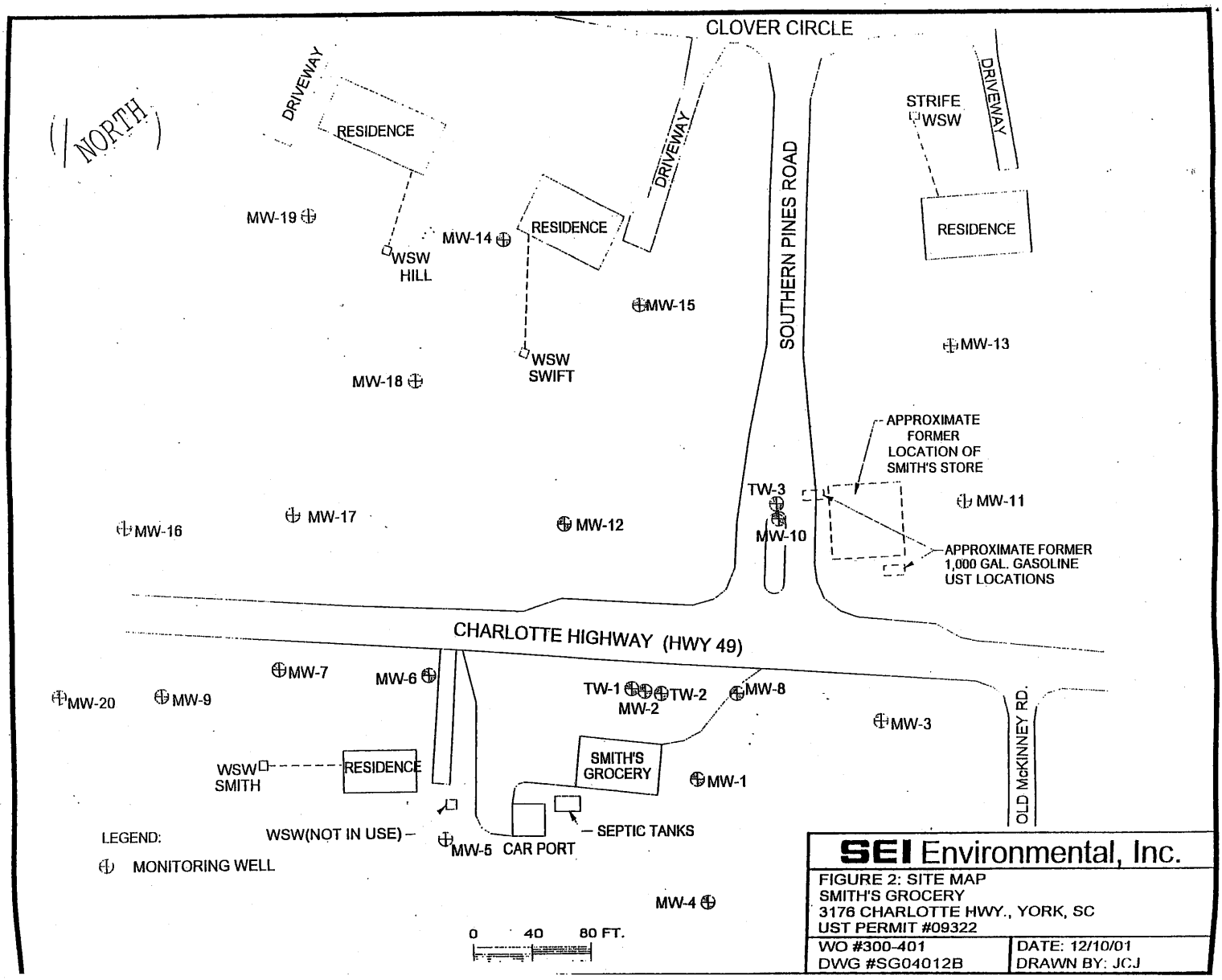
NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

WC #300-401
DWG #

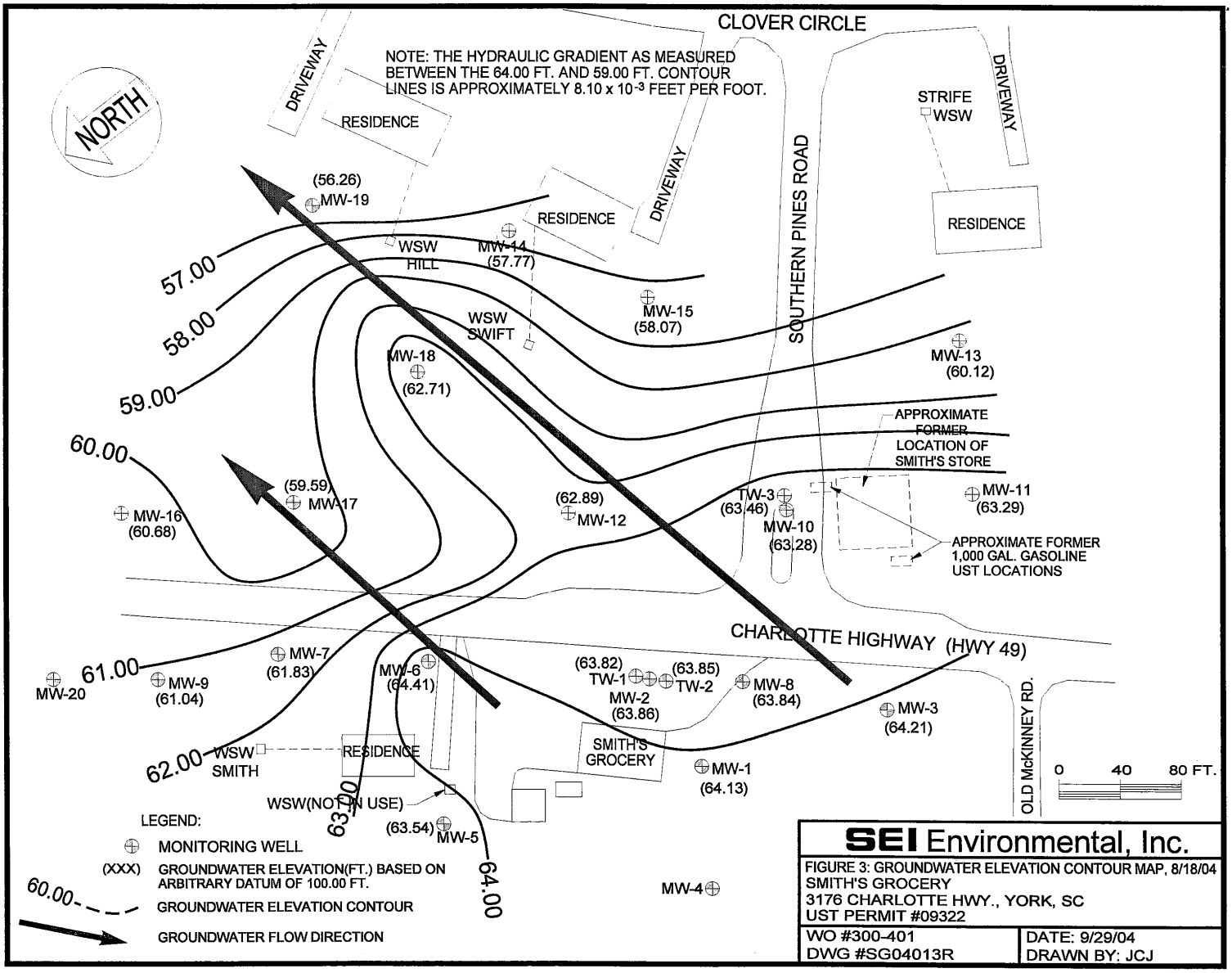
DATE: 12/7/01
DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

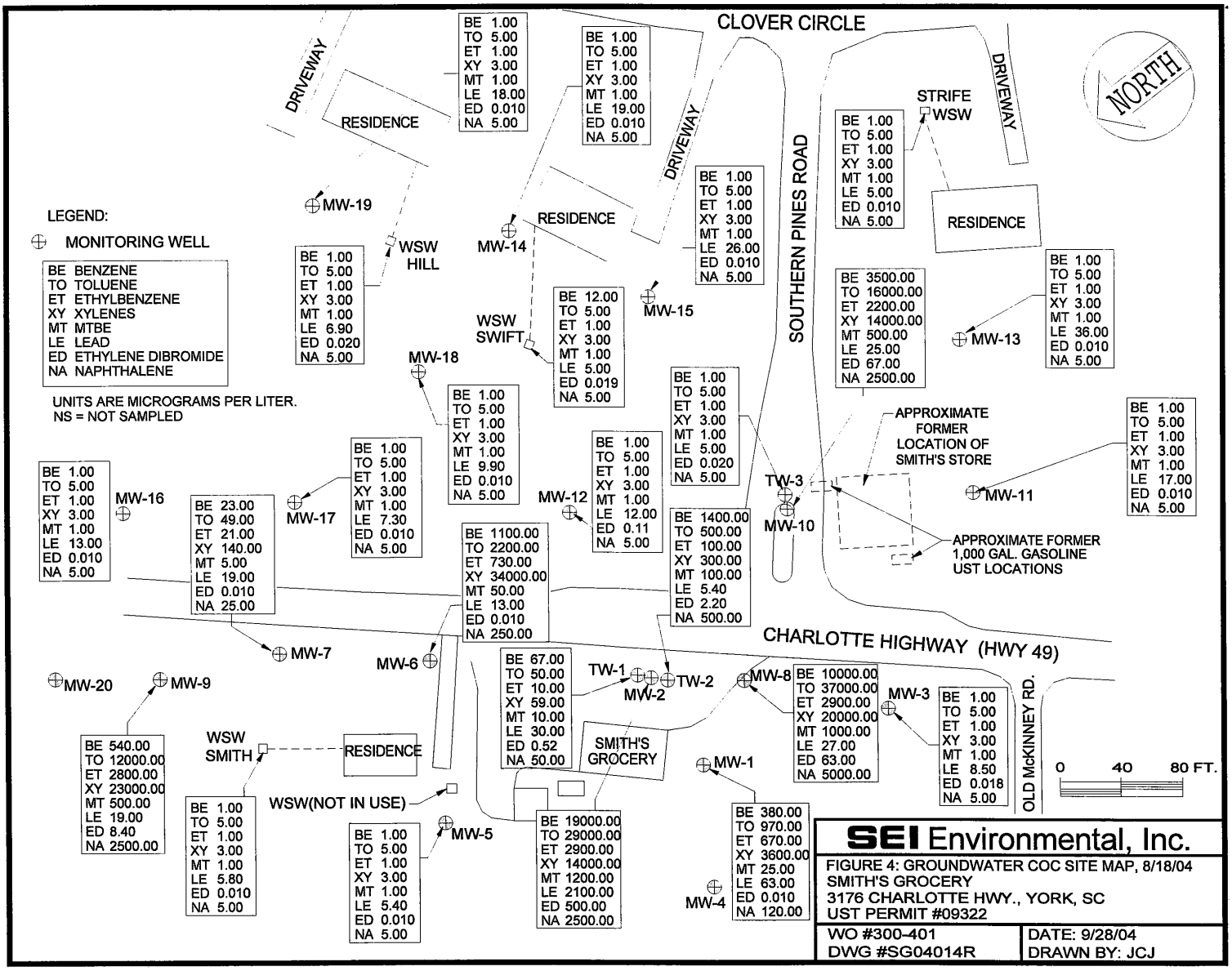
WO #300-401	DATE: 12/10/01
DWG #SG04012B	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: GROUNDWATER ELEVATION CONTOUR MAP, 8/18/04
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 9/29/04
DWG #SG04013R	DRAWN BY: JCJ


CLOVER CIRCLE
DRIVEWAY
RESIDENCE
DRIVEWAY
DRIVEWAY
SOUTHERN PINES ROAD
STRIFE
WSW
RESIDENCE
NORTH
LEGEND:
MONITORING WELL
BE BENZENE
TO TOLUENE
ET ETHYLBENZENE
XY XYLENES
MT MTBE
LE LEAD
ED ETHYLENE DIBROMIDE
NA NAPHTHALENE
UNITS ARE MICROGRAMS PER LITER.
NS = NOT SAMPLED
MW-19
WSW
HILL
MW-14
RESIDENCE
WSW
SWIFT
MW-15
MW-18
MW-13
APPROXIMATE
FORMER
LOCATION OF
SMITH'S STORE
MW-11
MW-16
MW-17
MW-12
TW-3
MW-10
APPROXIMATE FORMER
1,000 GAL. GASOLINE
UST LOCATIONS
CHARLOTTE HIGHWAY (HWY 49)
MW-7
MW-6
MW-20
MW-9
TW-1
MW-2
TW-2
MW-8
MW-3
OLD McKINNEY RD.
WSW
SMITH
RESIDENCE
SMITH'S
GROCERY
MW-1
WSW(NOT IN USE)
MW-5
MW-4
0
40
80 FT.
SEI Environmental, Inc.
FIGURE 4: GROUNDWATER COC SITE MAP, 8/18/04
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322
WO #300-401
DWG #SG04014R
DATE: 9/28/04
DRAWN BY: JCJ

SEI
Environmental, Inc.

Appendix B

Table 1 – August 17-18, 2004 Gauging Results

Table 2 – Historical Summary of Gauging Results

Table 1

Summary of Groundwater Elevations - August 17-18, 2004

Smith's Grocery
Ridgeland, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-1	8/17-18/04	35.00	27.03	N/A	N/A	91.16	64.13
MW-2	8/17-18/04	38.00	30.71	N/A	N/A	94.57	63.86
MW-3	8/17-18/04	35.00	27.7	N/A	N/A	91.91	64.21
MW-4	8/17-18/04	27.00	**	N/A	N/A	86.20	N/A
MW-5	8/17-18/04	30.00	25.75	N/A	N/A	89.29	63.54
MW-6	8/17-18/04	37.00	29.50	N/A	N/A	93.91	64.41
MW-7	8/17-18/04	36.00	29.85	N/A	N/A	91.68	61.83
MW-8	8/17-18/04	38.00	30.88	N/A	N/A	94.72	63.84
MW-9	8/17-18/04	36.00	29.5	N/A	N/A	90.54	61.04
MW-10	8/17-18/04	44.00	36.49	N/A	N/A	99.77	63.28
MW-11	8/17-18/04	44.00	37.17	N/A	N/A	100.46	63.29
MW-12	8/17-18/04	44.00	36.72	N/A	N/A	99.61	62.89
MW-13	8/17-18/04	47.00	40.27	N/A	N/A	100.39	60.12
MW-14	8/17-18/04	50.00	41.12	N/A	N/A	98.89	57.77
MW-15	8/17-18/04	50.00	42.11	N/A	N/A	100.18	58.07
MW-16	8/17-18/04	37.00	29.23	N/A	N/A	89.91	60.68
MW-17	8/17-18/04	40.00	34.87	N/A	N/A	94.46	59.59
MW-18	8/17-18/04	46.00	35.43	N/A	N/A	98.14	62.71
MW-19	8/17-18/04	50.00	42.01	N/A	N/A	98.27	56.26
MW-20	8/17-18/04	35.00	**	N/A	N/A	88.35	N/A
TW-1	8/17-18/04	61.00	30.90	N/A	N/A	94.72	63.82
TW-2	8/17-18/04	88.00	30.87	N/A	N/A	94.72	63.85
TW-3	8/17-18/04	71.00	35.75	N/A	N/A	99.21	63.46

Note: ** Not located

Table 2

Historical Summary of Gauging Events

Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-1	8/17-18/04	35.00	27.03	N/A	N/A	91.16	64.13
	05/10/04		26.90	N/A	N/A		64.26
	01/08/04		25.46	N/A	N/A		65.70
	08/26/03		24.07	N/A	N/A		67.09
	04/02/03		28.05	N/A	N/A		63.11
	01/06/03		29.88	N/A	N/A		61.28
MW-2	8/17-18/04	38.00	30.71	N/A	N/A	94.57	63.86
	05/10/04		26.68	N/A	N/A		67.89
	01/08/04		29.40	N/A	N/A		65.17
	08/26/03		27.81	N/A	N/A		66.76
	04/02/03		31.92	N/A	N/A		62.65
	01/06/03		33.76	N/A	N/A		60.81
MW-3	8/17-18/04	35.00	27.76	N/A	N/A	91.91	64.15
	05/10/04		28.83	N/A	N/A		63.08
	01/08/04		26.46	N/A	N/A		65.45
	08/26/03		25.98	N/A	N/A		65.93
	04/02/03		29.02	N/A	N/A		62.89
	01/06/03		30.87	N/A	N/A		61.04
MW-4	05/10/04	27.00	25.94	N/A	N/A	86.20	60.26
	01/08/04		20.73	N/A	N/A		65.47
	08/26/03		15.07	N/A	N/A		71.13
	04/02/03		22.73	N/A	N/A		63.47
	01/06/03		24.58	N/A	N/A		61.62
MW-5	8/17-18/04	30.00	25.75	N/A	N/A	89.29	63.54
	05/10/04		25.57	N/A	N/A		63.72
	01/08/04		24.49	N/A	N/A		64.80
	08/26/03		22.70	N/A	N/A		66.59
	04/02/03		25.00	N/A	N/A		64.29
	01/06/03		27.96	N/A	N/A		61.33
MW-6	8/17-18/04	37.00	29.50	N/A	N/A	93.91	64.41
	05/10/04		29.91	N/A	N/A		64.00
	01/08/04		29.58	N/A	N/A		64.33
	08/26/03		27.51	N/A	N/A		66.40
	04/02/03		31.66	N/A	N/A		62.25
	01/06/03		33.57	N/A	N/A		60.34

Table 2 - Continued
Historical Summary of Gauging Events
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-7	8/17-18/04	36.00	29.85	N/A	N/A	91.68	61.83
	05/10/04		27.78	N/A	N/A		63.90
	01/08/04		28.40	N/A	N/A		63.28
	08/26/03		26.88	N/A	N/A		64.80
	04/02/03		29.40	N/A	N/A		62.28
	01/06/03		31.57	N/A	N/A		60.11
MW-8	8/17-18/04	38.00	30.88	N/A	N/A	94.72	63.84
	05/10/04		29.90	N/A	N/A		64.82
	01/08/04		29.47	N/A	N/A		65.25
	08/26/03		27.58	N/A	N/A		67.14
	04/02/03		32.02	N/A	N/A		62.70
	01/06/03		33.84	N/A	N/A		60.88
MW-9	8/17-18/04	36.00	29.50	N/A	N/A	90.54	61.04
	05/10/04		28.69	N/A	N/A		61.85
	01/08/04		27.33	N/A	N/A		63.21
	08/26/03		26.10	N/A	N/A		64.44
	04/02/03		28.20	N/A	N/A		62.34
	01/06/03		30.41	N/A	N/A		60.13
MW-10	8/17-18/04	44.00	36.49	N/A	N/A	99.77	63.28
	05/10/04		35.50	N/A	N/A		64.27
	01/08/04		35.04	N/A	N/A		64.73
	08/26/03		33.36	N/A	N/A		66.41
	04/02/03		37.77	N/A	N/A		62.00
	01/06/03		39.71	N/A	N/A		60.06
MW-11	8/17-18/04	44.00	37.17	N/A	N/A	100.46	63.29
	05/10/04		36.19	N/A	N/A		64.27
	01/08/04		35.70	N/A	N/A		64.76
	08/26/03		33.88	N/A	N/A		66.58
	04/02/03		38.36	N/A	N/A		62.10
	01/06/03		40.37	N/A	N/A		60.09
MW-12	8/17-18/04	44.00	36.72	N/A	N/A	99.61	-36.72
	05/10/04		35.75	N/A	N/A		63.86
	01/08/04		35.44	N/A	N/A		64.17
	08/26/03		33.78	N/A	N/A		65.83
	04/02/03		37.78	N/A	N/A		61.83
	01/06/03		39.64	N/A	N/A		59.97

Table 2 - Continued
Historical Summary of Gauging Events
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-13	8/17-18/04	47.00	40.27	N/A	N/A	100.39	60.12
	05/10/04		39.27	N/A	N/A		61.12
	01/08/04		38.70	N/A	N/A		61.69
	08/26/03		37.20	N/A	N/A		63.19
	04/02/03		41.13	N/A	N/A		59.26
	01/06/03		42.87	N/A	N/A		57.52
MW-14	8/17-18/04	50.00	41.12	N/A	N/A	98.89	57.77
	05/10/04		40.06	N/A	N/A		58.83
	01/08/04		39.40	N/A	N/A		59.49
	08/26/03		38.39	N/A	N/A		60.50
	04/02/03		42.10	N/A	N/A		56.79
	01/06/03		43.66	N/A	N/A		55.23
MW-15	8/17-18/04	50.00	42.11	N/A	N/A	100.18	58.07
	05/10/04		41.19	N/A	N/A		58.99
	01/08/04		46.55	N/A	N/A		53.63
	08/26/03		39.58	N/A	N/A		60.60
	04/02/03		43.24	N/A	N/A		56.94
	01/06/03		44.97	N/A	N/A		55.21
MW-16	8/17-18/04	37.00	29.23	N/A	N/A	89.91	60.68
	05/10/04		27.83	N/A	N/A		62.08
	01/08/04		28.03	N/A	N/A		61.88
	08/26/03		27.54	N/A	N/A		62.37
	04/02/03		29.00	N/A	N/A		60.91
	01/06/03		31.07	N/A	N/A		58.84
MW-17	8/17-18/04	40.00	34.87	N/A	N/A	94.46	59.59
	05/10/04		32.93	N/A	N/A		61.53
	01/08/04		32.56	N/A	N/A		61.90
	08/26/03		37.08	N/A	N/A		57.38
	04/02/03		34.63	N/A	N/A		59.83
	01/06/03		36.81	N/A	N/A		57.65
MW-18	8/17-18/04	46.00	35.43	N/A	N/A	98.14	62.71
	05/10/04		39.09	N/A	N/A		59.05
	01/08/04		38.14	N/A	N/A		60.00
	08/26/03		37.47	N/A	N/A		60.67
	04/02/03		41.26	N/A	N/A		56.88
	01/06/03		42.83	N/A	N/A		55.31

Table 2 - Continued

Historical Summary of Gauging Events

Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-19	8/17-18/04	50.00	42.01	N/A	N/A	98.27	56.26
	05/10/04		41.47	N/A	N/A		56.80
	01/08/04		40.83	N/A	N/A		57.44
	08/26/03		39.24	N/A	N/A		59.03
	04/02/03		43.31	N/A	N/A		54.96
	01/06/03		45.14	N/A	N/A		53.13
MW-20	05/10/04	35.00	28.41	N/A	N/A	88.35	59.94
	01/08/04		25.10	N/A	N/A		63.25
	08/26/03		24.98	N/A	N/A		63.37
	04/02/03		25.79	N/A	N/A		62.56
	01/06/03		28.09	N/A	N/A		60.26
TW-1	8/17-18/04	61.00	30.40	N/A	N/A	94.72	64.32
	05/10/04		30.31	N/A	N/A		64.41
	01/08/04		29.48	N/A	N/A		65.24
	08/26/03		27.96	N/A	N/A		66.76
	04/02/03		31.86	N/A	N/A		62.86
	01/06/03		34.33	N/A	N/A		60.39
TW-2	8/17-18/04	88.00	30.87	N/A	N/A	94.72	63.85
	05/10/04		29.89	N/A	N/A		64.83
	01/08/04		29.45	N/A	N/A		65.27
	08/26/03		27.54	N/A	N/A		67.18
	04/02/03		32.04	N/A	N/A		62.68
	01/06/03		33.91	N/A	N/A		60.81
TW-3	8/17-18/04	71.00	35.75	N/A	N/A	99.21	63.46
	05/10/04		34.79	N/A	N/A		64.42
	01/08/04		34.40	N/A	N/A		64.81
	08/26/03		32.80	N/A	N/A		66.41
	04/02/03		36.97	N/A	N/A		62.24
	01/06/03		38.81	N/A	N/A		60.40

Notes: NA Not Applicable

SEI
Environmental, Inc.

Appendix C

Table 3- Gauging and Field Screenings

&

Field Data Information Sheet(s) for Ground Water Sampling

Table 3

Summary of Field Observations - August 17-18, 2004

Smith's Grocery
York , South Carolina
Site ID No.09322

Sample ID ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-1				27.03	35.00	N/A	N/A	N/A	N/A	4.00	Petroleum Odor
MW-2				30.71	38.00	N/A	N/A	N/A	N/A	4.00	Petroleum Odor
MW-3				27.76	35.00	7.82	0.043	14.40	10.64		
						7.37	0.036	18.10	8.20	1.20	
						7.16	0.036	17.60	7.23	1.20	
						7.09	0.035	17.30	7.16	1.20	
						7.01	0.034	16.90	7.00		
MW-5				25.75	30.00	7.57	0.044	18.30	8.37		
						7.13	0.044	17.20	8.15	0.66	
						6.71	0.046	17.00	6.83	0.66	
						6.60	0.047	16.80	6.17	0.66	
						6.42	0.047	16.60	5.94		
MW-6				29.51	37.00	N/A	N/A	N/A	N/A	4.00	Petroleum Odor
MW-7				29.85	36.00	N/A	N/A	N/A	N/A	3.00	Petroleum Odor
MW-8				30.88	38.00	N/A	N/A	N/A	N/A	3.50	Petroleum Odor
MW-9				29.50	36.00	N/A	N/A	N/A	N/A	3.20	Petroleum Odor
MW-10				36.49	44.00	N/A	N/A	N/A	N/A	4.00	Petroleum Odor
MW-11	Initial			37.17	44.00	6.00	0.103	17.3	5.10		
	1st Volume					5.79	0.102	17.5	6.09	1.11	
	2nd Volume					5.70	0.101	16.8	5.80	1.11	
	3rd Volume					5.67	0.100	16.8	5.91	1.11	
	Post Sampling					5.54	0.099	16.8	5.89		
MW-12				36.72	44.00	N/A	N/A	N/A	N/A	4.00	Petroleum Odor
MW-13	Initial			40.27	47.00	7.88	0.050	20.8	7.73		
	1st Volume					7.41	0.051	17.2	7.12	1.09	
	2nd Volume					7.00	0.051	17.1	7.06	1.10	
	3rd Volume					6.84	0.051	16.9	6.97	1.10	
	Post Sampling					6.76	0.051	16.6	6.91		

Table 3 - Continued

Summary of Field Observations - August 17-18, 2004

Smith's Grocery

York , South Carolina

Sample ID ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-14	Initial			41.12	50.00	6.26	0.080	19.0	5.85		
	1st Volume					6.32	0.079	17.2	6.51	1.45	
	2nd Volume					6.31	0.080	17.1	5.73	1.45	
	3rd Volume					6.29	0.078	17.0	5.52	1.45	
	Post Sampling					6.28	0.079	16.8	5.41		
MW-15	Initial			42.11	50.00	5.93	0.073	18.3	6.61		
	1st Volume					6.09	0.076	17.3	7.15	1.95	
	2nd Volume					6.15	0.076	17.0	7.04	1.95	
	3rd Volume					6.19	0.073	16.9	6.73	1.95	
	Post Sampling					6.21	0.072	16.7	6.75		
MW-16	Initial			29.23	37.00	6.49					
	1st Volume					6.25				1.09	
	2nd Volume					6.15				1.10	
	3rd Volume									1.10	
	Post Sampling										
MW-17	Initial			34.87	40.00	6.42	0.046	18.2	5.92		
	1st Volume					6.38	0.047	16.8	6.19	0.83	
	2nd Volume					6.39	0.050	16.7	6.04	0.83	
	3rd Volume					6.40	0.046	16.6	5.72	0.83	
	Post Sampling					6.39	0.044	16.5	5.82		
MW-18	Initial			35.43	46.00	6.32	0.052	17.1	5.85		
	1st Volume					6.24	0.051	16.5	6.01	1.09	
	2nd Volume					6.22	0.052	16.3	6.13	1.09	
	3rd Volume					6.20	0.052	16.4	4.56	1.09	
	Post Sampling					6.18	0.052	16.4	4.31		
MW-19	Initial			42.01	50.00	6.31	0.068	17.5	6.70		
	1st Volume					6.16	0.067	17.0	7.15	1.30	
	2nd Volume					6.07	0.068	17.2	7.14	1.30	
	3rd Volume					5.98	0.066	16.7	7.05	1.30	
	Post Sampling					5.92	0.064	16.5	6.99		

Table 3 - Continued

Summary of Field Observations - August 17-18, 2004

Smith's Grocery

York , South Carolina

Sample ID ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
TW-1	Initial			30.40	61.00	7.93	0.180	22.4	10.63		
	1st Volume					7.14	0.181	19.4	10.58	5.00	
	2nd Volume					7.04	0.188	19.7	10.53	5.00	
	3rd Volume					6.93	0.183	19.5	10.13	5.00	
	Post Sampling					6.89	0.178	19.4	10.08		
TW-2	Initial			30.87	88.00	6.92	0.129	20.8	5.76		
	1st Volume					7.19	0.128	19.5	5.37	9.33	
	2nd Volume					7.61	0.129	19.8	5.25	9.33	
	3rd Volume					0.758	0.130	19.6	5.20	9.33	
	Post Sampling					0.749	0.129	19.4	5.14		
TW-3	Initial			35.75	71.00	6.78	0.051	20.5	7.49		
	1st Volume					6.61	0.050	19.8	7.22	6.00	
	2nd Volume					6.56	0.049	19.5	6.32	6.00	
	3rd Volume					6.57	0.052	19.4	5.74	6.00	
	Post Sampling					6.55	0.048	19.2	5.62		

Notes: NA-Not Applicable

SEI
Environmental, Inc.

Appendix D

Table 4 – August 17-18, 2004 Summary of Laboratory Analytical Results

Table 5 – Historical Summary of Laboratory Analytical Results

Laboratory Analytical Results

&

Chain of Custody

Table 4

Summary of Laboratory Analysis - August 17-18, 2004

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*11.00*	*2,223.00*	*1,558.00*	*10,000.00*	*NA*	*80.00*	*2.00*	*0.32*	*56.00*
MW-1	08/17-18/04	**380.00**	**970.00**	**670.00**	**3,600.00**	**5,620.00**	**25.00**	**63.00**	**0.010**	**120.00**
SSTL		*10.00*	*2,021.00*	*1,416.00*	*15,000.00*	*NA*	*81.00*	*30.00*	*10.000*	*51.00*
MW-2	08/17-18/04	**19,000.00**	**29,000.00**	**2,900.00**	14,000.00	64,900.00	**1,200.00**	**2,100.00**	**500.000**	**2,500.00**
RBSL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.050*	*25.00*
MW-3	08/17-18/04	1.00	5.00	1.00	3.00	10.00	1.00	8.50	0.018	5.00
RBSL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
MW-5	08/17-18/04	1.00	5.00	1.00	3.00	10.00	1.00	5.40	0.010	5.00
SSTL		*6.00*	*1,212.00*	*850.00*	*8,000.00*	*NA*	*48.00*	*18.00*	*4.83*	*31.00*
MW-6	08/17-18/04	**1,100.00**	**2,200.00**	730.00	**34,000.00**	38,030.00	**50.00**	13.00	0.01	**250.00**
SSTL		*6.00*	*1,212.00*	*850.00*	*12,123.00*	*NA*	*48.00*	*18.00*	*0.66*	*31.00*
MW-7	08/17-18/04	**23.00**	49.00	21.00	140.00	233.00	5.00	**19.00**	0.010	25.00
SSTL		*12.00*	*2,424.00*	*1,700.00*	*16,000.00*	*NA*	*96.00*	*4.00*	*0.48*	*62.00*
MW-8	08/17-18/04	**10,000.00**	**37,000.00**	**2,900.00**	**20,000.00**	69,900.00	**1,000.00**	**27.00**	**63.00**	**5,000.00**
RBSL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
MW-9	08/17-18/04	**540.00**	**12,000.00**	**2,800.00**	**23,000.00**	38,340.00	**500.00**	**19.00**	**8.40**	**2,500.00**
SSTL		*9.00*	*1,819.00*	*1,274.00*	*18,185.00*	*NA*	*73.00*	*21.00*	*9.00*	*46.00*
MW-10	08/17-18/04	**3,500.00**	**16,000.00**	**2,200.00**	14,000.00	35,700.00	**500.00**	**25.00**	**67.00**	**2,500.00**
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.02*	*5.00*
MW-11	08/17-18/04	1.00	5.00	1.00	3.00		1.00	**17.00**	0.010	5.00
SSTL		*7.00*	*5.00*	*68.00*	*730.00*	*NA*	*5.00*	*7.00*	*7.00*	*36.00*
MW-12	08/17-18/04	1.00	5.00	1.00	3.00	10.00	1.00	12.00	0.11	5.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.02*	*5.00*
MW-13	08/17-18/04	1.00	5.00	1.00	3.00	10.00	1.00	36.00	0.010	5.00

Table 4 - Continued

Summary of Laboratory Analysis, August 17-18, 2004

Smith's Grocery

York, South Carolina

Site ID No.09322

SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.51*	*5.00*
MW-14	08/17-18/04	1.00	5.00	1.00	3.00	10.00	1.00	**19.00**	0.01	5.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.05*	*5.00*
MW-15	08/17-18/04	1.00	5.00	1.00	3.00	10.00	1.00	**26.00**	0.010	5.00
SSTL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
MW-16	08/17-18/04	1.00	5.00	1.00	3.00	10.00	1.00	13.00	0.010	5.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.02*	*5.00*
MW-17	08/17-18/04	1.00	5.00	1.00	3.00	10.00	1.00	7.30	0.010	5.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.12*	*5.00*
MW-18	08/17-18/04	1.00	5.00	1.00	3.00	10.00	1.00	9.90	0.010	5.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.02*	*5.00*
MW-19	08/17-18/04	1.00	5.00	1.00	3.00	10.00	1.00	**18.00**	0.010	5.00
SSTL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
TW-1	08/17-18/04	67.00	50.00	10.00	59.00	186.00	10.00	30.00	**0.52**	**50.00**
SSTL		*5.00*	*8.00*	*5.00*	*180.00*	*NA*	*5.00*	*2.00*	*0.05*	*18.00*
TW-2	08/17-18/04	**1,400.00**	**500.00**	**100.00**	**300.00**	2,300.00	**100.00**	**5.40**	**2.20**	**500.00**
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*2.00*	*0.23*	*5.00*
TW-3	08/17-18/04	1.00	5.00	1.00	3.00	10.00	1.00	**5.00**	0.020	5.00
SSTL		*5.00*	*2.00*	*2.00*	*26.00*	*NA*	*2.00*	*5.00*	*5.00*	*5.00*
Swift	08/17-18/04	12.00	**5.00**	1.00	3.00	21.00	1.00	5.00	0.019	5.00
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Hill	08/17-18/04	1.00	5.00	1.00	3.00	10.00	1.00	**6.90**	0.020	5.00
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Smith	08/17-18/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**5.80**	0.010	5.00
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Strife	08/17-18/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00

Notes: NA:Not Applicable NS- Not Sampled

Bold numbers indicate concentrations above RBSL/SSTL or suspected to be above RBSL/SSTL.

Table 5

Historical Summary of Laboratory Analysis

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*11.00*	*2,223.00*	*1,558.00*	*10,000.00*	*NA*	*80.00*	*2.00*	*0.32*	*56.00*
MW-1	05/10/04	**330.00**	1,100.00	459.00	3,700.00	30,299.00	25.00	**40.00**	0.010	**130.00**
MW-1	01/08/04	**620.00**	850.00	340.00	3,800.00	56,741.00	**100.00**	**5.00**	0.170	**500.00**
MW-1	08/26/03	**610.00**	1,200.00	640.00	4,800.00	7,250.00	**100.00**	**33.00**	0.010	**500.00**
MW-1	04/02/03	**590.00**	**2,900.00**	960.00	7,400.00	19,100.00	27.00	**10.00**	0.010	**200.00**
MW-1	01/06/03	**911.00**	**9,810.00**	**2,660.00**	**18,650.00**	51,131.00	**250.00**	**56.00**	0.010	**743.00**
SSTL		*10.00*	*2,021.00*	*1,416.00*	*15,000.00*	*NA*	*81.00*	*30.00*	*10.000*	*51.00*
MW-2	05/10/04	**17,000.00**	**24,000.00**	**2,000.00**	11,000.00	202,300.00	**750.00**	**1,200.00**	**260.000**	**2,500.00**
MW-2	01/08/04	**18,000.00**	**33,000.00**	**2,200.00**	12,000.00	219,900.00	**880.00**	**1,000.00**	**150.000**	**1,200.00**
MW-2	08/26/03	**16,000.00**	**26,000.00**	**2,200.00**	13,000.00	154,700.00	**480.00**	**190.00**	**120.000**	**540.00**
MW-2	04/02/03	**13,000.00**	**1,800.00**	**1,600.00**	9,500.00	97,500.00	**480.00**	**190.00**	**160.000**	**500.00**
MW-2	01/06/03	**18,400.00**	**31,100.00**	**3,180.00**	**18,920.00**	71,600.00	**395.00**	28.00	0.020	**514.00**
RBSL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.050*	*25.00*
MW-3	01/08/04	5.00	1.00	5.00	3.00	20.00	1.00	5.00	0.010	5.00
MW-3	01/06/03	1.00	1.00	1.00	3.00	6.00	1.00	**350.00**	0.020	1.00
RBSL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.050*	*25.00*
MW-4	01/08/04	5.00	1.00	5.00	3.00	20.00	1.00	5.00	0.010	5.00
MW-4	01/06/03	1.00	1.00	1.00	3.00	6.00	1.00	12.00	0.020	1.00
RBSL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
MW-5	01/08/04	5.00	1.00	5.00	3.00	22.40	1.00	5.00	0.010	5.00
MW-5	01/06/04	1.00	1.00	1.00	5.40	8.40	1.00	12.00	0.020	1.00
SSTL		*6.00*	*1,212.00*	*850.00*	*8,000.00*	*NA*	*48.00*	*18.00*	*4.83*	*31.00*
MW-6	05/10/04	**640.00**	**2,200.00**	300.00	1,900.00	5,040.00	5.00	**36.00**	1.80	**150.00**
MW-6	01/08/04	**350.00**	1,200.00	240.00	1,300.00	3,090.00	1.00	5.00	1.20	**77.00**
MW-6	08/26/03	**1,400.00**	**5,800.00**	**1,100.00**	6,600.00	14,900.00	**250.00**	**37.00**	0.01	**1,200.00**
MW-6	04/02/03	**2,600.00**	**11,000.00**	**1,800.00**	9,000.00	24,400.00	**250.00**	**54.00**	2.60	**1,200.00**
MW-6	01/06/04	**4,840.00**	**20,400.00**	**3,540.00**	**19,020.00**	47,800.00	25.00	11.00	**7.00**	**640.00**

Table 5 - Continued

Historical Summary of Laboratory Analysis

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*6.00*	*1,212.00*	*850.00*	*12,123.00*	*NA*	*48.00*	*18.00*	*0.66*	*31.00*
MW-7	05/10/04	**700.00**	**10,000.00**	**3,400.00**	**23,000.00**	37,100.00	**200.00**	5.00	**6.80**	**1,000.00**
MW-7	01/08/04	**630.00**	**13,000.00**	**3,400.00**	**25,000.00**	42,030.00	**100.00**	5.00	**3.50**	**1,000.00**
MW-7	08/26/03	**740.00**	250.00	110.00	1,600.00	2,700.00	**50.00**	**160.00**	0.09	**250.00**
MW-7	04/02/03	**240.00**	110.00	120.00	38.00	508.00	**210.00**	**240.00**	**1.70**	**120.00**
MW-7	01/06/04	**1,020.00**	1.00	**2,290.00**	**16,940.00**	20,251.00	1.00	5.00	**1.70**	**826.00**
SSTL		*12.00*	*2,424.00*	*1,700.00*	*16,000.00*	*NA*	*96.00*	*4.00*	*0.48*	*62.00*
MW-8	05/10/04	**4,500.00**	**18,000.00**	1,600.00	**18,000.00**	42,100.00	**200.00**	**67.00**	**6.30**	**1,000.00**
MW-8	01/08/04	**5,600.00**	**22,000.00**	**3,400.00**	**20,000.00**	51,000.00	**100.00**	**18.00**	**4.70**	**1,300.00**
MW-8	08/26/03	**3,800.00**	**10,000.00**	1,200.00	6,800.00	21,800.00	**100.00**	**81.00**	**58.00**	**500.00**
MW-8	04/02/03	**8,600.00**	**46,000.00**	**3,500.00**	**23,000.00**	81,100.00	**200.00**	**49.00**	**190.00**	**1,000.00**
MW-8	01/06/04	**6,770.00**	**84,600.00**	**3,560.00**	**24,740.00**	119,670.00	7.30	**24.00**	**1.90**	**362.00**
RBSL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
MW-9	01/08/04	5.00	1.00	5.00	3.00	14.00	1.00	**36.00**	0.010	5.00
MW-9	01/06/04	1.00	2.20	5.70	579.00	587.90	1.00	**24.00**	0.020	**109.00**
SSTL		*9.00*	*1,819.00*	*1,274.00*	*18,185.00*	*NA*	*73.00*	*21.00*	*9.00*	*46.00*
MW-10	05/10/04	**8,600.00**	**21,000.00**	**2,400.00**	14,000.00	46,000.00	**250.00**	5.70	**210.00**	**1,200.00**
MW-10	01/08/04	**4,200.00**	**14,000.00**	**2,400.00**	12,000.00	32,600.00	**100.00**	6.30	**100.00**	**500.00**
MW-10	08/26/03	**12,000.00**	**33,000.00**	**3,200.00**	17,000.00	65,200.00	**250.00**	**210.00**	**450.00**	**1,200.00**
MW-10	04/02/03	**11,000.00**	**23,000.00**	**2,400.00**	13,000.00	49,400.00	**200.00**	**49.00**	**190.00**	**1,000.00**
MW-10	01/06/04	**7,980.00**	**24,900.00**	**3,540.00**	18,180.00	54,600.00	25.00	**35.00**	**78.00**	**299.00**
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.02*	*5.00*
MW-11	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-11	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	**46.00**	0.010	5.00
MW-11	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**33.00**	**0.290**	5.00
MW-11	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	**26.00**	0.010	5.00
MW-11	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	**6.00**	0.020	**7.80**

Table 5 - Continued

Historical Summary of Laboratory Analysis

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*7.00*	*5.00*	*68.00*	*730.00*	*NA*	*5.00*	*7.00*	*7.00*	*36.00*
MW-12	05/10/04	23.00	5.00	1.00	43.00	72.00	1.00	6.80	0.110	5.00
MW-12	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.015	5.00
MW-12	08/26/03	**51.00**	5.00	1.00	72.00	129.00	1.00	**37.00**	0.370	5.50
MW-12	04/02/03	**12.00**	5.00	1.00	1.80	19.80	1.00	38.00	0.240	5.00
MW-12	01/06/04	**720.00**	**17.20**	13.40	**1,550.00**	2,300.60	1.00	6.00	12.00	**113.00**
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.02*	*5.00*
MW-13	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-13	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-13	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**45.00**	0.010	5.00
MW-13	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	40.00	0.010	5.00
MW-13	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	5.00	0.020	1.30
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.51*	*5.00*
MW-14	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-14	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	**45.00**	0.010	5.00
MW-14	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**100.00**	0.010	5.00
MW-14	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	39.00	0.010	5.00
MW-14	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	5.00	0.020	1.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.05*	*5.00*
MW-15	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-15	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	**48.00**	0.010	5.00
MW-15	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**120.00**	0.010	5.00
MW-15	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	**36.00**	0.010	5.00
MW-15	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	9.00	0.020	1.00
SSTL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
MW-16	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	**140.00**	0.010	5.00
MW-16	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	**18.00**	0.020	1.00

Table 6 - Continued

Historical Summary of Laboratory Analysis

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.02*	*5.00*
MW-17	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-17	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	**0.020**	5.00
MW-17	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	42.00	0.010	5.00
MW-17	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	17.00	0.010	5.00
MW-17	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	44.00	0.020	1.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.12*	*5.00*
MW-18	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-18	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	**97.00**	0.010	5.00
MW-18	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**100.00**	0.010	5.00
MW-18	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	**50.00**	0.010	5.00
MW-18	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	5.00	0.020	1.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.02*	*5.00*
MW-19	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-19	01/08/04	1.00	1.00	5.00	1.00	8.00	3.00	1.00	0.010	5.00
MW-19	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**18.00**	0.010	5.00
MW-19	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-19	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	6.00	0.020	1.00
SSTL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
MW-20	01/08/04	1.00	1.00	5.00	1.00	8.00	3.00	130.00	0.010	5.00
MW-20	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	11.00	0.020	1.00
SSTL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
TW-1	01/08/04	**2,000.00**	**2,500.00**	**1,100.00**	5,800.00	11,400.00	**50.00**	5.00	**0.380**	**250.00**
TW-1	01/06/04	**3,380.00**	**1,510.00**	**1,860.00**	9,370.00	16,120.00	25.00	6.00	**5.200**	**160.00**
SSTL		*5.00*	*8.00*	*5.00*	*180.00*	*NA*	*5.00*	*2.00*	*0.05*	*18.00*
TW-2	05/10/04	**3,700.00**	**640.00**	**160.00**	**1,800.00**	6,300.00	5.00	**5.00**	**1.20**	**170.00**
TW-2	1/8/.04	**2,800.00**	**460.00**	**14.00**	**1,000.00**	4,274.00	**22.00**	**5.40**	**1.10**	**34.00**
TW-2	08/26/03	**3,000.00**	**450.00**	**79.00**	**1,700.00**	5,229.00	**10.00**	**6.80**	**0.35**	**160.00**
TW-2	04/02/03	**3,300.00**	**1,500.00**	**220.00**	**2,000.00**	7,020.00	**50.00**	**10.00**	**1.10**	**250.00**
TW-2	01/06/04	**6,620.00**	**6,860.00**	**620.00**	**4,110.00**	18,210.00	**50.20**	**6.00**	**5.20**	**160.00**

Table 5 - Continued

Historical Summary of Laboratory Analysis

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*2.00*	*0.23*	*5.00*
TW-3	05/10/04	2.90	**11.00**	1.80	**12.00**	27.70	1.00	**5.00**	0.050	5.00
TW-3	01/08/04	1.00	1.00	5.00	1.00	8.00	3.00	**5.00**	0.010	5.00
TW-3	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**5.00**	0.010	5.00
TW-3	04/02/03	1.00	5.00	1.00	3.00	10.00	5.00	**5.00**	0.031	5.00
TW-3	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	**5.00**	0.130	**8.90**
SSTL		*5.00*	*2.00*	*2.00*	*26.00*	*NA*	*2.00*	*5.00*	*5.00*	*5.00*
Swift	05/10/04	1.00	**5.00**	1.00	3.00	10.00	1.00	5.00	0.030	5.00
Swift	01/08/04	1.00	**5.00**	1.00	3.00	10.00	1.00	5.00	0.010	5.00
Swift	08/26/03	1.00	**5.00**	1.00	3.00	10.00	1.00	**9.80**	0.017	5.00
Swift	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	**23.00**	0.010	4.00
Swift	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	**10.00**	0.020	1.00
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Hill	05/10/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**6.10**	0.010	5.00
Hill	01/08/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**22.00**	0.010	5.00
Hill	08/26/03	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00
Hill	04/02/03	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**23.00**	0.010	5.00
Hill	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	**9.00**	0.020	4.80
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Smith	05/10/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**41.00**	0.010	5.00
Smith	01/08/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**120.00**	0.010	5.00
Smith	08/26/03	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**5.20**	0.010	5.00
Smith	04/02/03	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00
Smith	01/06/04	1.00	1.00	1.00	**3.00**	6.00	1.00	5.00	0.020	1.00
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Strife	05/10/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00
Strife	01/08/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00
Strife	08/26/03	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00
Strife	04/02/03	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00
Strife	01/06/04	1.00	1.00	1.00	**3.00**	6.00	1.00	**28.00**	0.020	1.00

Notes: NA:Not Applicable NS- Not Sampled

Bold numbers indicate concentrations above RBSL/SSTL or suspected to be above RBSL/SSTL.

SEI
Environmental, Inc.

Appendix E

Non-Hazardous Waste Manifest and Certificate of Disposal

Please print or type
Form designed for use on elite (12-pitch) typewriter.

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address
SEI ENVIRONMENTAL, INC
[illegible]

4. Generator's Phone (   )

5. Transporter 1 Company Name
SEI ENVIRONMENTAL, INC

6. US EPA ID Number

A. Transporter's Phone
[illegible]

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
B & K TANK SERVICES
[illegible] 1384
SUMTER, SC [illegible]

10. US EPA ID Number
[illegible]

C. Facility's Phone
[illegible]

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED WATER [illegible] GROCERY YORK, SC			1330	gal
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name | Signature | Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature [signature] | Month 8 Day 19 Year 04

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name [signature] | Signature [signature] | Month 8 Day 19 Year 04

GENERATOR / TRANSPORTER / FACILITY

Printed by J. J. KELLER & ASSOCIATES, INC.

ORIGINAL - RETURN TO GENERATOR

G & K
TANK SERVICES, INC.
Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-4593 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 135 gallons
Smith's Grocery
York, SC

Contaminant NonHazardous Petroleum
Contaminated Water

This is to certify the above ~~soil~~* water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by _____ Date 08/19/04

SEI
Environmental, Inc.

Appendix F

Table 6- May 10, 2004 Concentration Reduction Calculation

Table 6

Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
Swift	Initial	5.00	2.00	2.00	26.00	2.00	5.00	5.00	5.00	
	SSTL	5.00	2.00	2.00	26.00	2.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	**12.00**	**5.00**	1.00	3.00	1.00	5.00	0.019	5.00	
	SSTL	5.00	2.00	2.00	26.00	2.00	5.00	5.00	5.00	
	Subsequent > SSTL	7.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00
Hill	Initial	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	**1.00**	**5.00**	1.00	**3.00**	1.00	**6.90**	0.020	5.00	
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	Subsequent > SSTL	0.00	3.00	0.00	1.00	0.00	1.90	0.00	0.00	5.90
Strife	Initial	2.00	2.00	2.00	2.00	2.00	5.00	5.00	5.00	
	SSTL	2.00	2.00	2.00	2.00	2.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	1.00	**5.00**	1.00	**3.00**	1.00	5.00	0.01	5.00	
	SSTL	2.00	2.00	2.00	2.00	2.00	5.00	5.00	5.00	
	Subsequent > SSTL	0.00	3.00	0.00	1.00	0.00	0.00	0.00	0.00	4.00
Smith	Initial	5.00	5.00	5.00	15.00	5.00	5.00	5.00	5.00	
	SSTL	5.00	5.00	5.00	15.00	5.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	**5.80**	0.01	5.00	
	SSTL	5.00	5.00	5.00	15.00	5.00	5.00	5.00	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.80

Table 6- Continued

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-1	Initial	1,100.00	19,000.00	2,700.00	10,000.00	80.00	2.00	0.32	770.00	
	SSTL	11.00	2,223.00	1,558.00	10,000.00	80.00	2.00	0.32	56.00	
	Initial > SSTL	1,089.00	16,777.00	1,142.00	0.00	0.00	0.00	0.00	714.00	19,722.00
	Subsequent	**380.00**	970.00	670.00	3,600.00	25.00	**63.00**	0.01	**120.00**	
	SSTL	11.00	2,223.00	1,558.00	10,000.00	80.00	2.00	0.32	56.00	
	Subsequent > SSTL	369.00	0.00	0.00	0.00	0.00	61.00	0.00	64.00	494.00
MW-2	Initial	25,000.00	39,000.00	3,500.00	15,000.00	200.00	1,300.00	179.00	200.00	
	SSTL	10.00	2,021.00	1,416.00	15,000.00	81.00	30.00	10.00	51.00	
	Initial > SSTL	24,990.00	36,979.00	2,084.00	0.00	119.00	1,270.00	169.00	149.00	65,760.00
	Subsequent	**19,000.00**	**29,000.00**	**2,900.00**	14,000.00	**1,200.00**	**2,100.00**	**500.00**	**2,500.00**	
	SSTL	10.00	2,021.00	1,416.00	15,000.00	81.00	30.00	10.00	51.00	
	Subsequent > SSTL	18,990.00	26,979.00	1,484.00	0.00	1,119.00	2,070.00	490.00	2,449.00	53,581.00
MW-6	Initial	3,400.00	14,000.00	1,900.00	8,000.00	80.00	39.00	4.83	700.00	
	SSTL	6.00	1,212.00	850.00	8,000.00	48.00	18.00	4.83	31.00	
	Initial > SSTL	3,394.00	12,788.00	1,050.00	0.00	32.00	21.00	0.00	669.00	17,954.00
	Subsequent	**1,100.00**	**2,200.00**	730.00	3,400.00	50.00	13.00	0.01	**250.00**	
	SSTL	6.00	1,212.00	850.00	8,000.00	48.00	18.00	4.83	31.00	
	Subsequent > SSTL	1,094.00	988.00	0.00	0.00	0.00	0.00	0.00	219.00	2,301.00
MW-7	Initial	2,000.00	4,100.00	3,100.00	15,000.00	200.00	110.00	0.66	1,400.00	
	SSTL	6.00	1,212.00	850.00	12,123.00	48.00	18.00	0.66	31.00	
	Initial > SSTL	1,994.00	2,888.00	2,250.00	2,877.00	152.00	92.00	0.00	1,369.00	11,622.00
	Subsequent	**23.00**	49.00	21.00	140.00	5.00	**19.00**	0.10	25.00	
	SSTL	6.00	1,212.00	850.00	12,123.00	48.00	18.00	0.66	31.00	
	Subsequent > SSTL	17.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	18.00

Table 6 - Continued

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-8	Initial	9,500.00	56,000.00	5,300.00	16,000.00	200.00	4.00	0.48	820.00	
	SSTL	12.00	2,424.00	1,700.00	16,000.00	96.00	4.00	0.48	62.00	
	Initial > SSTL	9,488.00	53,576.00	3,600.00	0.00	104.00	0.00	0.00	758.00	67,526.00
	Subsequent	**10,000.00**	**37,000.00**	**2,900.00**	**20,000.00**	**1,000.00**	**67.00**	**6.30**	**5,000.00**	
	SSTL	12.00	2,424.00	1,700.00	16,000.00	96.00	4.00	0.48	62.00	
	Subsequent > SSTL	9,988.00	34,576.00	1,200.00	4,000.00	904.00	63.00	5.82	4,938.00	55,674.82
MW-10	Initial	5,800.00	26,000.00	3,200.00	19,000.00	800.00	21.00	95.30	800.00	
	SSTL	9.00	1,819.00	1,274.00	18,185.00	73.00	21.00	9.00	46.00	
	Initial > SSTL	5,791.00	24,181.00	1,926.00	815.00	727.00	0.00	86.30	754.00	34,280.30
	Subsequent	**3,500.00**	**16,000.00**	**2,200.00**	14,000.00	**500.00**	5.70	**210.00**	**2,500.00**	
	SSTL	9.00	1,819.00	1,274.00	18,185.00	73.00	21.00	9.00	46.00	
	Subsequent > SSTL	3,491.00	14,181.00	926.00	0.00	427.00	0.00	201.00	2,454.00	21,680.00
MW-11	Initial	5.00	5.00	5.00	10.00	5.00	6.00	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.02	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	5.00	0.01	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.02	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-12	Initial	390.00	5.00	68.00	730.00	5.00	7.00	20.80	52.00	
	SSTL	7.00	5.00	68.00	730.00	5.00	7.00	7.00	36.00	
	Initial > SSTL	383.00	0.00	0.00	0.00	0.00	0.00	13.80	16.00	412.80
	Subsequent	1.00	5.00	1.00	3.00	1.00	**12.00**	0.11	5.00	
	SSTL	7.00	5.00	68.00	730.00	5.00	7.00	7.00	36.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	5.00

Table 6 - Continued

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-13	Initial	5.00	5.00	5.00	10.00	75.00	5.00	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.02	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	70.00	0.00	0.00	0.00	70.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	**36.00**	0.01	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.02	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	31.00	0.00	0.00	31.00
MW-14	Initial	5.00	5.00	5.00	10.00	5.00	37.00	0.51	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.51	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	32.00	0.00	0.00	32.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	**19.00**	0.01	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.51	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	14.00	0.00	0.00	14.00
MW-15	Initial	5.00	5.00	5.00	10.00	5.00	39.00	0.51	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.05	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	24.00	0.46	0.00	24.46
	Subsequent	1.00	5.00	1.00	3.00	1.00	**26.00**	0.01	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.05	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	11.00	0.00	0.00	11.00
MW-17	Initial	5.00	5.00	5.00	10.00	5.00	29.00	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.02	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	14.00	0.00	0.00	14.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	7.30	0.01	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.02	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 6 - Continued

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-18	Initial	5.00	5.00	5.00	10.00	5.00	42.00	0.12	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.12	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	27.00	0.00	0.00	27.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	9.90	0.01	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.12	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-19	Initial	5.00	5.00	5.00	10.00	5.00	51.00	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.02	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	36.00	0.00	0.00	36.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	**18.00**	0.01	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.02	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	3.00
TW-2	Initial	400.00	8.00	5.00	180.00	5.00	2.00	0.05	18.00	
	SSTL	5.00	8.00	5.00	180.00	5.00	2.00	0.05	18.00	
	Initial > SSTL	395.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	395.00
	Subsequent	**1,400.00**	**500.00**	**100.00**	**300.00**	**100.00**	**5.40**	**2.20**	**500.00**	
	SSTL	5.00	8.00	5.00	180.00	5.00	2.00	0.05	18.00	
	Subsequent > SSTL	1,395.00	492.00	95.00	120.00	95.00	3.40	2.15	482.00	2,684.55
TW-3	Initial	5.00	5.00	5.00	10.00	5.00	2.00	0.23	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	2.00	0.23	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	**5.00**	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	2.00	0.23	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	3.00
Totals	Initial > SSTL	(Sum of Initial Concentration Above SSTL for all Wells)								217,876.56
	Subsequent > SSTL	(Sum of Subsequent Concentration Above SSTL for all Wells)								136,521.07

Note: Bold Concentrations are greater than the respective SSTL.
CoC Mass Reduction = (Sum of Initial Conc. > SSTL - Sum of Subsequent Conc. > SSTL)/
(Sum of Initial Conc. > SSTL) * 100
CoC Mass Reduction = (217,876.56 - 136,521.07) / (217,876.56) * 100
CoC Mass Reduction =37.34%

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

JUN 14 2004

CHARLES & KIMBERLY SWIFT
3043 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received June 9, 2004
York County

Dear Mr. & Mrs. Swift:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

JUN 14 2004

TONY & SUSAN HILL
3049 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received June 9, 2004
York County

Dear Mr. & Mrs. Hill:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

JUN 14 2004

ROBERT STRIFE
3035 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received June 9, 2004
York County

Dear Mr. Strife:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Please find enclosed a copy of the report. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Quarterly Monitoring Report

cc: Technical file

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

JUN 14 2004

LOUIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received June 9, 2004
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program has reviewed the report submitted by SEI Environmental, Inc. This report documents the results of the sampling activities. All future sampling activities should include pre- and post-GAC analyses so that the UST Program can ensure that the carbon units are being maintained in accordance with the bid specifications. In addition, the UST Program is concerned about the lack of progress. SEI Environmental received Corrective Action Plan approval in September 2001. Based on the proposed time frame of 30 months, corrective action activities should have been completed in March 2004; however, there is only a 40% reduction in the petroleum concentrations. SEI should evaluate the current remediation methodology and propose any necessary modifications in order to expedite the remediation. The next corrective action status evaluation report should be submitted on or before August 15, 2004.

On all correspondence regarding this site, please reference the UST Permit Number. Please feel free to contact me, at (803) 896-6397 or thomadl@dhec.sc.gov, if you have questions or need additional information.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Paul Bekish, SEI Environmental, Inc., 3021 McNaughton Dr, Ste 9, Columbia, SC 29223
Technical file

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

JUN 14 2004

FRONTIS HEMPHILL
2146 OLD MCKINNEY RD
YORK SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release reported June 30, 1993
Corrective Action Status Report received June 9, 2004
York County

Dear Mr. Hemphill

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has reviewed the referenced report submitted by SEI Environmental, Inc. SEI is currently conducting corrective action activities in response to groundwater contamination at the former Smith's Grocery. Monitoring Well MW-3 on your property was not sampled. The next quarterly sampling will be conducted in approximately three months.

If you would like additional information regarding this corrective action or if you would like to review the monitoring report, please contact me by phone at (800) 826-5435 (within South Carolina only) or (803) 896-6397, by fax at (803) 896-6245, or by e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical file

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
JUN 0 9 2004
UNDERGROUND STORAGE
TANK PROGRAM

June 4, 2004

Ms. Debra Thoma, Hydrogeologist
SCDHEC - UST Program
Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201

Re: Summary of Corrective Action and Gauging Results
Smith's Grocery
#176 Charlotte Highway (Highway 49)
York, South Carolina 29745
UST Permit # 09322

Dear Ms. Thoma:

SEI Environmental, Inc. (SEI) submits the following summary of gauging results and laboratory analytical results for samples collected on May 10, 2004. On February 12, 2003, SCDHEC submitted to Mr. Paul Bekish the attached directive letter for the Corrective Action Plan. A copy of the directive letter can be found in Appendix A. Attached in Appendix B is Figure 1, a topographic map depicting the location of the site and Figure 2, a site map illustrating the location of the monitoring wells.

March 1, 2004 SEI personnel were on site to gauge water levels, and check for the presence of free product. No free product was observed. Please note that TW-1 could not be located. Attached in Appendix C is Table 1, which summarizes the March 1, 2004 gauging results. Attached in Appendix D, is Figure 3, is a potentiometric map based upon the March 1, 2004 data.

May 10, 2004 SEI personnel were on site to gauge the monitoring wells, remove free product, if applicable, and collect groundwater samples. Twenty-three (23) monitoring wells were gauged. Upon completion of gauging, eight (8) monitoring wells, MW-11, MW-13 through MW-15, MW-17 through MW-19, and TW-3 were purged and field screened. The remaining monitoring wells were not purged. Please note that petroleum odor was observed, resulting in no field screening, at MW-1, MW-2, MW-6 through MW-8, MW-10, MW-12, and TW-2, a total of eight (8) monitoring wells. No free product was observed. Attached in Appendix C is Table 2, a summary of the groundwater gauging results for May 10, 2004 and Table 3, an historical summary of gauging results including groundwater elevation data. 158 gallons of petroleum-impacted water was generated from the purging of the sixteen(16) monitoring wells. Attached in Appendix D is Figure 4, a Groundwater Potentiometric map of the May 10, 2004 field observations. Attached in Appendix E is Table 4, which summarizes the May 10, 2004 field screening information and

SEI
Environmental, Inc.

copies of the Field Data Information Sheet(s) for Ground Water Sampling. Upon completion of purging activities, a representative sample was collected from each sample point. Each sample was submitted to Environmental Science Laboratory in Mt. Juliet Tennessee for analysis for Benzene, Toluene, Ethylbenzene, Xylene (BTEX) by EPA method 8260B, Methyl Tert-butyl Ether (MTBE) by EPA method 8260B, Naphthalene by EPA method 8260B, Lead By EPA method 6010B, and Ethylene Dibromide(EDB) by EPA method 8011. Attached in Appendix F is Table 5, which summarizes the May 10, 2004 laboratory analytical results; Table 6, a historical summary of the laboratory analytical data; copies of the laboratory analytical results, and a copy of the Chain of Custody. Attached in Appendix G is Figure 5, a CoC map illustrating the May 10, 2004 laboratory analytical data.

May 15, 2004, the 158 gallons of petroleum-impacted water, which was generated from the purging of the sample points on May 10, 2004, was disposed at G & K Tank Services, Inc. in Sumter, SC. Attached in Appendix H are copies of the Non-Hazardous Waste Manifest and Certificate fof Disposal.

The evaluation of the corrective action activities' effectiveness consists of comparing the May 10, 2004, laboratory analytical data against the baseline SSTL concentrations and determining the percent of total concentration reduction. The percent of total concentration reduction is calculated by using the following formula:

> Percent of Total Concentration Reduction = (Initial Mass Above SSTL) – (Current Mass Above SSTL) *(100)) / (Initial Mass Above SSTL)

The calculation for the April 15, 2004 Percent of Total Concentration Reduction was found to be 40.22 %. Attached in Appendix I is Table 7, which illustrates the concentration reduction calculation.

SEI will collect groundwater samples in August 2004 for further evaluation of the corrective action activities. Upon receipt of the laboratory analytical data, SEI will submit a report summarizing the findings.

If you have any questions and / or comments, concerning the information provided in this document, please contact David Pittman at (803) 788-2535.

Sincerely,

David B. Pittman
Project Manager
SEI – Columbia Office

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 21054 RANDY R. CASEY

Randy Casey
P.E. #21054

Attachment(s)

cc: Ms. Lois B. Smith, 3715 Charlotte Highway, York, South Carolina 29745
SEI Files

Appendix A
SCDHEC Directive Letter

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

PAUL BEKISH
SEI ENVIRONMENTAL INC
3021 MCNAUGHTON DR STE 9
COLUMBIA SC 29223-1854

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit #09322
York County

Dear Mr. Bekish:

The Underground Storage Tank (UST) Program has reviewed the previous Corrective Action Performance Evaluation Reports. The UST Program is granting your request to remove monitoring wells MW-3, MW-4, MW-5, MW-9, MW-16, and MW-20 from the quarterly sampling requirements. These wells should be screened for organic vapors. Any well showing the presence of organic vapors should be sampled for laboratory analyses. The UST Program cannot authorize removal of TW-1 as contaminants of concern were detected during the January 2004 sampling event.

On all correspondence regarding this site, please reference UST Permit #09322. If you have any questions concerning this correspondence, please contact me at (803) 896-6397, (800) 826-5435 (within SC only), via fax at (803) 896-6245, or via e-mail at thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

cc: Technical File

Appendix B

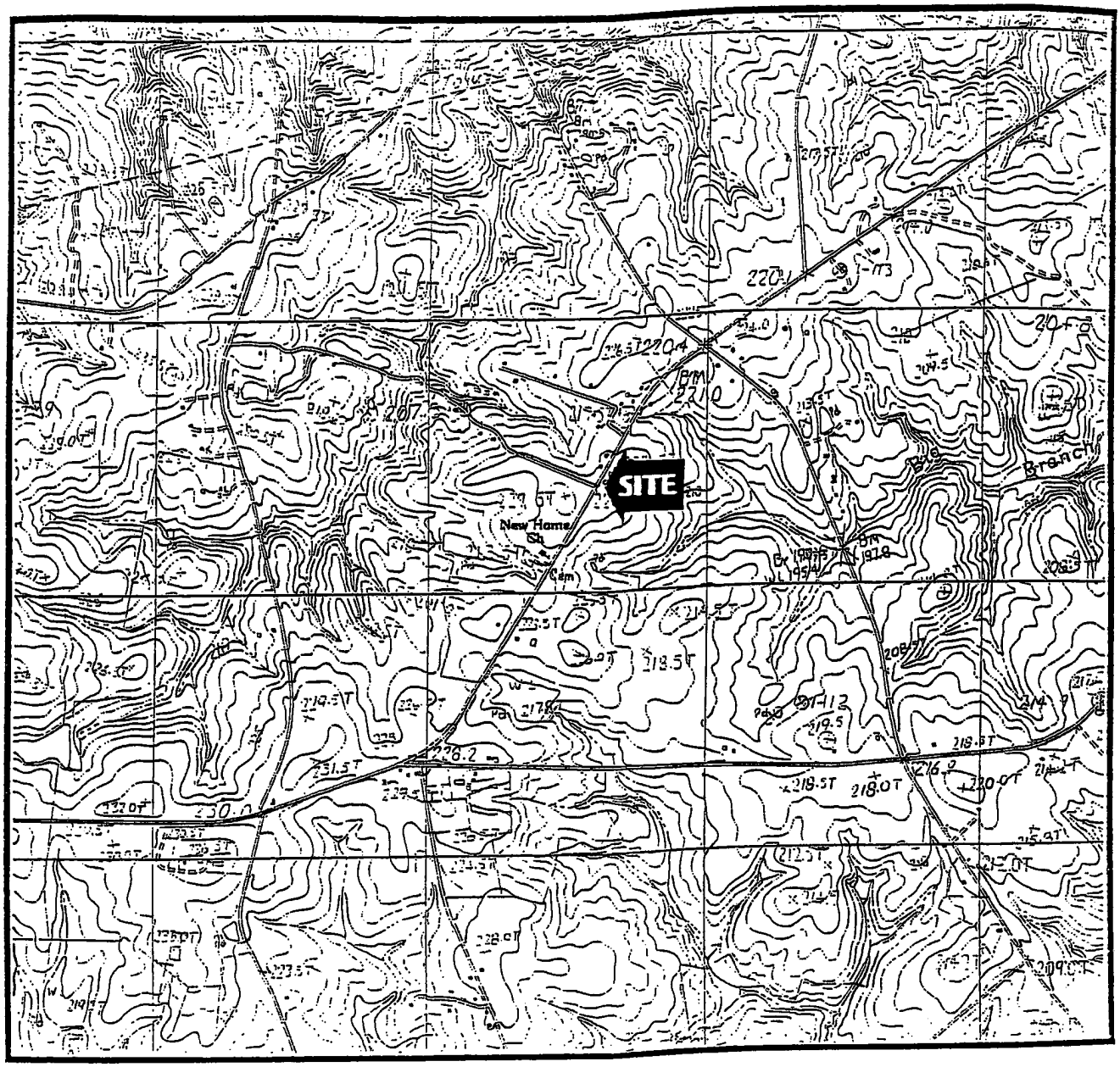
Figure 1 – Topographic Map

&

Figure 2 – Site Map

7.5 MINUTE SERIES(TOPOGRAPHIC)

CLOVER QUADRANGLE



SCALE 1:24000

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

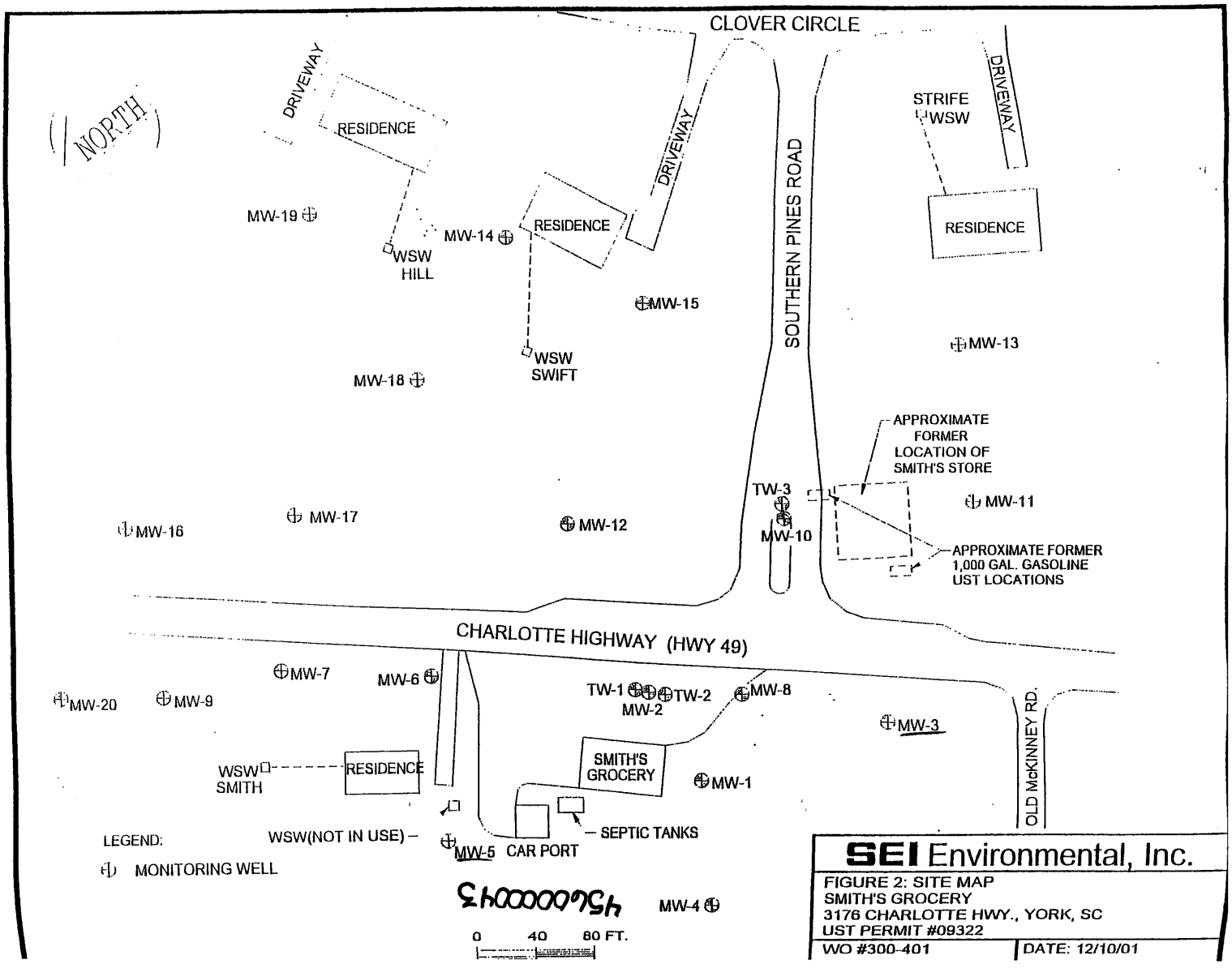
NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

NC #300-401
DWG #

DATE: 12/7/01
DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401 | DATE: 12/10/01

Appendix C

Table 1 – March 1, 2004 Gauging Results

Table 2 – May 10, 2004 Gauging Results

Table 3 – Historical Summary of Gauging Results

Table 1

Summary of Groundwater Elevations - March 1 , 2004

Smith's Grocery

Ridgeland, South Carolina

Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-1	03/01/04	35.00	26.00	N/A	N/A	91.16	65.16
MW-2	03/01/04	38.00	24.75	N/A	N/A	94.57	69.82
MW-3	03/01/04	35.00	26.71	N/A	N/A	91.91	65.20
MW-4	03/01/04	27.00	20.81	N/A	N/A	86.20	65.39
MW-5	03/01/04	30.00	24.4	N/A	N/A	89.29	64.89
MW-6	03/01/04	37.00	29.76	N/A	N/A	93.91	64.15
MW-7	03/01/04	36.00	28.28	N/A	N/A	91.68	63.40
MW-8	03/01/04	38.00	29.32	N/A	N/A	94.72	65.40
MW-9	03/01/04	36.00	27.19	N/A	N/A	90.54	63.35
MW-10	03/01/04	44.00	35.50	N/A	N/A	99.77	64.27
MW-11	03/01/04	44.00	36.20	N/A	N/A	100.46	64.26
MW-12	03/01/04	44.00	35.45	N/A	N/A	99.61	64.16
MW-13	03/01/04	47.00	39.19	N/A	N/A	100.39	61.20
MW-14	03/01/04	50.00	39.87	N/A	N/A	98.89	59.02
MW-15	03/01/04	50.00	41.02	N/A	N/A	100.18	59.16
MW-16	03/01/04	37.00	25.97	N/A	N/A	89.91	63.94
MW-17	03/01/04	40.00	32.88	N/A	N/A	94.46	61.58
MW-18	03/01/04	46.00	38.87	N/A	N/A	98.14	59.27
MW-19	03/01/04	50.00	41.3	N/A	N/A	98.27	56.97
MW-20	03/01/04	35.00	24.91	N/A	N/A	88.35	63.44
TW-1	03/01/04	61.00	**	N/A	N/A	94.72	**
TW-2	03/01/04	88.00	29.82	N/A	N/A	94.72	64.90
TW-3	03/01/04	71.00	34.76	N/A	N/A	99.21	64.45

Note: ** Not located

Table 2

Summary of Groundwater Elevations - May 10 , 2004

Smith's Grocery

Ridgeland, South Carolina

Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-1	05/10/04	35.00	26.90	N/A	N/A	91.16	64.26
MW-2	05/10/04	38.00	26.68	N/A	N/A	94.57	67.89
MW-3	05/10/04	35.00	28.83	N/A	N/A	91.91	63.08
MW-4	05/10/04	27.00	25.94	N/A	N/A	86.20	60.26
MW-5	05/10/04	30.00	25.57	N/A	N/A	89.29	63.72
MW-6	05/10/04	37.00	29.91	N/A	N/A	93.91	64.00
MW-7	05/10/04	36.00	27.78	N/A	N/A	91.68	63.90
MW-8	05/10/04	38.00	29.90	N/A	N/A	94.72	64.82
MW-9	05/10/04	36.00	28.69	N/A	N/A	90.54	61.85
MW-10	05/10/04	44.00	35.50	N/A	N/A	99.77	64.27
MW-11	05/10/04	44.00	36.19	N/A	N/A	100.46	64.27
MW-12	05/10/04	44.00	35.75	N/A	N/A	99.61	63.86
MW-13	05/10/04	47.00	39.27	N/A	N/A	100.39	61.12
MW-14	05/10/04	50.00	40.06	N/A	N/A	98.89	58.83
MW-15	05/10/04	50.00	41.19	N/A	N/A	100.18	58.99
MW-16	05/10/04	37.00	27.83	N/A	N/A	89.91	62.08
MW-17	05/10/04	40.00	32.93	N/A	N/A	94.46	61.53
MW-18	05/10/04	46.00	39.09	N/A	N/A	98.14	59.05
MW-19	05/10/04	50.00	41.47	N/A	N/A	98.27	56.80
MW-20	05/10/04	35.00	28.41	N/A	N/A	88.35	59.94
TW-1	05/10/04	61.00	30.31	N/A	N/A	94.72	64.41
TW-2	05/10/04	88.00	29.89	N/A	N/A	94.72	64.83
TW-3	05/10/04	71.00	34.79	N/A	N/A	99.21	64.42

Table 3
Historical Summary of Gauging Events
Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-1	05/10/04	35.00	26.90	N/A	N/A	91.16	64.26
	01/08/04		25.46	N/A	N/A		65.70
	08/26/03		24.07	N/A	N/A		67.09
	04/02/03		28.05	N/A	N/A		63.11
	01/06/03		29.88	N/A	N/A		61.28
MW-2	05/10/04	38.00	26.68	N/A	N/A	94.57	67.89
	01/08/04		29.40	N/A	N/A		65.17
	08/26/03		27.81	N/A	N/A		66.76
	04/02/03		31.92	N/A	N/A		62.65
	01/06/03		33.76	N/A	N/A		60.81
MW-3	05/10/04	35.00	28.83	N/A	N/A	91.91	63.08
	01/08/04		26.46	N/A	N/A		65.45
	08/26/03		25.98	N/A	N/A		65.93
	04/02/03		29.02	N/A	N/A		62.89
	01/06/03		30.87	N/A	N/A		61.04
MW-4	05/10/04	27.00	25.94	N/A	N/A	86.20	60.26
	01/08/04		20.73	N/A	N/A		65.47
	08/26/03		15.07	N/A	N/A		71.13
	04/02/03		22.73	N/A	N/A		63.47
	01/06/03		24.58	N/A	N/A		61.62
MW-5	05/10/04	30.00	25.57	N/A	N/A	89.29	63.72
	01/08/04		24.49	N/A	N/A		64.80
	08/26/03		22.70	N/A	N/A		66.59
	04/02/03		25.00	N/A	N/A		64.29
	01/06/03		27.96	N/A	N/A		61.33
MW-6	05/10/04	37.00	29.91	N/A	N/A	93.91	64.00
	01/08/04		29.58	N/A	N/A		64.33
	08/26/03		27.51	N/A	N/A		66.40
	04/02/03		31.66	N/A	N/A		62.25
	01/06/03		33.57	N/A	N/A		60.34

Table 3 - Continued

Historical Summary of Gauging Events

Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-7	05/10/04	36.00	27.78	N/A	N/A	91.68	63.90
	01/08/04		28.40	N/A	N/A		63.28
	08/26/03		26.88	N/A	N/A		64.80
	04/02/03		29.40	N/A	N/A		62.28
	01/06/03		31.57	N/A	N/A		60.11
MW-8	05/10/04	38.00	29.90	N/A	N/A	94.72	64.82
	01/08/04		29.47	N/A	N/A		65.25
	08/26/03		27.58	N/A	N/A		67.14
	04/02/03		32.02	N/A	N/A		62.70
	01/06/03		33.84	N/A	N/A		60.88
MW-9	05/10/04	36.00	28.69	N/A	N/A	90.54	61.85
	01/08/04		27.33	N/A	N/A		63.21
	08/26/03		26.10	N/A	N/A		64.44
	04/02/03		28.20	N/A	N/A		62.34
	01/06/03		30.41	N/A	N/A		60.13
MW-10	05/10/04	44.00	35.50	N/A	N/A	99.77	64.27
	01/08/04		35.04	N/A	N/A		64.73
	08/26/03		33.36	N/A	N/A		66.41
	04/02/03		37.77	N/A	N/A		62.00
	01/06/03		39.71	N/A	N/A		60.06
MW-11	05/10/04	44.00	36.19	N/A	N/A	100.46	64.27
	01/08/04		35.70	N/A	N/A		64.76
	08/26/03		33.88	N/A	N/A		66.58
	04/02/03		38.36	N/A	N/A		62.10
	01/06/03		40.37	N/A	N/A		60.09
MW-12	05/10/04	44.00	35.75	N/A	N/A	99.61	63.86
	01/08/04		35.44	N/A	N/A		64.17
	08/26/03		33.78	N/A	N/A		65.83
	04/02/03		37.78	N/A	N/A		61.83
	01/06/03		39.64	N/A	N/A		59.97

Table 3 - Continued

Historical Summary of Gauging Events

Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-13	05/10/04	47.00	39.27	N/A	N/A	100.39	61.12
	01/08/04		38.70	N/A	N/A		61.69
	08/26/03		37.20	N/A	N/A		63.19
	04/02/03		41.13	N/A	N/A		59.26
	01/06/03		42.87	N/A	N/A		57.52
MW-14	05/10/04	50.00	40.06	N/A	N/A	98.89	58.83
	01/08/04		39.40	N/A	N/A		59.49
	08/26/03		38.39	N/A	N/A		60.50
	04/02/03		42.10	N/A	N/A		56.79
	01/06/03		43.66	N/A	N/A		55.23
MW-15	05/10/04	50.00	41.19	N/A	N/A	100.18	58.99
	01/08/04		46.55	N/A	N/A		53.63
	08/26/03		39.58	N/A	N/A		60.60
	04/02/03		43.24	N/A	N/A		56.94
	01/06/03		44.97	N/A	N/A		55.21
MW-16	05/10/04	37.00	27.83	N/A	N/A	89.91	62.08
	01/08/04		28.03	N/A	N/A		61.88
	08/26/03		27.54	N/A	N/A		62.37
	04/02/03		29.00	N/A	N/A		60.91
	01/06/03		31.07	N/A	N/A		58.84
MW-17	05/10/04	40.00	32.93	N/A	N/A	94.46	61.53
	01/08/04		32.56	N/A	N/A		61.90
	08/26/03		37.08	N/A	N/A		57.38
	04/02/03		34.63	N/A	N/A		59.83
	01/06/03		36.81	N/A	N/A		57.65
MW-18	05/10/04	46.00	39.09	N/A	N/A	98.14	59.05
	01/08/04		38.14	N/A	N/A		60.00
	08/26/03		37.47	N/A	N/A		60.67
	04/02/03		41.26	N/A	N/A		56.88
	01/06/03		42.83	N/A	N/A		55.31

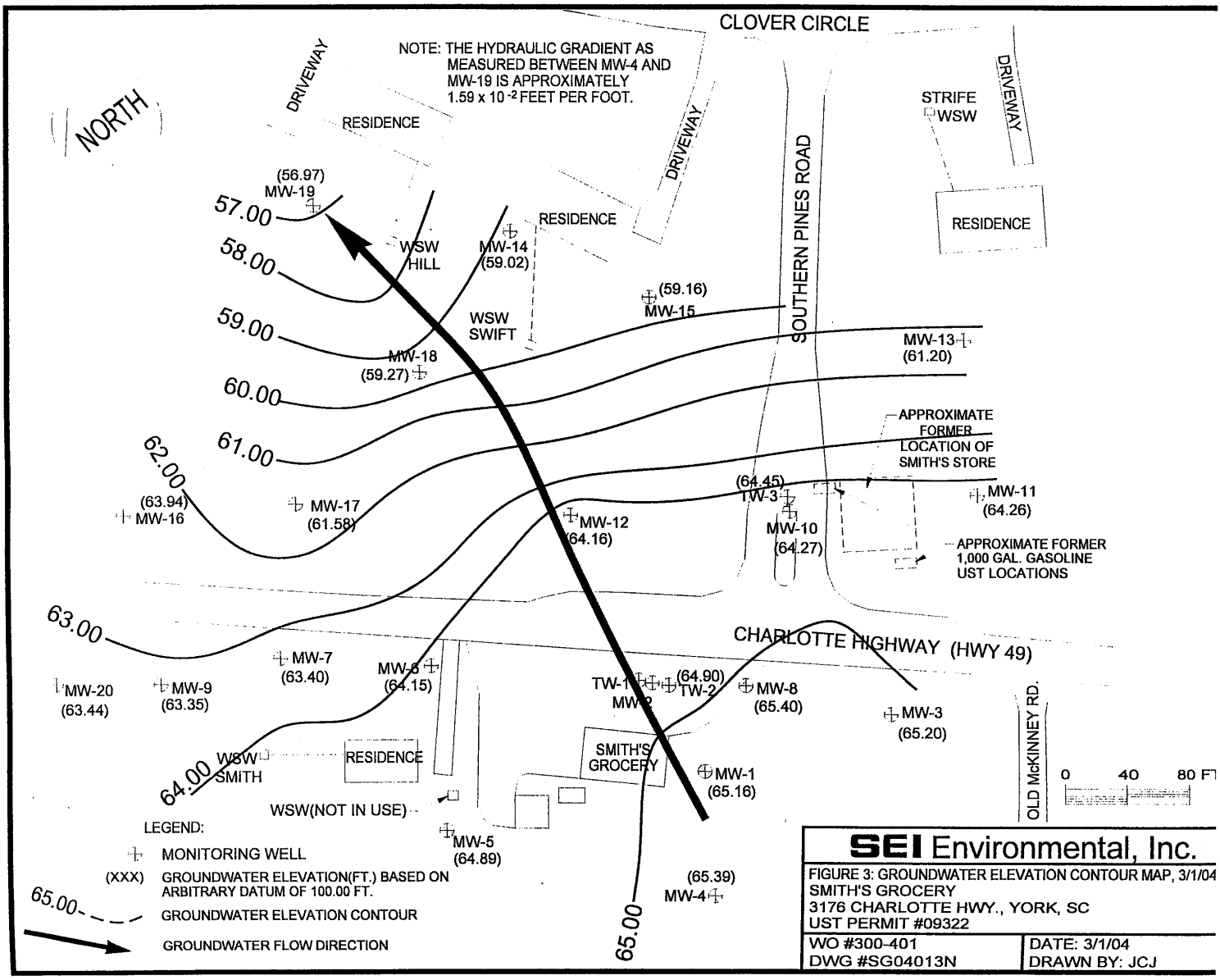
Table 3 - Continued

Historical Summary of Gauging Events

Smith's Grocery
York, South Carolina
Site ID No.09322

Monitoring Well ID	Date	Depth of Well	Depth of Groundwater (Feet)	Depth of Free Product (Feet)	Height of Free Product (Feet)	Top of Casing (Feet)	Water Table Elevation (Feet)
MW-19	05/10/04	50.00	41.47	N/A	N/A	98.27	56.80
	01/08/04		40.83	N/A	N/A		57.44
	08/26/03		39.24	N/A	N/A		59.03
	04/02/03		43.31	N/A	N/A		54.96
	01/06/03		45.14	N/A	N/A		53.13
MW-20	05/10/04	35.00	28.41	N/A	N/A	88.35	59.94
	01/08/04		25.10	N/A	N/A		63.25
	08/26/03		24.98	N/A	N/A		63.37
	04/02/03		25.79	N/A	N/A		62.56
	01/06/03		28.09	N/A	N/A		60.26
TW-1	05/10/04	61.00	30.31	N/A	N/A	94.72	64.41
	01/08/04		29.48	N/A	N/A		65.24
	08/26/03		27.96	N/A	N/A		66.76
	04/02/03		31.86	N/A	N/A		62.86
	01/06/03		34.33	N/A	N/A		60.39
TW-2	05/10/04	88.00	29.89	N/A	N/A	94.72	64.83
	01/08/04		29.45	N/A	N/A		65.27
	08/26/03		27.54	N/A	N/A		67.18
	04/02/03		32.04	N/A	N/A		62.68
	01/06/03		33.91	N/A	N/A		60.81
TW-3	05/10/04	71.00	34.79	N/A	N/A	99.21	64.42
	01/08/04		34.40	N/A	N/A		64.81
	08/26/03		32.80	N/A	N/A		66.41
	04/02/03		36.97	N/A	N/A		62.24
	01/06/03		38.81	N/A	N/A		60.40

Notes: NA Not Applicable


CLOVER CIRCLE
NOTE: THE HYDRAULIC GRADIENT AS MEASURED BETWEEN MW-4 AND MW-19 IS APPROXIMATELY 1.59 x 10 -2 FEET PER FOOT.
NORTH
DRIVEWAY
RESIDENCE
DRIVEWAY
SOUTHERN PINES ROAD
STRIFE WSW
DRIVEWAY
RESIDENCE
(56.97) MW-19
57.00
58.00
59.00
60.00
61.00
62.00
63.00
64.00
65.00
WSW HILL
MW-14 (59.02)
RESIDENCE
(59.16) MW-15
WSW SWIFT
MW-18 (59.27)
MW-13 (61.20)
APPROXIMATE FORMER LOCATION OF SMITH'S STORE
(64.45) TW-3
MW-11 (64.26)
(63.94) MW-16
MW-17 (61.58)
MW-12 (64.16)
MW-10 (64.27)
APPROXIMATE FORMER 1,000 GAL. GASOLINE UST LOCATIONS
CHARLOTTE HIGHWAY (HWY 49)
MW-20 (63.44)
MW-9 (63.35)
MW-7 (63.40)
MW-6 (64.15)
TW-1 MW-2
(64.90) TW-2
MW-8 (65.40)
MW-3 (65.20)
OLD McKINNEY RD.
WSW SMITH
RESIDENCE
SMITH'S GROCERY
MW-1 (65.16)
WSW(NOT IN USE)
MW-5 (64.89)
(65.39) MW-4
0 40 80 FT
LEGEND:
MONITORING WELL
(XXX) GROUNDWATER ELEVATION(FT.) BASED ON ARBITRARY DATUM OF 100.00 FT.
GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
SEI Environmental, Inc.
FIGURE 3: GROUNDWATER ELEVATION CONTOUR MAP, 3/1/04
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322
WO #300-401
DWG #SG04013N
DATE: 3/1/04
DRAWN BY: JCJ

Appendix D

Figure 3 – Potentiometric Map for March 1, 2004

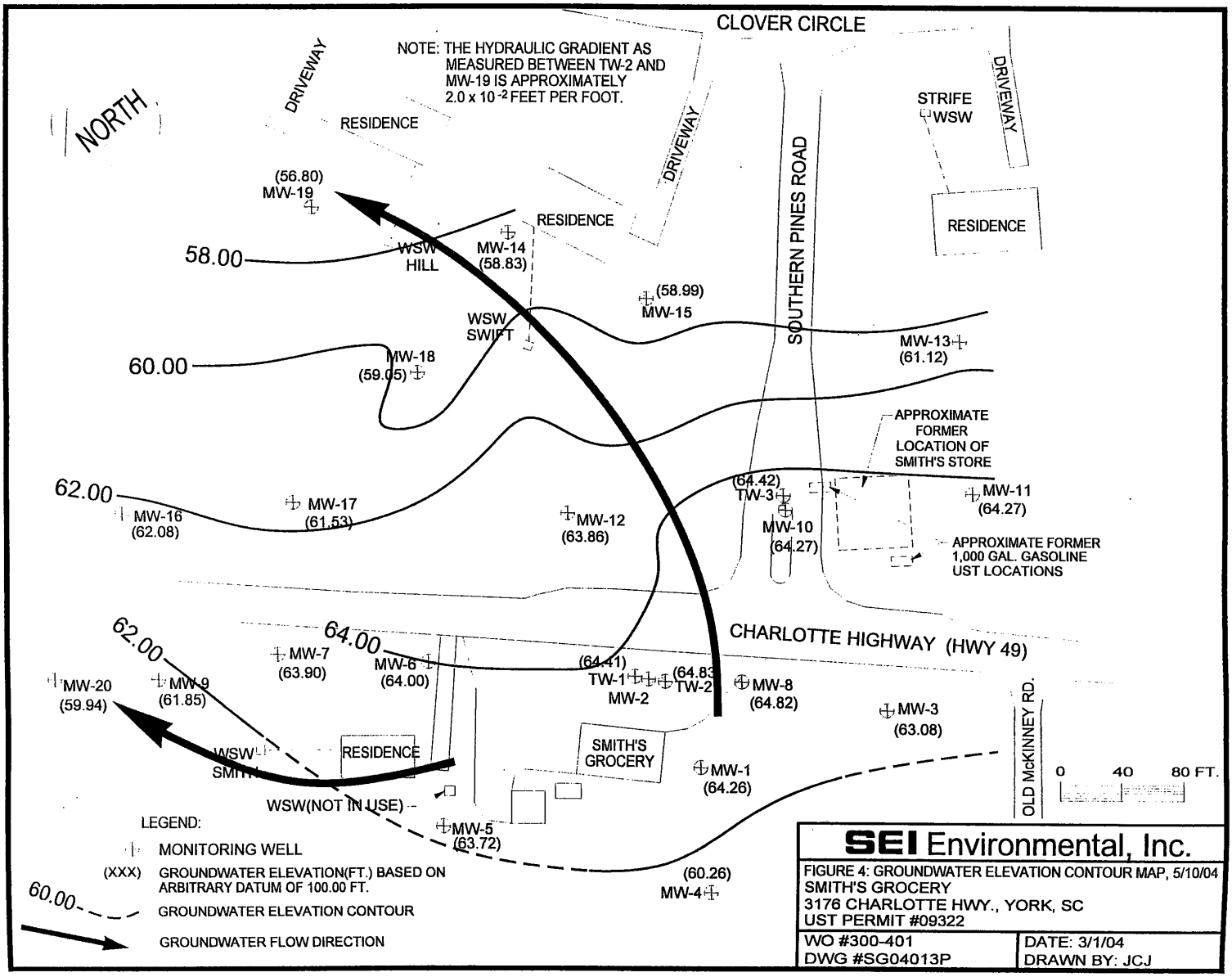
Figure 4 – Potentiometric Map for May 10, 2004

Appendix E

Table 4 – Summary of May 10, 2004 Gauging and Field Screening Activities

&

Field Data Information Sheet(s) for Ground Water Sampling



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER ELEVATION CONTOUR MAP, 5/10/04
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 3/1/04
DWG #SG04013P	DRAWN BY: JCJ

Table 4

Summary of Field Observations - May 10, 2004

Smith's Grocery
York , South Carolina
Site ID No.09322

Sample ID ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-1				26.90	35.00	N/A	N/A	N/A	N/A	3.90	Petroleum Odor
MW-2				28.68	38.00	N/A	N/A	N/A	N/A	4.50	Petroleum Odor
MW-6				29.91	37.00	N/A	N/A	N/A	N/A	3.46	Petroleum Odor
MW-7				27.78	36.00	N/A	N/A	N/A	N/A	4.01	Petroleum Odor
MW-8				39.90	38.00	N/A	N/A	N/A	N/A	3.90	Petroleum Odor
MW-10				35.50	44.00	N/A	N/A	N/A	N/A	5.20	Petroleum Odor
MW-11	Initial			36.19	44.00	4.58	0.128	17.8	4.40	3.81	
MW-11	1st Volume				44.00	4.23	0.124	17.4	4.69		
MW-11	2nd Volume				44.00	4.36	0.116	17.3	4.79		
MW-11	3rd Volume				44.00	4.35	0.115	17.2	4.28		
MW-11	Post Sampling				44.00	4.31	0.111	17.2	4.39		
MW-12				35.75	44.00	N/A	N/A	N/A	N/A	4.00	Petroleum Odor
MW-13	Initial			39.27	47.00	4.68	0.055	18.8	6.53	3.77	
MW-13	1st Volume				47.00	4.55	0.050	17.4	6.24		
MW-13	2nd Volume				47.00	4.57	0.050	17.2	5.86		
MW-13	3rd Volume				47.00	4.46	0.050	17.1	6.44		
MW-13	Post Sampling				47.00	4.40	0.059	17.0	6.37		
MW-14	Initial			40.06	50.00	6.02	0.066	18.5	4.23	4.86	
MW-14	1st Volume				50.00	5.44	0.068	17.7	4.40		
MW-14	2nd Volume				50.00	5.29	0.068	17.9	2.60		
MW-14	3rd Volume				50.00	5.20	0.068	17.4	3.38		
MW-14	Post Sampling				50.00	5.19	0.066	17.3	5.34		

Table 4 - continued

Summary of Field Observations - May 10, 2004

Smith's Grocery

York , South Carolina

MW-15	Initial			41.19	50.00	4.97	0.086	18.2	6.06	4.30	
MW-15	1st Volume				50.00	5.25	0.086	17.6	5.96		
MW-15	2nd Volume				50.00	5.32	0.088	17.3	5.89		
MW-15	3rd Volume				50.00	5.33	0.087	17.2	5.98		
MW-15	Post Sampling				50.00	5.41	0.086	17.1	5.76		
MW-17	Initial			32.94	40.00	5.15	0.016	18.5	2.82	3.45	
MW-17	1st Volume				40.00	4.87	0.014	17.1	4.71		
MW-17	2nd Volume				40.00	4.66	0.014	16.9	6.08		
MW-17	3rd Volume				40.00	4.61	0.015	16.7	9.19		
MW-17	Post Sampling				40.00	4.41	0.013	16.8	6.23		
MW-18	Initial			37.47	46.00	5.67	0.058	17.9	2.34	4.17	
MW-18	1st Volume				46.00	5.33	0.055	16.9	2.86		
MW-18	2nd Volume				46.00	5.57	0.057	16.7	3.39		
MW-18	3rd Volume				46.00	5.50	0.061	16.6	3.39		
MW-18	Post Sampling				46.00	5.56	0.061	16.6	3.64		
MW-19	Initial			41.47	50.00	5.78	0.069	18.2	7.39	5.26	
MW-19	1st Volume				50.00	4.90	0.064	17.4	4.81		
MW-19	2nd Volume				50.00	4.74	0.063	17.0	6.47		
MW-19	3rd Volume				50.00	4.63	0.064	16.8	5.80		
MW-19	Post Sampling				50.00	4.70	0.064	16.8	6.86		
TW-2				29.80	88.00	N/A	N/A	N/A	N/A	28.40	Petroleum Odor
TW-3	Initial			34.79	71.00	5.42	0.730	20.2	4.00	3.00	Bailed Dry

Notes: NA-Not Applicable

Table 5

Summary of May 10, 2004 Laboratory Analytical Results

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*11.00*	*2,223.00*	*1,558.00*	*10,000.00*	*NA*	*80.00*	*2.00*	*0.32*	*56.00*
MW-1	05/10/04	**330.00**	1,100.00	459.00	3,700.00	5,589.00	25.00	**40.00**	0.010	**130.00**
SSTL		*10.00*	*2,021.00*	*1,416.00*	*15,000.00*	*NA*	*81.00*	*30.00*	*10.000*	*51.00*
MW-2	05/10/04	**17,000.00**	**24,000.00**	**2,000.00**	11,000.00	54,000.00	**750.00**	**1,200.00**	**260.000**	**2,500.00**
SSTL		*6.00*	*1,212.00*	*850.00*	*8,000.00*	*NA*	*48.00*	*18.00*	*4.83*	*31.00*
MW-6	05/10/04	**640.00**	**2,200.00**	300.00	1,900.00	5,040.00	5.00	**36.00**	1.80	**150.00**
SSTL		*6.00*	*1,212.00*	*850.00*	*12,123.00*	*NA*	*48.00*	*18.00*	*0.66*	*31.00*
MW-7	05/10/04	**700.00**	**10,000.00**	**3,400.00**	**23,000.00**	37,100.00	**200.00**	5.00	**6.80**	**1,000.00**
SSTL		*12.00*	*2,424.00*	*1,700.00*	*16,000.00*	*NA*	*96.00*	*4.00*	*0.48*	*62.00*
MW-8	05/10/04	**4,500.00**	**18,000.00**	1,600.00	**18,000.00**	42,100.00	**200.00**	**67.00**	**6.30**	**1,000.00**
SSTL		*9.00*	*1,819.00*	*1,274.00*	*18,185.00*	*NA*	*73.00*	*21.00*	*9.00*	*46.00*
MW-10	05/10/04	**8,600.00**	**21,000.00**	**2,400.00**	14,000.00	46,000.00	**250.00**	5.70	**210.00**	**1,200.00**
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.02*	*5.00*
MW-11	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
SSTL		*7.00*	*5.00*	*68.00*	*730.00*	*NA*	*5.00*	*7.00*	*7.00*	*36.00*
MW-12	05/10/04	23.00	5.00	1.00	43.00	72.00	1.00	6.80	0.110	5.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.02*	*5.00*
MW-13	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.51*	*5.00*
MW-14	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.05*	*5.00*
MW-15	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.02*	*5.00*
MW-17	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00

Table 5 - Continued

Summary of May 10, 2004 Laboratory Analytical Results

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.12*	*5.00*
MW-18	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.02*	*5.00*
MW-19	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
SSTL		*5.00*	*8.00*	*5.00*	*180.00*	*NA*	*5.00*	*2.00*	*0.05*	*18.00*
TW-2	05/10/04	**3,700.00**	**640.00**	**160.00**	**1,800.00**	6,300.00	5.00	**5.00**	**1.20**	**170.00**
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*2.00*	*0.23*	*5.00*
TW-3	05/10/04	2.90	**11.00**	1.80	**12.00**	27.70	1.00	**5.00**	0.050	5.00
SSTL		*5.00*	*2.00*	*2.00*	*26.00*	*NA*	*2.00*	*5.00*	*5.00*	*5.00*
Swift	05/10/04	1.00	**5.00**	1.00	3.00	10.00	1.00	5.00	0.030	5.00
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Hill	05/10/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**6.10**	0.010	5.00
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Smith	05/10/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**41.00**	0.010	5.00
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Strife	05/10/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00

Notes: Bold numbers indicate concentrations above SSTL or suspected to be above SSTL.

Table 6

Historical Summary of Laboratory Analysis

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*11.00*	*2,223.00*	*1,558.00*	*10,000.00*	*NA*	*80.00*	*2.00*	*0.32*	*56.00*
MW-1	05/10/04	**330.00**	1,100.00	459.00	3,700.00	30,299.00	25.00	**40.00**	0.010	**130.00**
MW-1	01/08/04	**620.00**	850.00	340.00	3,800.00	56,741.00	**100.00**	**5.00**	0.170	**500.00**
MW-1	08/26/03	**610.00**	1,200.00	640.00	4,800.00	7,250.00	**100.00**	**33.00**	0.010	**500.00**
MW-1	04/02/03	**590.00**	**2,900.00**	960.00	7,400.00	19,100.00	27.00	**10.00**	0.010	**200.00**
MW-1	01/06/03	**911.00**	**9,810.00**	**2,660.00**	**18,650.00**	51,131.00	**250.00**	**56.00**	0.010	**743.00**
SSTL		*10.00*	*2,021.00*	*1,416.00*	*15,000.00*	*NA*	*81.00*	*30.00*	*10.000*	*51.00*
MW-2	05/10/04	**17,000.00**	**24,000.00**	**2,000.00**	11,000.00	202,300.00	**750.00**	**1,200.00**	**260.000**	**2,500.00**
MW-2	01/08/04	**18,000.00**	**33,000.00**	**2,200.00**	12,000.00	219,900.00	**880.00**	**1,000.00**	**150.000**	**1,200.00**
MW-2	08/26/03	**16,000.00**	**26,000.00**	**2,200.00**	13,000.00	154,700.00	**480.00**	**190.00**	**120.000**	**540.00**
MW-2	04/02/03	**13,000.00**	**1,800.00**	**1,600.00**	9,500.00	97,500.00	**480.00**	**190.00**	**160.000**	**500.00**
MW-2	01/06/03	**18,400.00**	**31,100.00**	**3,180.00**	**18,920.00**	71,600.00	**395.00**	28.00	0.020	**514.00**
RBSL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.050*	*25.00*
MW-3	01/08/04	5.00	1.00	5.00	3.00	20.00	1.00	5.00	0.010	5.00
MW-3	01/06/03	1.00	1.00	1.00	3.00	6.00	1.00	**350.00**	0.020	1.00
RBSL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.050*	*25.00*
MW-4	01/08/04	5.00	1.00	5.00	3.00	20.00	1.00	5.00	0.010	5.00
MW-4	01/06/03	1.00	1.00	1.00	3.00	6.00	1.00	12.00	0.020	1.00
RBSL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
MW-5	01/08/04	5.00	1.00	5.00	3.00	22.40	1.00	5.00	0.010	5.00
MW-5	01/06/04	1.00	1.00	1.00	5.40	8.40	1.00	12.00	0.020	1.00
SSTL		*6.00*	*1,212.00*	*850.00*	*8,000.00*	*NA*	*48.00*	*18.00*	*4.83*	*31.00*
MW-6	05/10/04	**640.00**	**2,200.00**	300.00	1,900.00	5,040.00	5.00	**36.00**	1.80	**150.00**
MW-6	01/08/04	**350.00**	1,200.00	240.00	1,300.00	3,090.00	1.00	5.00	1.20	**77.00**
MW-6	08/26/03	**1,400.00**	**5,800.00**	**1,100.00**	6,600.00	14,900.00	**250.00**	**37.00**	0.01	**1,200.00**
MW-6	04/02/03	**2,600.00**	**11,000.00**	**1,800.00**	9,000.00	24,400.00	**250.00**	**54.00**	2.60	**1,200.00**
MW-6	01/06/04	**4,840.00**	**20,400.00**	**3,540.00**	**19,020.00**	47,800.00	25.00	11.00	**7.00**	**640.00**

Table 6 - Continued

Historical Summary of Laboratory Analysis

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*6.00*	*1,212.00*	*850.00*	*12,123.00*	*NA*	*48.00*	*18.00*	*0.66*	*31.00*
MW-7	05/10/04	**700.00**	**10,000.00**	**3,400.00**	**23,000.00**	37,100.00	**200.00**	5.00	**6.80**	**1,000.00**
MW-7	01/08/04	**630.00**	**13,000.00**	**3,400.00**	**25,000.00**	42,030.00	**100.00**	5.00	**3.50**	**1,000.00**
MW-7	08/26/03	**740.00**	250.00	110.00	1,600.00	2,700.00	**50.00**	**160.00**	0.09	**250.00**
MW-7	04/02/03	**240.00**	110.00	120.00	38.00	508.00	**210.00**	**240.00**	**1.70**	**120.00**
MW-7	01/06/04	**1,020.00**	1.00	**2,290.00**	**16,940.00**	20,251.00	1.00	5.00	**1.70**	**826.00**
SSTL		*12.00*	*2,424.00*	*1,700.00*	*16,000.00*	*NA*	*96.00*	*4.00*	*0.48*	*62.00*
MW-8	05/10/04	**4,500.00**	**18,000.00**	1,600.00	**18,000.00**	42,100.00	**200.00**	**67.00**	**6.30**	**1,000.00**
MW-8	01/08/04	**5,600.00**	**22,000.00**	**3,400.00**	**20,000.00**	51,000.00	**100.00**	**18.00**	**4.70**	**1,300.00**
MW-8	08/26/03	**3,800.00**	**10,000.00**	1,200.00	6,800.00	21,800.00	**100.00**	**81.00**	**58.00**	**500.00**
MW-8	04/02/03	**8,600.00**	**46,000.00**	**3,500.00**	**23,000.00**	81,100.00	**200.00**	**49.00**	**190.00**	**1,000.00**
MW-8	01/06/04	**6,770.00**	**84,600.00**	**3,560.00**	**24,740.00**	119,670.00	7.30	**24.00**	**1.90**	**362.00**
RBSL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
MW-9	01/08/04	5.00	1.00	5.00	3.00	14.00	1.00	**36.00**	0.010	5.00
MW-9	01/06/04	1.00	2.20	5.70	579.00	587.90	1.00	**24.00**	0.020	**109.00**
SSTL		*9.00*	*1,819.00*	*1,274.00*	*18,185.00*	*NA*	*73.00*	*21.00*	*9.00*	*46.00*
MW-10	05/10/04	**8,600.00**	**21,000.00**	**2,400.00**	14,000.00	46,000.00	**250.00**	5.70	**210.00**	**1,200.00**
MW-10	01/08/04	**4,200.00**	**14,000.00**	**2,400.00**	12,000.00	32,600.00	**100.00**	6.30	**100.00**	**500.00**
MW-10	08/26/03	**12,000.00**	**33,000.00**	**3,200.00**	17,000.00	65,200.00	**250.00**	**210.00**	**450.00**	**1,200.00**
MW-10	04/02/03	**11,000.00**	**23,000.00**	**2,400.00**	13,000.00	49,400.00	**200.00**	**49.00**	**190.00**	**1,000.00**
MW-10	01/06/04	**7,980.00**	**24,900.00**	**3,540.00**	18,180.00	54,600.00	25.00	**35.00**	**78.00**	**299.00**
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.02*	*5.00*
MW-11	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-11	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	**46.00**	0.010	5.00
MW-11	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**33.00**	**0.290**	5.00
MW-11	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	**26.00**	0.010	5.00
MW-11	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	**6.00**	0.020	**7.80**

Table 6 - Continued

Historical Summary of Laboratory Analysis

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*7.00*	*5.00*	*68.00*	*730.00*	*NA*	*5.00*	*7.00*	*7.00*	*36.00*
MW-12	05/10/04	23.00	5.00	1.00	43.00	72.00	1.00	6.80	0.110	5.00
MW-12	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.015	5.00
MW-12	08/26/03	**51.00**	5.00	1.00	72.00	129.00	1.00	**37.00**	0.370	5.50
MW-12	04/02/03	**12.00**	5.00	1.00	1.80	19.80	1.00	38.00	0.240	5.00
MW-12	01/06/04	**720.00**	**17.20**	13.40	**1,550.00**	2,300.60	1.00	6.00	12.00	**113.00**
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.02*	*5.00*
MW-13	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-13	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-13	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**45.00**	0.010	5.00
MW-13	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	40.00	0.010	5.00
MW-13	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	5.00	0.020	1.30
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*5.00*	*0.51*	*5.00*
MW-14	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-14	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	**45.00**	0.010	5.00
MW-14	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**100.00**	0.010	5.00
MW-14	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	39.00	0.010	5.00
MW-14	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	5.00	0.020	1.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.05*	*5.00*
MW-15	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-15	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	**48.00**	0.010	5.00
MW-15	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**120.00**	0.010	5.00
MW-15	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	**36.00**	0.010	5.00
MW-15	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	9.00	0.020	1.00
SSTL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
MW-16	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	**140.00**	0.010	5.00
MW-16	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	**18.00**	0.020	1.00

Table 6 - Continued

Historical Summary of Laboratory Analysis

Smith's Grocery

York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.02*	*5.00*
MW-17	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-17	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	**0.020**	5.00
MW-17	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	42.00	0.010	5.00
MW-17	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	17.00	0.010	5.00
MW-17	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	44.00	0.020	1.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.12*	*5.00*
MW-18	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-18	01/08/04	1.00	5.00	1.00	3.00	10.00	1.00	**97.00**	0.010	5.00
MW-18	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**100.00**	0.010	5.00
MW-18	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	**50.00**	0.010	5.00
MW-18	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	5.00	0.020	1.00
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*15.00*	*0.02*	*5.00*
MW-19	05/10/04	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-19	01/08/04	1.00	1.00	5.00	1.00	8.00	3.00	1.00	0.010	5.00
MW-19	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**18.00**	0.010	5.00
MW-19	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	5.00	0.010	5.00
MW-19	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	6.00	0.020	1.00
SSTL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
MW-20	01/08/04	1.00	1.00	5.00	1.00	8.00	3.00	130.00	0.010	5.00
MW-20	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	11.00	0.020	1.00
SSTL		*5.00*	*1,000.00*	*700.00*	*10,000.00*	*NA*	*40.00*	*15.00*	*0.05*	*25.00*
TW-1	01/08/04	**2,000.00**	**2,500.00**	**1,100.00**	5,800.00	11,400.00	**50.00**	5.00	**0.380**	**250.00**
TW-1	01/06/04	**3,380.00**	**1,510.00**	**1,860.00**	9,370.00	16,120.00	25.00	6.00	**5.200**	**160.00**
SSTL		*5.00*	*8.00*	*5.00*	*180.00*	*NA*	*5.00*	*2.00*	*0.05*	*18.00*
TW-2	05/10/04	**3,700.00**	**640.00**	**160.00**	**1,800.00**	6,300.00	5.00	**5.00**	**1.20**	**170.00**
TW-2	1/8/.04	**2,800.00**	**460.00**	**14.00**	**1,000.00**	4,274.00	**22.00**	**5.40**	**1.10**	**34.00**
TW-2	08/26/03	**3,000.00**	**450.00**	**79.00**	**1,700.00**	5,229.00	**10.00**	**6.80**	**0.35**	**160.00**
TW-2	04/02/03	**3,300.00**	**1,500.00**	**220.00**	**2,000.00**	7,020.00	**50.00**	**10.00**	**1.10**	**250.00**
TW-2	01/06/04	**6,620.00**	**6,860.00**	**620.00**	**4,110.00**	18,210.00	**50.20**	**6.00**	**5.20**	**160.00**

Table 6 - Continued

Historical Summary of Laboratory Analysis

Smith's Grocery

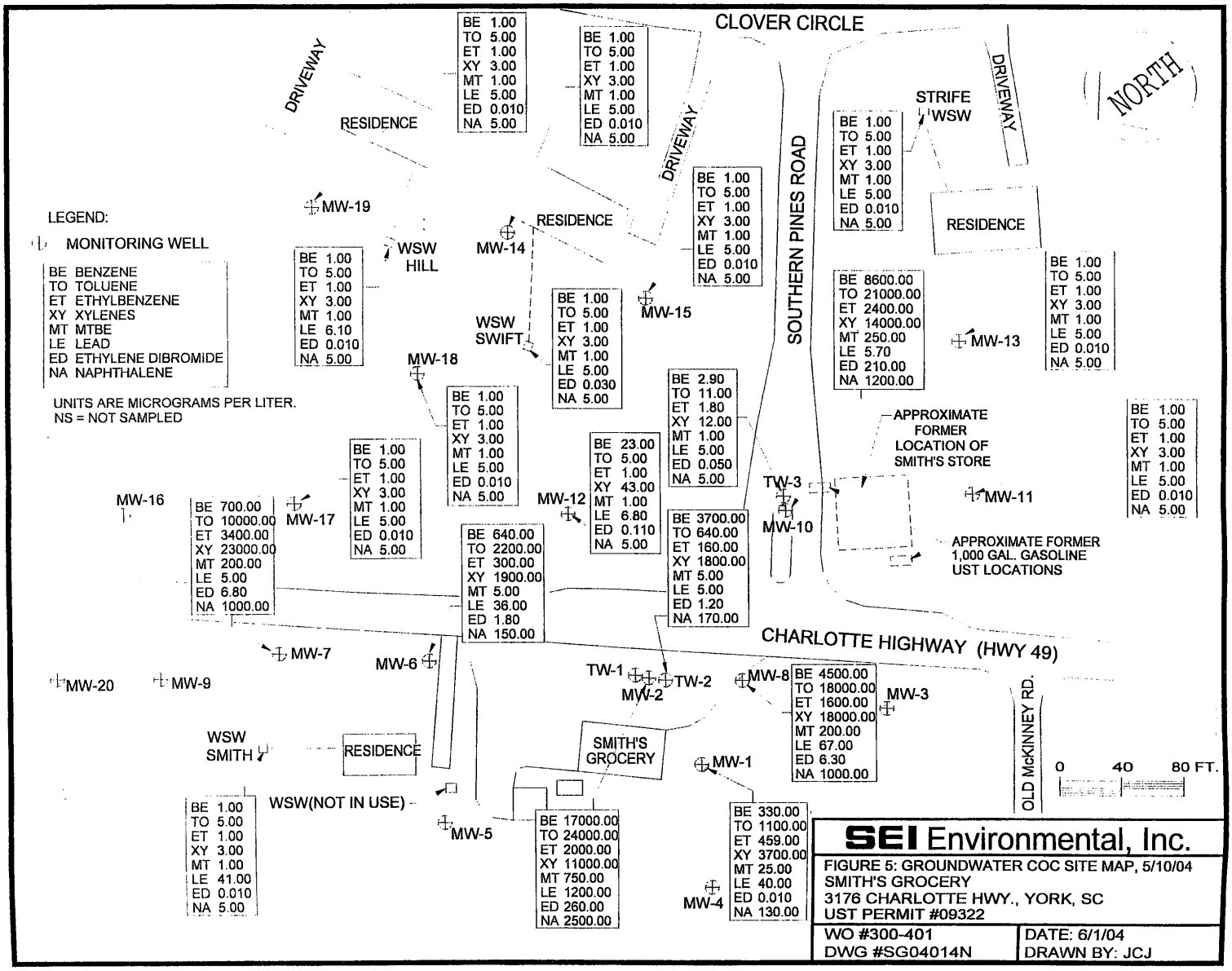
York, South Carolina

Site ID No.09322

Monitor Well	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
SSTL		*5.00*	*5.00*	*5.00*	*10.00*	*NA*	*5.00*	*2.00*	*0.23*	*5.00*
TW-3	05/10/04	2.90	**11.00**	1.80	**12.00**	27.70	1.00	**5.00**	0.050	5.00
TW-3	01/08/04	1.00	1.00	5.00	1.00	8.00	3.00	**5.00**	0.010	5.00
TW-3	08/26/03	1.00	5.00	1.00	3.00	10.00	1.00	**5.00**	0.010	5.00
TW-3	04/02/03	1.00	5.00	1.00	3.00	10.00	5.00	**5.00**	0.031	5.00
TW-3	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	**5.00**	0.130	**8.90**
SSTL		*5.00*	*2.00*	*2.00*	*26.00*	*NA*	*2.00*	*5.00*	*5.00*	*5.00*
Swift	05/10/04	1.00	**5.00**	1.00	3.00	10.00	1.00	5.00	0.030	5.00
Swift	01/08/04	1.00	**5.00**	1.00	3.00	10.00	1.00	5.00	0.010	5.00
Swift	08/26/03	1.00	**5.00**	1.00	3.00	10.00	1.00	**9.80**	0.017	5.00
Swift	04/02/03	1.00	5.00	1.00	3.00	10.00	1.00	**23.00**	0.010	4.00
Swift	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	**10.00**	0.020	1.00
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Hill	05/10/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**6.10**	0.010	5.00
Hill	01/08/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**22.00**	0.010	5.00
Hill	08/26/03	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00
Hill	04/02/03	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**23.00**	0.010	5.00
Hill	01/06/04	1.00	1.00	1.00	3.00	6.00	1.00	**9.00**	0.020	4.80
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Smith	05/10/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**41.00**	0.010	5.00
Smith	01/08/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**120.00**	0.010	5.00
Smith	08/26/03	1.00	**5.00**	1.00	**3.00**	10.00	1.00	**5.20**	0.010	5.00
Smith	04/02/03	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00
Smith	01/06/04	1.00	1.00	1.00	**3.00**	6.00	1.00	5.00	0.020	1.00
SSTL		*2.00*	*2.00*	*2.00*	*2.00*	*NA*	*5.00*	*5.00*	*5.00*	*5.00*
Strife	05/10/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00
Strife	01/08/04	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00
Strife	08/26/03	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00
Strife	04/02/03	1.00	**5.00**	1.00	**3.00**	10.00	1.00	5.00	0.010	5.00
Strife	01/06/04	1.00	1.00	1.00	**3.00**	6.00	1.00	**28.00**	0.020	1.00

Notes: NA:Not Applicable NS- Not Sampled

Bold numbers indicate concentrations above RBSL/SSTL or suspected to be above RBSL/SSTL.



BE 1.00
TO 5.00
ET 1.00
XY 3.00
MT 1.00
LE 5.00
ED 0.010
NA 5.00

BE 1.00
TO 5.00
ET 1.00
XY 3.00
MT 1.00
LE 5.00
ED 0.010
NA 5.00

BE 1.00
TO 5.00
ET 1.00
XY 3.00
MT 1.00
LE 5.00
ED 0.010
NA 5.00

BE 1.00
TO 5.00
ET 1.00
XY 3.00
MT 1.00
LE 6.10
ED 0.010
NA 5.00

BE 1.00
TO 5.00
ET 1.00
XY 3.00
MT 1.00
LE 5.00
ED 0.030
NA 5.00

BE 1.00
TO 5.00
ET 1.00
XY 3.00
MT 1.00
LE 5.00
ED 0.010
NA 5.00

BE 2.90
TO 11.00
ET 1.80
XY 12.00
MT 1.00
LE 5.00
ED 0.050
NA 5.00

BE 8600.00
TO 21000.00
ET 2400.00
XY 14000.00
MT 250.00
LE 5.70
ED 210.00
NA 1200.00

BE 1.00
TO 5.00
ET 1.00
XY 3.00
MT 1.00
LE 5.00
ED 0.010
NA 5.00

BE 1.00
TO 5.00
ET 1.00
XY 3.00
MT 1.00
LE 5.00
ED 0.010
NA 5.00

BE 1.00
TO 5.00
ET 1.00
XY 3.00
MT 1.00
LE 5.00
ED 0.010
NA 5.00

BE 23.00
TO 5.00
ET 1.00
XY 43.00
MT 1.00
LE 6.80
ED 0.110
NA 5.00

BE 700.00
TO 10000.00
ET 3400.00
XY 23000.00
MT 200.00
LE 5.00
ED 6.80
NA 1000.00

BE 640.00
TO 2200.00
ET 300.00
XY 1900.00
MT 5.00
LE 36.00
ED 1.80
NA 150.00

BE 3700.00
TO 640.00
ET 160.00
XY 1800.00
MT 5.00
LE 5.00
ED 1.20
NA 170.00

BE 4500.00
TO 18000.00
ET 1600.00
XY 18000.00
MT 200.00
LE 67.00
ED 6.30
NA 1000.00

BE 1.00
TO 5.00
ET 1.00
XY 3.00
MT 1.00
LE 41.00
ED 0.010
NA 5.00

BE 17000.00
TO 24000.00
ET 2000.00
XY 11000.00
MT 750.00
LE 1200.00
ED 260.00
NA 2500.00

BE 330.00
TO 1100.00
ET 459.00
XY 3700.00
MT 25.00
LE 40.00
ED 0.010
NA 130.00

SEI Environmental, Inc.

FIGURE 5: GROUNDWATER COC SITE MAP, 5/10/04
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 6/1/04
DWG #SG04014N	DRAWN BY: JCJ

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
. . . . .	3R6827	34714704

GENERATOR

3. Generator's Name and Mailing Address

3EI ENVIRONMENTAL, INC
3021 MCNAUGHTON DR. SUITE 9
COLOMBIA, SC 29223

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
3EI ENVRIONMENTAL, INC	. . . . .	803-788-2535
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
	. . . . .	
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
G & K TANK SERVICES PO BOX 1384 SUMTER, SC 29151	387573557	800-800-6840

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED WATER SMITH'S GROCERY YORK, SC #300401			158	gal
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Michael CADE	Michael Cade	01	14	04

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
S. Scott	S. Scott	1	14	04

ORIGINAL - RETURN TO GENERATOR

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-4593 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 158 Gallons
Smith's Grocery
York, SC

Contaminant NonHazardous Petroleum
Contaminated Water

This is to certify the above ~~soil~~ water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. Colley

Date 5/14/04

Table 7

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
Swift	Initial	5.00	2.00	2.00	26.00	2.00	5.00	5.00	5.00	
	SSTL	5.00	2.00	2.00	26.00	2.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	1.00	**5.00**	1.00	3.00	1.00	5.00	0.03	5.00	
	SSTL	5.00	2.00	2.00	26.00	2.00	5.00	5.00	5.00	
	Subsequent > SSTL	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00
Hill	Initial	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	1.00	**5.00**	1.00	**3.00**	1.00	**6.10**	0.022	5.00	
	SSTL	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	
	Subsequent > SSTL	0.00	3.00	0.00	1.00	0.00	1.10	0.00	0.00	5.10
Strife	Initial	2.00	2.00	2.00	2.00	2.00	5.00	5.00	5.00	
	SSTL	2.00	2.00	2.00	2.00	2.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	1.00	**5.00**	1.00	**3.00**	1.00	5.00	0.01	5.00	
	SSTL	2.00	2.00	2.00	2.00	2.00	5.00	5.00	5.00	
	Subsequent > SSTL	0.00	3.00	0.00	1.00	0.00	0.00	0.00	0.00	4.00
Smith	Initial	5.00	5.00	5.00	15.00	5.00	5.00	5.00	5.00	
	SSTL	5.00	5.00	5.00	15.00	5.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	**41.00**	0.01	5.00	
	SSTL	5.00	5.00	5.00	15.00	5.00	5.00	5.00	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	36.00	0.00	0.00	36.00

Table 7

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-1	Initial	1,100.00	19,000.00	2,700.00	10,000.00	80.00	2.00	0.32	770.00	
	SSTL	11.00	2,223.00	1,558.00	10,000.00	80.00	2.00	0.32	56.00	
	Initial > SSTL	1,089.00	16,777.00	1,142.00	0.00	0.00	0.00	0.00	714.00	19,722.00
	Subsequent	**330.00**	1,100.00	490.00	3,700.00	25.00	**40.00**	0.01	**130.00**	
	SSTL	11.00	2,223.00	1,558.00	10,000.00	80.00	2.00	0.32	56.00	
	Subsequent > SSTL	319.00	0.00	0.00	0.00	0.00	38.00	0.00	74.00	431.00
MW-2	Initial	25,000.00	39,000.00	3,500.00	15,000.00	200.00	1,300.00	179.00	200.00	
	SSTL	10.00	2,021.00	1,416.00	15,000.00	81.00	30.00	10.00	51.00	
	Initial > SSTL	24,990.00	36,979.00	2,084.00	0.00	119.00	1,270.00	169.00	149.00	65,760.00
	Subsequent	**17,000.00**	**24,000.00**	**2,000.00**	11,000.00	**750.00**	**1,200.00**	**260.00**	**2,500.00**	
	SSTL	10.00	2,021.00	1,416.00	15,000.00	81.00	30.00	10.00	51.00	
	Subsequent > SSTL	16,990.00	21,979.00	584.00	0.00	669.00	1,170.00	250.00	2,449.00	44,091.00
MW-6	Initial	3,400.00	14,000.00	1,900.00	8,000.00	80.00	39.00	4.83	700.00	
	SSTL	6.00	1,212.00	850.00	8,000.00	48.00	18.00	4.83	31.00	
	Initial > SSTL	3,394.00	12,788.00	1,050.00	0.00	32.00	21.00	0.00	669.00	17,954.00
	Subsequent	**640.00**	**2,200.00**	300.00	1,900.00	5.00	**36.00**	1.80	**150.00**	
	SSTL	6.00	1,212.00	850.00	8,000.00	48.00	18.00	4.83	31.00	
	Subsequent > SSTL	634.00	988.00	0.00	0.00	0.00	18.00	0.00	119.00	1,759.00
MW-7	Initial	2,000.00	4,100.00	3,100.00	15,000.00	200.00	110.00	0.66	1,400.00	
	SSTL	6.00	1,212.00	850.00	12,123.00	48.00	18.00	0.66	31.00	
	Initial > SSTL	1,994.00	2,888.00	2,250.00	2,877.00	152.00	92.00	0.00	1,369.00	11,622.00
	Subsequent	**700.00**	**10,000.00**	**3,400.00**	**23,000.00**	**200.00**	5.00	**6.80**	**1,000.00**	
	SSTL	6.00	1,212.00	850.00	12,123.00	48.00	18.00	0.66	31.00	
	Subsequent > SSTL	694.00	8,788.00	2,550.00	10,877.00	152.00	0.00	6.14	969.00	24,036.14

Table 7

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-8	Initial	9,500.00	56,000.00	5,300.00	16,000.00	200.00	4.00	0.48	820.00	
	SSTL	12.00	2,424.00	1,700.00	16,000.00	96.00	4.00	0.48	62.00	
	Initial > SSTL	9,488.00	53,576.00	3,600.00	0.00	104.00	0.00	0.00	758.00	67,526.00
	Subsequent	**4,500.00**	**18,000.00**	1,600.00	**18,000.00**	**200.00**	**67.00**	**6.30**	1,000.00	
	SSTL	12.00	2,424.00	1,700.00	16,000.00	96.00	4.00	0.48	62.00	
	Subsequent > SSTL	4,488.00	15,576.00	0.00	2,000.00	104.00	63.00	5.82	938.00	23,174.82
MW-10	Initial	5,800.00	26,000.00	3,200.00	19,000.00	800.00	21.00	95.30	800.00	
	SSTL	9.00	1,819.00	1,274.00	18,185.00	73.00	21.00	9.00	46.00	
	Initial > SSTL	5,791.00	24,181.00	1,926.00	815.00	727.00	0.00	86.30	754.00	34,280.30
	Subsequent	**8,600.00**	**21,000.00**	**2,400.00**	14,000.00	**250.00**	5.70	**210.00**	**1,200.00**	
	SSTL	9.00	1,819.00	1,274.00	18,185.00	73.00	21.00	9.00	46.00	
	Subsequent > SSTL	8,591.00	19,181.00	1,126.00	0.00	177.00	0.00	201.00	1,154.00	30,430.00
MW-11	Initial	5.00	5.00	5.00	10.00	5.00	6.00	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.02	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	5.00	0.01	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.02	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-12	Initial	390.00	5.00	68.00	730.00	5.00	7.00	20.80	52.00	
	SSTL	7.00	5.00	68.00	730.00	5.00	7.00	7.00	36.00	
	Initial > SSTL	383.00	0.00	0.00	0.00	0.00	0.00	13.80	16.00	412.80
	Subsequent	**23.00**	5.00	1.00	43.00	1.00	6.80	0.11	5.00	
	SSTL	7.00	5.00	68.00	730.00	5.00	7.00	7.00	36.00	
	Subsequent > SSTL	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.00

Table 7

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-13	Initial	5.00	5.00	5.00	10.00	75.00	5.00	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.02	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	70.00	0.00	0.00	0.00	70.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	5.00	0.01	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.02	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-14	Initial	5.00	5.00	5.00	10.00	5.00	37.00	0.51	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.51	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	32.00	0.00	0.00	32.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	5.00	0.01	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	5.00	0.51	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-15	Initial	5.00	5.00	5.00	10.00	5.00	39.00	0.51	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.05	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	24.00	0.46	0.00	24.46
	Subsequent	1.00	5.00	1.00	3.00	1.00	5.00	0.03	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.05	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-17	Initial	5.00	5.00	5.00	10.00	5.00	29.00	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.02	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	14.00	0.00	0.00	14.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	5.00	**0.03**	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.02	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01

Table 7

Concentration Reduction Calculation
Smith's Grocery
York, South Carolina
Site No. 09322

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-18	Initial	5.00	5.00	5.00	10.00	5.00	42.00	0.12	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.12	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	27.00	0.00	0.00	27.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	5.00	0.01	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.12	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-19	Initial	5.00	5.00	5.00	10.00	5.00	51.00	0.02	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.02	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	36.00	0.00	0.00	36.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	5.00	0.01	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	15.00	0.02	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TW-2	Initial	400.00	8.00	5.00	180.00	5.00	2.00	0.05	18.00	
	SSTL	5.00	8.00	5.00	180.00	5.00	2.00	0.05	18.00	
	Initial > SSTL	395.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	395.00
	Subsequent	**3,700.00**	**640.00**	**160.00**	**1,800.00**	5.00	**5.00**	**1.20**	**170.00**	
	SSTL	5.00	8.00	5.00	180.00	5.00	2.00	0.05	18.00	
	Subsequent > SSTL	3,695.00	632.00	155.00	1,620.00	0.00	3.00	1.15	152.00	6,258.15
TW-3	Initial	5.00	5.00	5.00	10.00	5.00	2.00	0.23	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	2.00	0.23	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	2.90	**11.00**	1.80	**12.00**	1.00	**5.00**	**0.05**	5.00	
	SSTL	5.00	5.00	5.00	10.00	5.00	2.00	0.23	5.00	
	Subsequent > SSTL	0.00	6.00	0.00	2.00	0.00	3.00	0.00	0.00	11.00
Totals	Initial > SSTL	(Sum of Initial Concentration Above SSTL for all Wells)								217,876.56
	Subsequent > SSTL	(Sum of Subsequent Concentration Above SSTL for all Wells)								130,255.22

Note: Bold Concentrations are greater than the respective SSTL.

CoC Mass Reduction = (Sum of Initial Conc. > SSTL - Sum of Subsequent Conc. > SSTL)/ (Sum of Initial Conc. > SSTL) * 100

CoC Mass Reduction = (217,876.56 - 130,255.22) / (217,876.56) * 100

CoC Mass Reduction =40.22%

SEI Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
FEB 0 5 2004
UNDERGROUND STORAGE TANK PROGRAM

February 3, 2004

Ms. Paula Anderson
SCDHEC - UST Program
2600 Bull Street
Columbia, SC 29201

Re: Summary of Corrective Action and Gauging Results
Smith's Grocery, First Quarter 2004
#176 Charlotte Highway (Highway 49)
York, South Carolina 29745
UST Permit # 09322

Dear Ms. Anderson;

SEI Environmental, Inc. (SEI) submits summary of gauging results and laboratory analytical results for samples collected on January 8, 2004. Attached in Appendix A, Figure 1, is a topographic map depicting the location of the site and Figure 2, a site map illustrating the location of the monitoring wells.

January 8, 2004, SEI personnel were on site to gauge the monitoring wells, remove free product and collect groundwater samples. Twenty-three (23) monitoring wells were gauged each site visit. No free product was found during either sampling event. A total of two (2) drums of petroleum-impacted water were generated from the purging of the monitoring wells during the sampling event. Attached in Appendix C is Table 2, which summarizes January 8, 2004 gauging and field screening information, and copies of the Field Data Information Sheet(s) for Ground Water Sampling. Upon completion of purging and collection of field screening information, a representative sample was collected from each sample point. Each sample was submitted to Environmental Science Laboratory in Nashville, Tennessee for analysis for Benzene, Toluene, Ethylbenzene, Xylene (BTEX) by EPA method 8260B, Methyl Tert-butyl Ether (MTBE) by EPA method 8260B, Naphthalene by EPA method 8260B, Ethylene Dibromide by EPA method 8011, and Lead by EPA method 6010B. Attached in Appendix D is Table 3, which summarizes the laboratory analytical results and copies of the laboratory analytical results and a copy of the Chain of Custody. Attached in Appendix E is Figure 3, a CoC map based on the January 8, 2004, laboratory analytical data.

January 8, 2004, a total of two (2) drums of petroleum-impacted water, which were generated from the purging of the sample points, was disposed at G & K Tank Services, Inc. in Sumter, SC. Attached in Appendix F are copies of the Non-Hazardous Waste Manifests and Certificate for Disposals for the two(2) drums of petroleum-impacted water.

The evaluation of the corrective action activities' effectiveness consists of comparing the April 2, 2003 laboratory analytical data against the baseline SSTL concentrations and determining the percent of total concentration reduction. The percent of total concentration reduction is calculated by using the following formula:

SEI
Environmental, Inc.

Percent of Total Concentration Reduction = (Initial Con. Above SSTL) – (Current Conc. Above SSTL) *(100)) / (Initial Conc. Above SSTL)

The calculation for the January 8, 2004, Percent of Total Concentration Reduction was found to be **46.6%.** Attached in Appendix G is Table 4, which illustrates the system's effectiveness analysis.

SEI will continue collect groundwater samples as required in the next quarterly sampling period as specified in the February 12, 2003 directive. Upon receipt of the laboratory analytical data, SEI will submit a report summarizing the findings.

If you have any questions and / or comments, concerning the information provided in this document, please contact John Paul Bekish at (803) 788-2535.

Sincerely,

David B. Pittman
Project Manager
SEI – Columbia Office

SOUTH CAROLINA PROFESSIONAL ENGINEER
2/4/04
No. 21084
RANDY CASEY

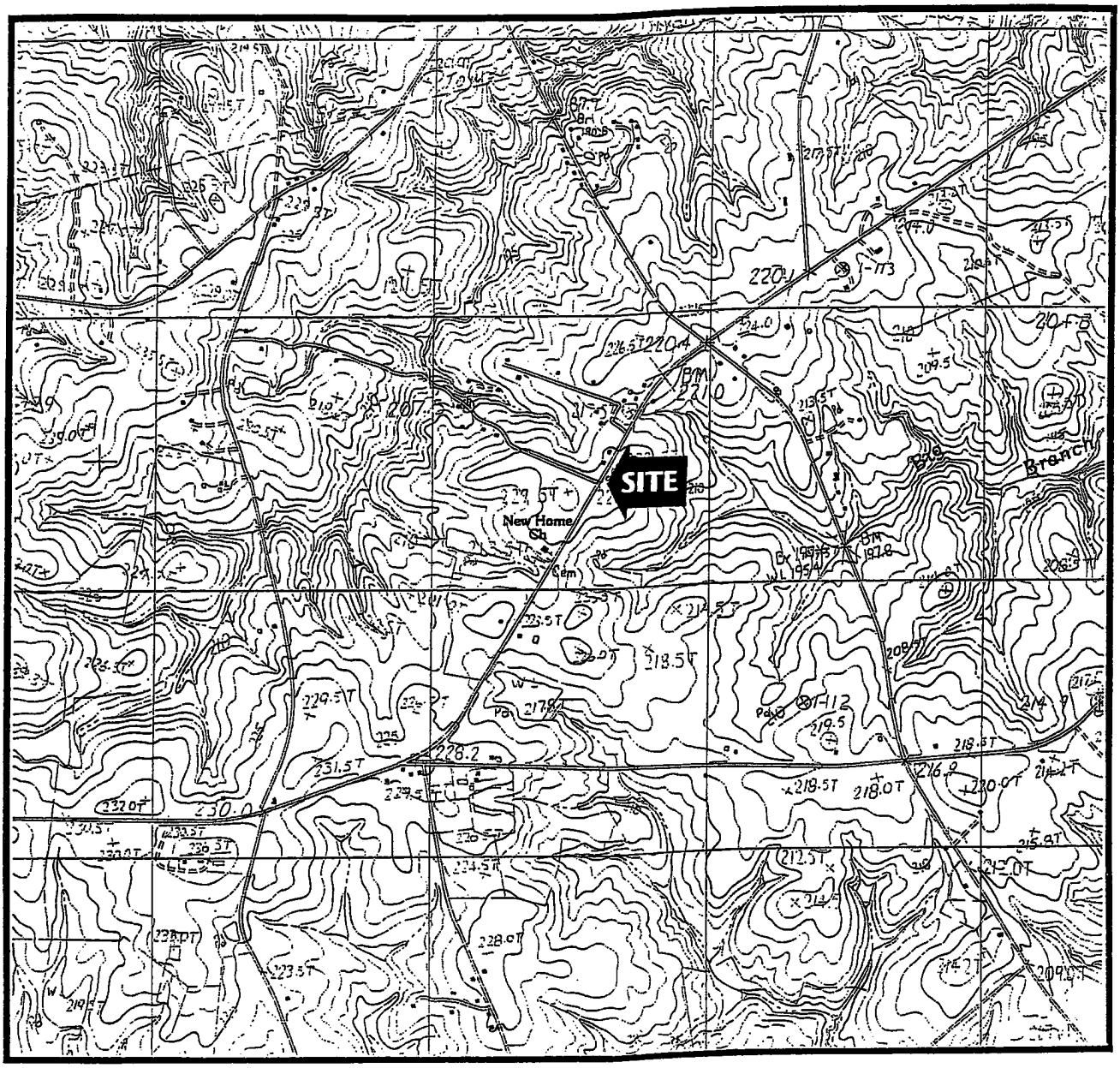
Randy Casey
P.E. #21084

Attachment(s)

cc: Lois B. Smith, Smith's Grocery
SEI Project Files

7.5 MINUTE SERIES(TOPOGRAPHIC)

CLOVER QUADRANGLE



SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

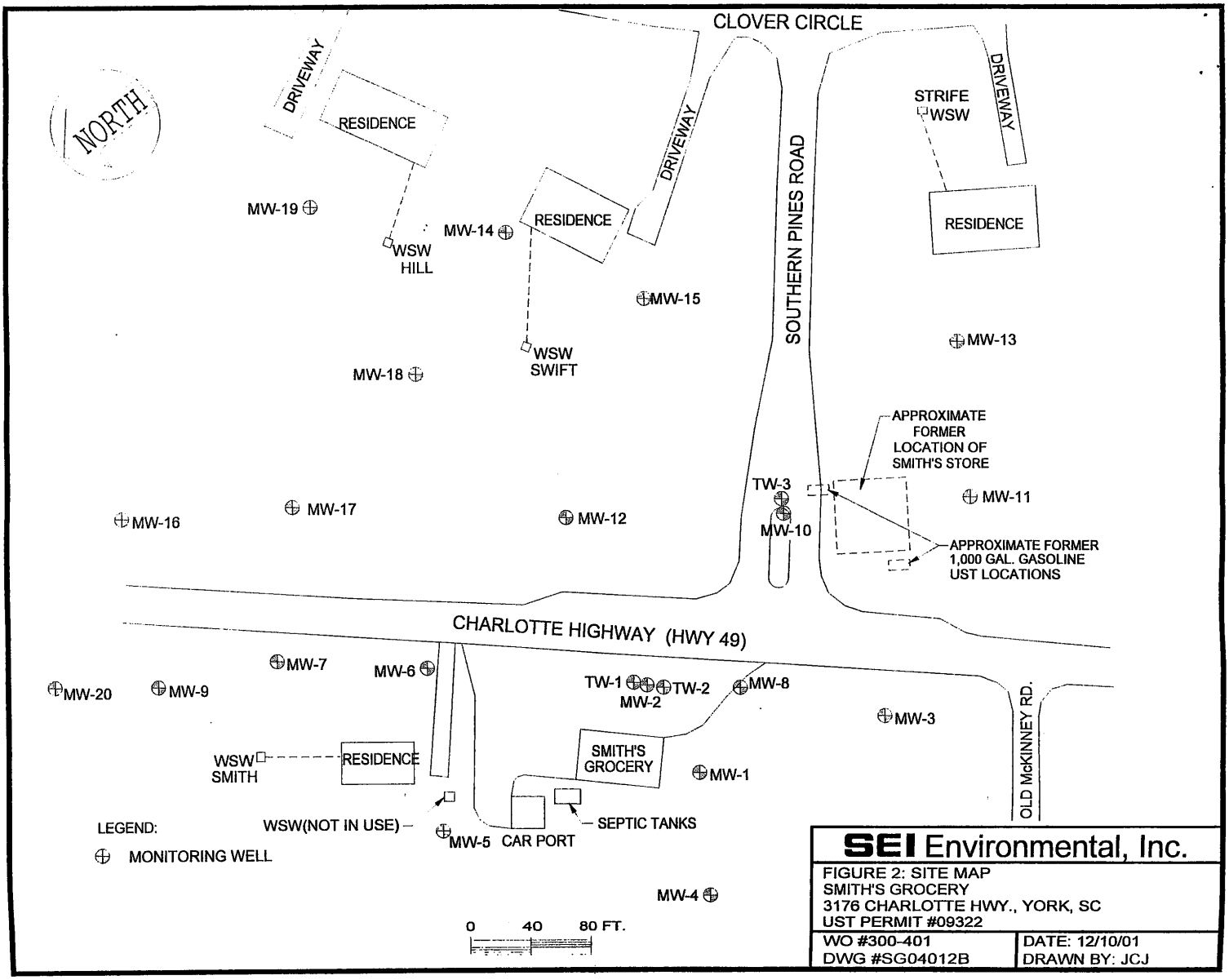
1 .5 0 1 KILOMETER

NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

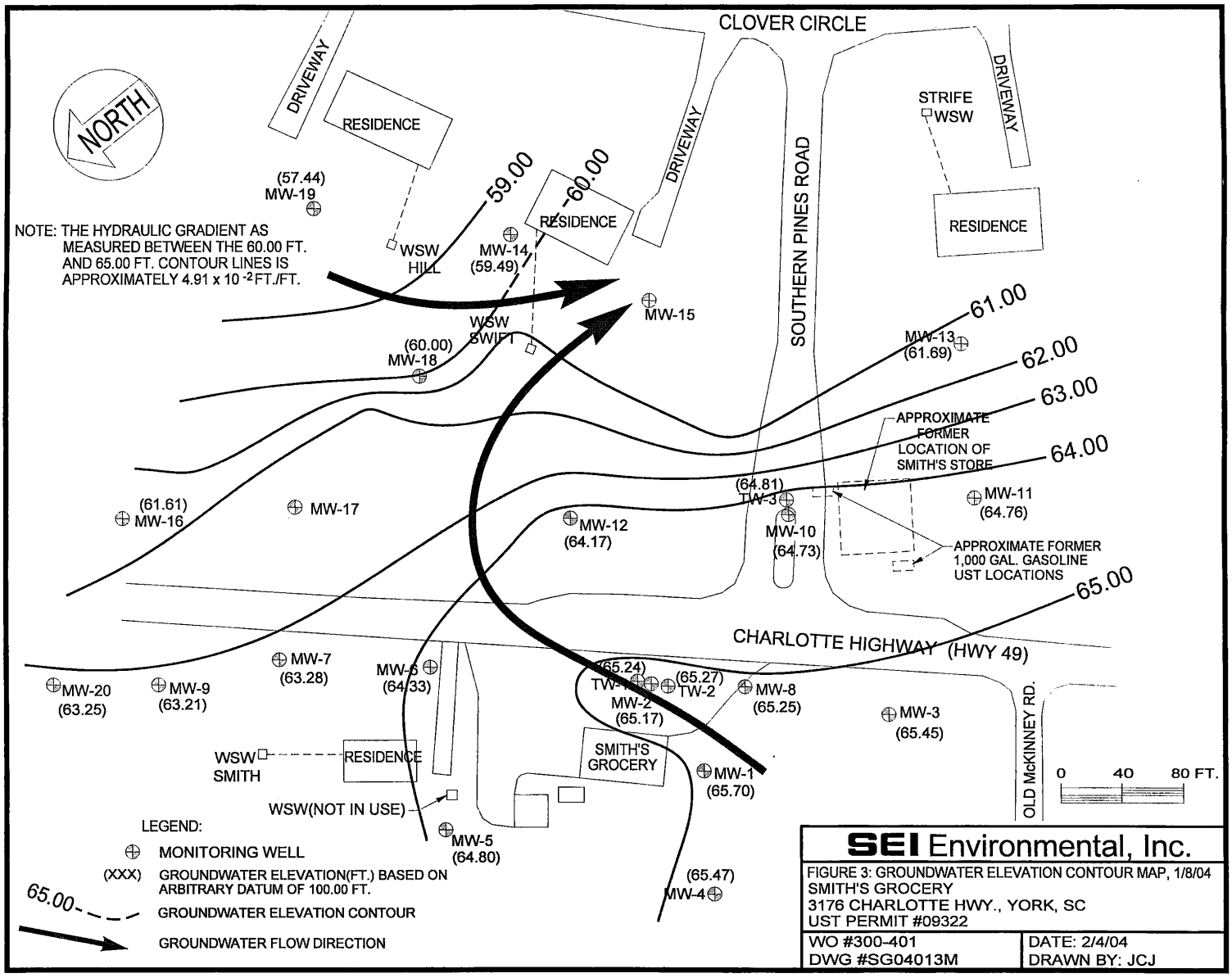
WO #300-401	DATE: 12/7/01
DWG #	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

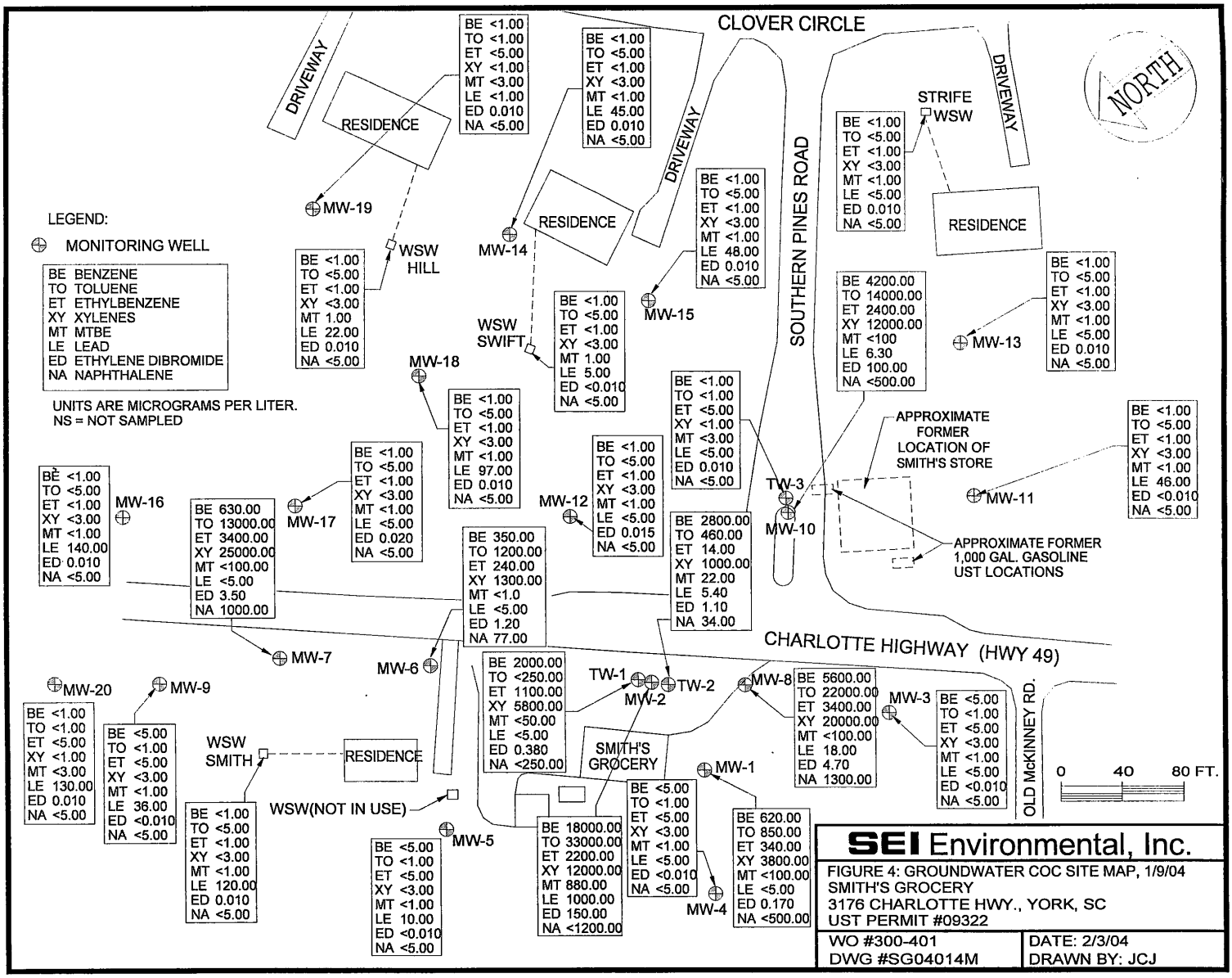
WO #300-401	DATE: 12/10/01
DWG #SG04012B	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: GROUNDWATER ELEVATION CONTOUR MAP, 1/8/04
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 2/4/04
DWG #SG04013M	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP, 1/9/04
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 2/3/04
DWG #SG04014M	DRAWN BY: JCJ

Table 2
Summary of Field Observations - January 8, 2004
Smith's Grocery
York South Carolina
Site ID No. 09322

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-1				25.56	35.00	N/A	N/A	N/A	N/A	4.68	Petroleum Odor
MW-2				29.40	38.00	N/A	N/A	N/A	N/A	4.20	Petroleum Odor
MW-3	Initial			26.46	35.00	4.01	0.065	14.4	6.03	4.17	
MW-3	Ist Volume				35.00	4.09	0.042	16.3	6.41	1.25	Bailed dry
MW-3	2nd Volume				35.00	4.14	0.041	16.5	6.63		
MW-3	3rd Volume				35.00	4.37	0.039	16.6	7.31		
MW-3	Post Sampling				35.00	4.37	0.038	16.6	7.09		
MW-4	Initial			20.73	27.00	4.35	0.072	14.6	5.97		
MW-4	Ist Volume				27.00	4.42	0.072	15.1	6.11		
MW-4	Post Sampling				27.00	4.49	0.071	15.2	6.09		
MW-5	Initial			24.49	30.00	4.26	0.063	14.5	5.46	1.00	Bailed dry
MW-5	Ist Volume				30.00	4.33	0.068	14.9	5.71		
MW-6				29.58	37.00	N/A	N/A	N/A	N/A	3.61	Petroleum Odor
MW-7				28.40	36.00	N/A	N/A	N/A	N/A	3.42	Petroleum Odor
MW-8				29.47	38.00	N/A	N/A	N/A	N/A	4.17	Petroleum Odor
MW-9	Initial			27.33	36.00	5.22	0.031	15.9	5.41	4.23	
MW-9	Ist Volume				36.00	4.70	0.029	16.2	6.34		
MW-9	2nd Volume				36.00	4.65	0.027	16.2	5.44		
MW-9	3rd Volume				36.00	4.71	0.028	16.2	4.96		
MW-9	Post Sampling				36.00	7.69	0.028	16.2	5.02		
MW-10				35.04	40.00	N/A	N/A	N/A	N/A	4.30	Petroleum Odor
MW-11	Initial			35.70	44.00	4.11	0.126	15.3	5.92	4.00	
MW-11	Ist Volume				44.00	4.02	0.121	15.5	5.54		
MW-11	2nd Volume				44.00	4.09	0.119	15.7	5.48		
MW-11	3rd Volume				44.00	4.24	0.115	15.7	5.63		
MW-11	Post Sampling				44.00	4.14	0.115	15.7	5.55		

MW-12				35.44	44.00	N/A	N/A	N/A	N/A	4.10	Petroleum Odor
MW-13	Initial			38.70	47.00	4.06	0.113	15.1	6.01	4.00	
MW-13	Ist Volume				47.00	4.03	0.114	16.2	6.22		
MW-13	2nd Volume				47.00	4.02	0.111	16.3	6.13		
MW-13	3rd Volume				47.00	4.02	0.106	16.4	6.25		
MW-13	Post Sampling				47.00	4.02	0.106	16.3	6.35		
MW-14	Initial			39.40	50.00	5.21	0.071	15.7	4.21	5.10	
MW-14	Ist Volume				50.00	5.27	0.070	15.4	4.37		
MW-14	2nd Volume				50.00	5.07	0.065	15.9	4.04		
MW-14	3rd Volume				50.00	5.31	0.067	16.0	3.98		
MW-14	Post Sampling				50.00	5.15	0.069	16.0	3.77		
MW-15	Initial			46.55	50.00	4.57	0.057	15.1	7.13	0.75	
MW-15	Ist Volume				50.00	4.78	0.062	15.2	7.53		
MW-15	Post Sampling				50.00	4.77	0.062	15.3	7.88		
MW-16	Initial			28.03	37.00	4.96	0.024	15.1	5.64	4.30	
MW-16	Ist Volume				37.00	4.56	0.250	15.4	5.87		
MW-16	2nd Volume				37.00	4.99	0.025	15.5	6.35		
MW-16	3rd Volume				37.00	5.04	0.026	15.4	6.27		
MW-16	Post Sampling				37.00	4.98	0.026	15.4	6.28		
MW-17	Initial			32.56	40.00	4.87	0.027	15.5	4.98	3.60	
MW-17	Ist Volume				40.00	4.57	0.028	15.9	4.77		
MW-17	2nd Volume				40.00	4.37	0.025	15.9	4.81		
MW-17	3rd Volume				40.00	4.99	0.027	16.0	4.88		
MW-17	Post Sampling				40.00	4.69	0.027	16.0	4.65		
MW-18	Initial			38.14	46.00	5.38	0.055	15.0	3.03	3.80	
MW-18	Ist Volume				46.00	5.34	0.053	15.4	2.97		
MW-18	2nd Volume				46.00	5.53	0.070	15.6	3.91		
MW-18	3rd Volume				46.00	5.70	0.073	15.6	3.39		
MW-18	Post Sampling				46.00	5.60	0.075	15.6	3.51		
MW-19	Initial			40.83	50.00	5.22	0.067	15.3	8.37	4.40	
MW-19	Ist Volume				50.00	4.90	0.066	15.4	9.00		
MW-19	2nd Volume				50.00	4.95	0.063	15.5	9.16		
MW-19	3rd Volume				50.00	4.87	0.066	15.2	9.31		
MW-19	Post Sampling				50.00	4.88	0.065	15.2	9.27		
MW-20	Initial			25.10	35.00	4.86	0.031	15.6	6.50	4.83	

MW-20	Ist Volume				35.00	4.61	0.027	15.9	7.31		
MW-20	2nd Volume				35.00	4.43	0.026	16.0	8.31		
MW-20	3rd Volume				35.00	4.68	0.025	15.9	7.82		
MW-20	Post Sampling				35.00	4.57	0.020	16.0	8.02		
TW-1	Initial			29.48	61.00	6.66	0.338	17.1	2.85	15.42	
TW-1	Ist Volume				61.00	6.19	0.280	17.2	3.18		
TW-1	2nd Volume				61.00	5.92	0.213	17.0	3.59		
TW-1	3rd Volume				61.00	5.78	0.191	17.5	3.15		
TW-1	Post Sampling				61.00	5.80	0.189	17.1	4.55		
TW-2				29.45	88.00	N/A	N/A	N/A	N/A	28.62	Petroleum Odor
TW-3	Initial			34.40	71.00	5.16	0.079	17.1	3.13		
TW-3	Ist Volume				71.00	5.37	0.082	16.4	3.22		
TW-3	2nd Volume				71.00	5.42	0.081	16.4	3.32		
TW-3	3rd Volume				71.00	5.27	0.081	16.7	3.18		
TW-3	Post Sampling				71.00	5.30	0.080	16.7	3.28		

Notes: NA-Not Applicable *

TABLE I
Groundwater Elevation Data
Smith's Grocery / York, South Carolina

Monitor Well Number	Date Measured	Top of Casing Elevation (feet)	Depth to Ground Water (feet)	Total Depth of Well (feet)	Groundwater Elevation (feet)
MW-1	1/08/04	91.16	25.46	35	65.70
MW-2	1/08/04	94.57	29.40	38	65.17
MW-3	1/08/04	91.91	26.46	35	65.45
MW-4	1/08/04	86.20	20.73	27	65.47
MW-5	1/08/04	89.29	24.49	30	64.80
MW-6	1/08/04	93.91	29.58	37	64.33
MW-7	1/08/04	91.68	28.40	36	63.28
MW-8	1/08/04	94.72	29.47	38	65.25
MW-9	1/08/04	90.54	27.33	36	63.21
MW-10	1/08/04	99.77	35.04	44	64.73
MW-11	1/08/04	100.46	35.70	44	64.76
MW-12	1/08/04	99.61	35.44	44	64.17
MW-13	1/08/04	100.39	38.70	47	61.69
MW-14	1/08/04	98.89	39.40	50	59.49
MW-15	1/08/04	100.18	46.55	50	53.63
MW-16	1/08/04	89.91	28.03	37	61.61
MW-17	1/08/04	94.46	32.56	40	66.90
MW-18	1/08/04	98.14	38.14	46	60.00
MW-19	1/08/04	98.27	40.83	50	57.44
MW-20	1/08/04	88.35	25.10	35	63.25
TW-1	1/08/04	94.72	29.48	61	65.24
TW-2	1/08/04	94.72	29.45	88	65.27
TW-3	1/08/04	99.21	34.40	71	64.81

Top of casing elevation is referenced to an assumed elevation.

Table 3

Summary ofJanuary 9, 2004 Laboratory Analytical Results

Smith's Grocery

York, South Carolina

Site ID No 09322

Monitor Well	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
Swift WSW	<1.00	**<5.00**	<1.00	<3.00	1.00	**5.00**	<0.010	<5.00
Hill WSW	<1.00	**<5.00**	<1.00	<3.00	1.00	**22.00**	0.010	<5.00
Smith WSW	<1.00	<5.00	<1.00	<3.00	<1.00	**120.00**	0.010	<5.00
Strife WSW	<1.00	**<5.00**	<1.00	**<3.00**	<1.00	<5.00	0.010	<5.00
MW-1	**620.00**	**850.00**	340.00	3800.00	**<100.00**	**<5.00**	0.170	**<500.00**
MW-2	**18000.00**	**33000.00**	**2200.00**	12000.00	**880.00**	**1000.00**	**150.00**	**<1200.00**
MW-3	<5.00	<1.00	<5.00	<3.00	<1.00	<5.00	<0.010	<5.00
MW-4	<5.00	<1.00	<5.00	<3.00	<1.00	<5.00	<0.010	<5.00
MW-5	<5.00	<1.00	<5.00	<3.00	<1.00	10.00	<0.010	<5.00
MW-6	**350.00**	**1200.00**	240.00	1300.00	**<1.0**	<5.00	1.20	**77.00**
MW-7	630.00	**13000.00**	**3400.00**	**25000.00**	**<100.00**	<5.00	**3.50**	**1000.00**
MW-8	**5600.00**	**22000.00**	**3400.00**	**20000.00**	**<100.00**	**18.00**	**4.70**	**1300.00**
MW-9	<5.00	<1.00	<5.00	<3.00	<1.00	36.00	<0.010	<5.00
MW-10	**4200.00**	**14000.00**	2400.00	12000.00	**<100**	6.30	**100.00**	**<500.00**
MW-11	<1.00	<5.00	<1.00	<3.00	<1.00	**46.00**	<0.010	<5.00
MW-12	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	0.015	<5.00
MW-13	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	0.010	<5.00
MW-14	<1.00	<5.00	<1.00	<3.00	<1.00	**45.00**	0.010	<5.00
MW-15	<1.00	<5.00	<1.00	<3.00	<1.00	**48.00**	0.010	<5.00
MW-16	<1.00	<5.00	<1.00	<3.00	<1.00	140.00	0.010	<5.00
MW-17	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	0.020	<5.00
MW-18	<1.00	<5.00	<1.00	<3.00	<1.00	**97.00**	0.010	<5.00
MW-19	<1.00	<1.00	<5.00	<1.00	<3.00	<1.00	0.010	<5.00
MW-20	<1.00	<1.00	<5.00	<1.00	<3.00	130.00	0.010	<5.00
TW-1	2000.00	<250.00	1100.00	5800.00	<50.00	<5.00	0.380	<250.00
TW-2	**2800.00**	**460.00**	**14.00**	**1000.00**	**22.00**	**5.40**	**1.10**	**34.00**
TW-3	<1.00	<1.00	<5.00	<1.00	<3.00	**<5.00**	0.010	<5.00

Bold values greater than SSTL

Table 4

System Effectiveness -January 9, 2004 Laboratory Analytical Results

Smith's Grocery

York, South Carolina

Site ID No. 09322

Monitor Well	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Total Conc. (ppb)
Swift WSW	1.00	5.00	1.00	3.00	1.00	9.80	0.017	5.00	25.82
Hill WSW	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00	21.01
Smith WSW	1.00	5.00	1.00	3.00	1.00	5.20	0.010	5.00	21.21
Strife WSW	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00	21.01
MW-1	**620.00**	850.00	340.00	3800.00	**100.00**	**5.00**	0.170	**500.00**	6215.17
MW-2	**18000.00**	**33000.00**	**2200.00**	12000.00	**880.00**	**1000.00**	**150.00**	**1200.00**	68430.00
MW-6	**350.00**	1200.00	240.00	1300.00	**1.00**	**5.00**	1.20	**77.00**	3174.20
MW-7	**630.00**	**13000.00**	**3400.00**	**25000.00**	**100.00**	5.00	**3.50**	**1000.00**	43138.50
MW-8	**5600.00**	**22000.00**	**3400.00**	**20000.00**	**100.00**	**18.00**	**4.70**	**1300.00**	52422.70
MW-10	**4200.00**	**14000.00**	**2400.00**	12000.00	**100.00**	6.30	**100.00**	**500.00**	33306.30
MW-11	1.00	5.00	1.00	3.00	1.00	**46.00**	0.010	5.00	62.01
MW-12	1.00	5.00	1.00	3.00	1.00	5.00	0.015	5.00	21.02
MW-13	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00	21.01
MW-14	1.00	5.00	1.00	3.00	1.00	**45.00**	0.010	5.00	61.01
MW-15	1.00	5.00	1.00	3.00	1.00	**48.00**	0.010	5.00	64.01
MW-17	1.00	5.00	1.00	3.00	1.00	5.00	0.020	5.00	21.02
MW-18	1.00	5.00	1.00	3.00	1.00	**97.00**	0.010	5.00	113.01
MW-19	1.00	5.00	1.00	3.00	1.00	5.70	0.010	5.00	21.71
TW-2	**2800.00**	**460.00**	**14.00**	**1000.00**	**22.00**	**5.40**	**1.10**	**34.00**	4336.50
TW-3	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00	21.01
Initial Conc	47644.00	158164.00	19824.00	84035.00	1694.00	1716.00	322.43	4820.00	318219.43
SSTL Conc.	120.00	10975.00	7772.00	80343.00	490.00	199.00	53.33	391.00	100343.33
Initial Conc.above SSTL	47524.00	147189.00	12052.00	3692.00	1204.00	1517.00	269.10	4429.00	217876.10
Current Conc.	32213.00	84575.00	12007.00	75139.00	1316.00	1331.40	260.82	4676.00	211518.22
Current Conc. Above SSTL	32093.00	73600.00	4235.00	0.00	826.00	1132.40	207.49	4285.00	116378.89

(Initial Conc above SSTL - Current Conc. Above SSTL)(100)/(Initial Conc. Above SSTL)=(217876.10 - 116378.89) (100) / 217876.10)=46.6%

Bold concentrations are above SSTL

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of 01/14/04

3. Generator's Name and Mailing Address
SEI ENVIRONMENTAL, INC
3021 MCNAUGHTON DR. SUITE 9
COLOMBIA, SC 29223

4. Generator's Phone ( )

5. Transporter 1 Company Name: SEI ENVRIONMENTAL, INC | 6. US EPA ID Number | A. Transporter's Phone: 803-788-2535

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address: G & K TANK SERVICES
PO BOX 1284
SUMTER, SC 29151
10. US EPA ID Number: 987573557
C. Facility's Phone: 800-800-6840

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED WATER SMITH'S GROCERY YORK, SC	02	DM		
b. NON HAZARDOUS PETROLEUM CONTAMINATED WATER PANTRY #3441 PROSPERITY, SC	02	DM		
c.				
d. NON HAZARDOUS PETROLEUM CONTAMINATED WATER BOILING SPRINGS, SC	01	DM		

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name | Signature | Month | Day | Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Van Chisholm | Signature: Van Chisholm | Month: 01 | Day: 14 | Year: 04

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: S. Sollett | Signature: S. Sollett | Month: 01 | Day: 14 | Year: 04

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL - RETURN TO GENERATOR

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-4593 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 2 Drums
Smith's Grocery
York, SC

Contaminant NonHazardous Petroleum
Contaminated Water

This is to certify the above ~~soil~~ water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. Sobey

Date 01/14/04

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAR 29 2004

CHARLES & KIMBERLY SWIFT
3043 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, 3176 Charlotte Hwy., York, SC
UST Permit #09322
Laboratory Analytical Results for supply well sampled on March 3, 2004
York County

Dear Mr. & Mrs. Swift:

On March 3, 2004, the South Carolina Department of Health and Environmental Control (SCDHEC) sampled your supply well for gasoline constituents. Please find enclosed a copy of the analytical results. The results indicate that petroleum constituents are present before the granulated carbon (GAC) unit as indicated by the sample labeled Swift Pre-GAC but the unit is successfully removing the petroleum as indicated by the sample labeled Swift Post-GAC.

If you have any questions or need additional information, please contact me at (803) 896-6397 or (800) 826-5435 (within SC only).

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Analytical results

cc: Technical File

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAR 29 2004

ROBERT STRIFE
3035 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, 3176 Charlotte Hwy., York, SC
UST Permit #09322
Laboratory Analytical Results for supply well sampled on March 3, 2004
York County

Dear Mr. Strife:

On March 3, 2004, the South Carolina Department of Health and Environmental Control (SCDHEC) sampled your supply well for gasoline constituents. Please find enclosed a copy of the analytical results. The results indicate that no petroleum was detected before the granulated carbon (GAC) unit as indicated by the sample labeled Strife Pre-GAC.

If you have any questions or need additional information, please contact me at (803) 896-6397 or (800) 826-5435 (within SC only).

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Analytical results

cc: Technical File

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAR 29 2004

TONY & SUSAN HILL
3049 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, 3176 Charlotte Hwy., York, SC
UST Permit #09322
Laboratory Analytical Results for supply well sampled on March 3, 2004
York County

Dear Mr. & Mrs. Hill:

On March 3, 2004, the South Carolina Department of Health and Environmental Control (SCDHEC) sampled your supply well for gasoline constituents. Please find enclosed a copy of the analytical results. The results indicate that low levels of petroleum are present before the granulated carbon (GAC) unit as indicated by the sample labeled Hill Pre-GAC but the unit is successfully removing the petroleum as indicated by the sample labeled Hill Post-GAC.

If you have any questions or need additional information, please contact me at (803) 896-6397 or (800) 826-5435 (within SC only).

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Analytical results

cc: Technical File

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAR 29 2004

LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, 3176 Charlotte Hwy., York, SC
UST Permit #09322
Laboratory Analytical Results for supply well sampled on March 3, 2004
York County

Dear MS. Smith:

On March 3, 2004, the South Carolina Department of Health and Environmental Control (SCDHEC) sampled your supply well for gasoline constituents. Please find enclosed a copy of the analytical results. The results indicate no petroleum constituents were detected.

If you have any questions or need additional information, please contact me at (803) 896-6397 or (800) 826-5435 (within SC only).

Sincerely,

Debra L. Thoma

Debra L. Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

Enc: Analytical results

cc: Technical File

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

March 15, 2004

Ms. Debra Thoma
SCDHEC
UST Program
2600 Bull Street
Columbia, SC 29201

RE: Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

Dear Ms. Thoma:

Enclosed are the analytical results for sample(s) received by the laboratory on March 5, 2004. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report please feel free to contact me.

Sincerely,

Sherri Stabel
Sherri.Stabel@pacelabs.com
Project Manager

Enclosures

RECEIVED
MAR 18 2004
UNDERGROUND STORAGE TANK PROGRAM

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

Lab Sample No: 923941991 Project Sample Number: 9261592-001 Date Collected: 03/04/04 15:15
Client Sample ID: SMITH RES Matrix: Water Date Received: 03/05/04 11:40

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
Metals									
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010								
Lead	0.0012 J	mg/l	0.0050	1.0	03/10/04 18:02	LBG	7439-92-1		
Date Digested	03/10/04				03/10/04				
GC/MS Volatiles									
GC/MS VOCs by 8260	Method: EPA 8260								
Benzene	ND	ug/l	5.0	1.0	03/12/04 16:07	DLK	71-43-2		
Ethylbenzene	ND	ug/l	5.0	1.0	03/12/04 16:07	DLK	100-41-4		
Methyl-tert-butyl ether	ND	ug/l	5.0	1.0	03/12/04 16:07	DLK	1634-04-4		
Naphthalene	ND	ug/l	5.0	1.0	03/12/04 16:07	DLK	91-20-3		
Toluene	ND	ug/l	5.0	1.0	03/12/04 16:07	DLK	108-88-3		
m&p-Xylene	ND	ug/l	10.	1.0	03/12/04 16:07	DLK			
o-Xylene	ND	ug/l	5.0	1.0	03/12/04 16:07	DLK	95-47-6		
Toluene-d8 (S)	96	%		1.0	03/12/04 16:07	DLK	2037-26-5		
4-Bromofluorobenzene (S)	86	%		1.0	03/12/04 16:07	DLK	460-00-4		
Dibromofluoromethane (S)	113	%		1.0	03/12/04 16:07	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	121	%		1.0	03/12/04 16:07	DLK	17060-07-0		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

Lab Sample No: 923942007 Project Sample Number: 9261592-002 Date Collected: 03/04/04 15:30
Client Sample ID: STRIFE PRE-GAC Matrix: Water Date Received: 03/05/04 11:40

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
Metals									
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010								
Lead	0.0019 J	mg/l	0.0050	1.0	03/10/04 18:07	LBG	7439-92-1		
Date Digested	03/10/04				03/10/04				
GC/MS Volatiles									
GC/MS VOCs by 8260	Method: EPA 8260								
Benzene	ND	ug/l	5.0	1.0	03/12/04 16:35	DLK	71-43-2		
Ethylbenzene	ND	ug/l	5.0	1.0	03/12/04 16:35	DLK	100-41-4		
Methyl-tert-butyl ether	ND	ug/l	5.0	1.0	03/12/04 16:35	DLK	1634-04-4		
Naphthalene	ND	ug/l	5.0	1.0	03/12/04 16:35	DLK	91-20-3		
Toluene	ND	ug/l	5.0	1.0	03/12/04 16:35	DLK	108-88-3		
m&p-Xylene	ND	ug/l	10.	1.0	03/12/04 16:35	DLK			
o-Xylene	ND	ug/l	5.0	1.0	03/12/04 16:35	DLK	95-47-6		
Toluene-d8 (S)	100	%		1.0	03/12/04 16:35	DLK	2037-26-5		
4-Bromofluorobenzene (S)	98	%		1.0	03/12/04 16:35	DLK	460-00-4		
Dibromofluoromethane (S)	114	%		1.0	03/12/04 16:35	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	116	%		1.0	03/12/04 16:35	DLK	17060-07-0		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

Lab Sample No: 923942015 Project Sample Number: 9261592-003 Date Collected: 03/04/04 15:35
Client Sample ID: STRIFE POST-GAC Matrix: Water Date Received: 03/05/04 11:40

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC/MS Volatiles									
GC/MS VOCs by 8260	Method: EPA 8260								
Benzene	ND	ug/l	5.0	1.0	03/13/04 00:18	DLK	71-43-2		
Ethylbenzene	ND	ug/l	5.0	1.0	03/13/04 00:18	DLK	100-41-4		
Methyl-tert-butyl ether	ND	ug/l	5.0	1.0	03/13/04 00:18	DLK	1634-04-4		
Naphthalene	ND	ug/l	5.0	1.0	03/13/04 00:18	DLK	91-20-3		
Toluene	ND	ug/l	5.0	1.0	03/13/04 00:18	DLK	108-88-3		
m&p-Xylene	ND	ug/l	10.	1.0	03/13/04 00:18	DLK			
o-Xylene	ND	ug/l	5.0	1.0	03/13/04 00:18	DLK	95-47-6		
Toluene-d8 (S)	99	%		1.0	03/13/04 00:18	DLK	2037-26-5		
4-Bromofluorobenzene (S)	98	%		1.0	03/13/04 00:18	DLK	460-00-4		
Dibromofluoromethane (S)	102	%		1.0	03/13/04 00:18	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	109	%		1.0	03/13/04 00:18	DLK	17060-07-0		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

Lab Sample No: 923942023 Project Sample Number: 9261592-004 Date Collected: 03/04/04 15:40
Client Sample ID: SWIFT PRE-GAC Matrix: Water Date Received: 03/05/04 11:40

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
Metals									
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010								
Lead	0.0025 J	mg/l	0.0050	1.0	03/10/04 18:11	LBG	7439-92-1		
Date Digested	03/10/04				03/10/04				
GC/MS Volatiles									
GC/MS VOCs by 8260	Method: EPA 8260								
Benzene	42.	ug/l	5.0	1.0	03/13/04 00:46	DLK	71-43-2		
Ethylbenzene	ND	ug/l	5.0	1.0	03/13/04 00:46	DLK	100-41-4		
Methyl-tert-butyl ether	ND	ug/l	5.0	1.0	03/13/04 00:46	DLK	1634-04-4		
Naphthalene	ND	ug/l	5.0	1.0	03/13/04 00:46	DLK	91-20-3		
Toluene	ND	ug/l	5.0	1.0	03/13/04 00:46	DLK	108-88-3		
m&p-Xylene	18.	ug/l	10.	1.0	03/13/04 00:46	DLK			
o-Xylene	6.6	ug/l	5.0	1.0	03/13/04 00:46	DLK	95-47-6		
Toluene-d8 (S)	102	%		1.0	03/13/04 00:46	DLK	2037-26-5		
4-Bromofluorobenzene (S)	98	%		1.0	03/13/04 00:46	DLK	460-00-4		
Dibromofluoromethane (S)	103	%		1.0	03/13/04 00:46	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	114	%		1.0	03/13/04 00:46	DLK	17060-07-0		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

Lab Sample No: 923942031 Project Sample Number: 9261592-005 Date Collected: 03/04/04 15:45
Client Sample ID: SWIFT POST-GAC Matrix: Water Date Received: 03/05/04 11:40

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC/MS Volatiles									
GC/MS VOCs by 8260	Method: EPA 8260								
Benzene	ND	ug/l	5.0	1.0	03/13/04 01:15	DLK	71-43-2		
Ethylbenzene	ND	ug/l	5.0	1.0	03/13/04 01:15	DLK	100-41-4		
Methyl-tert-butyl ether	ND	ug/l	5.0	1.0	03/13/04 01:15	DLK	1634-04-4		
Naphthalene	ND	ug/l	5.0	1.0	03/13/04 01:15	DLK	91-20-3		
Toluene	ND	ug/l	5.0	1.0	03/13/04 01:15	DLK	108-88-3		
m&p-Xylene	ND	ug/l	10.	1.0	03/13/04 01:15	DLK			
o-Xylene	ND	ug/l	5.0	1.0	03/13/04 01:15	DLK	95-47-6		
Toluene-d8 (S)	101	%		1.0	03/13/04 01:15	DLK	2037-26-5		
4-Bromofluorobenzene (S)	98	%		1.0	03/13/04 01:15	DLK	460-00-4		
Dibromofluoromethane (S)	109	%		1.0	03/13/04 01:15	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	117	%		1.0	03/13/04 01:15	DLK	17060-07-0		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

Lab Sample No: 923942049 Project Sample Number: 9261592-006 Date Collected: 03/04/04 16:00
Client Sample ID: HILL PRE-GAC Matrix: Water Date Received: 03/05/04 11:40

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
Metals									
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010								
Lead	0.0016	J mg/l	0.0050	1.0	03/10/04 18:15	LBG	7439-92-1		
Date Digested	03/10/04				03/10/04				
GC/MS Volatiles									
GC/MS VOCs by 8260	Method: EPA 8260								
Benzene	1.7	J ug/l	5.0	1.0	03/13/04 01:44	DLK	71-43-2		
Ethylbenzene	ND	ug/l	5.0	1.0	03/13/04 01:44	DLK	100-41-4		
Methyl-tert-butyl ether	ND	ug/l	5.0	1.0	03/13/04 01:44	DLK	1634-04-4		
Naphthalene	ND	ug/l	5.0	1.0	03/13/04 01:44	DLK	91-20-3		
Toluene	ND	ug/l	5.0	1.0	03/13/04 01:44	DLK	108-88-3		
m&p-Xylene	ND	ug/l	10.	1.0	03/13/04 01:44	DLK			
o-Xylene	ND	ug/l	5.0	1.0	03/13/04 01:44	DLK	95-47-6		
Toluene-d8 (S)	100	%		1.0	03/13/04 01:44	DLK	2037-26-5		
4-Bromofluorobenzene (S)	94	%		1.0	03/13/04 01:44	DLK	460-00-4		
Dibromofluoromethane (S)	104	%		1.0	03/13/04 01:44	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	117	%		1.0	03/13/04 01:44	DLK	17060-07-0		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs	
NC Wastewater	40
NC Drinking Water	37712
SC Environmental	99030
FL NELAP	E87648

Charlotte Certification IDs	
NC Wastewater	12
NC Drinking Water	37706
SC	99006
FL NELAP	E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

Lab Sample No: 923942056 Project Sample Number: 9261592-007 Date Collected: 03/04/04 16:05
Client Sample ID: HILL POST-GAC Matrix: Water Date Received: 03/05/04 11:40

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC/MS Volatiles									
GC/MS VOCs by 8260	Method: EPA 8260								
Benzene	ND	ug/l	5.0	1.0	03/13/04 02:13	DLK	71-43-2		
Ethylbenzene	ND	ug/l	5.0	1.0	03/13/04 02:13	DLK	100-41-4		
Methyl-tert-butyl ether	ND	ug/l	5.0	1.0	03/13/04 02:13	DLK	1634-04-4		
Naphthalene	ND	ug/l	5.0	1.0	03/13/04 02:13	DLK	91-20-3		
Toluene	ND	ug/l	5.0	1.0	03/13/04 02:13	DLK	108-88-3		
m&p-Xylene	ND	ug/l	10.	1.0	03/13/04 02:13	DLK			
o-Xylene	ND	ug/l	5.0	1.0	03/13/04 02:13	DLK	95-47-6		
Toluene-d8 (S)	102	%		1.0	03/13/04 02:13	DLK	2037-26-5		
4-Bromofluorobenzene (S)	100	%		1.0	03/13/04 02:13	DLK	460-00-4		
Dibromofluoromethane (S)	106	%		1.0	03/13/04 02:13	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	114	%		1.0	03/13/04 02:13	DLK	17060-07-0		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

PARAMETER FOOTNOTES

Dilution factor shown represents the factor applied to the reported result and reporting limit due to changes in sample preparation, dilution of the extract, or moisture content

Inorganic Wet Chemistry and Metals Analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Charlotte laboratory unless otherwise footnoted.

ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
(S)	Surrogate

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs

NC Wastewater	40
NC Drinking Water	37712
SC Environmental	99030
FL NELAP	E87648

Charlotte Certification IDs

NC Wastewater	12
NC Drinking Water	37706
SC	99006
FL NELAP	E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

QUALITY CONTROL DATA

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

QC Batch: 94161 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: GC/MS VOCs by 8260
Associated Lab Samples: 923941991 923942007

METHOD BLANK: 923966188
Associated Lab Samples: 923941991 923942007

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Benzene	ug/l	ND	5.0	
Ethylbenzene	ug/l	ND	5.0	
Methyl-tert-butyl ether	ug/l	ND	5.0	
Naphthalene	ug/l	ND	5.0	
Toluene	ug/l	ND	5.0	
m&p-Xylene	ug/l	ND	10.	
o-Xylene	ug/l	ND	5.0	
Toluene-d8 (S)	%	96		
4-Bromofluorobenzene (S)	%	98		
Dibromofluoromethane (S)	%	105		
1,2-Dichloroethane-d4 (S)	%	103		

LABORATORY CONTROL SAMPLE: 923966196

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Benzene	ug/l	50.00	48.46	97	
Ethylbenzene	ug/l	50.00	48.56	97	
Methyl-tert-butyl ether	ug/l	50.00	48.61	97	
Naphthalene	ug/l	50.00	42.57	85	
Toluene	ug/l	50.00	49.13	98	
m&p-Xylene	ug/l	100.00	97.25	97	
o-Xylene	ug/l	50.00	46.91	94	
Toluene-d8 (S)				100	
4-Bromofluorobenzene (S)				97	
Dibromofluoromethane (S)				94	
1,2-Dichloroethane-d4 (S)				105	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

QUALITY CONTROL DATA

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 923966204 923966212

Parameter	Units	923942510 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Benzene	ug/l	0	50.00	49.71	52.27	99	104	5	
Toluene	ug/l	0	50.00	51.20	50.26	102	100	2	
Toluene-d8 (S)						103	97		
4-Bromofluorobenzene (S)						94	98		
Dibromofluoromethane (S)						100	96		
1,2-Dichloroethane-d4 (S)						106	114		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

QUALITY CONTROL DATA

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

QC Batch: 94292 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: GC/MS VOCs by 8260
Associated Lab Samples: 923942015 923942023 923942031 923942049 923942056

METHOD BLANK: 923973952
Associated Lab Samples: 923942015 923942023 923942031 923942049 923942056

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Benzene	ug/l	ND	5.0	
Ethylbenzene	ug/l	ND	5.0	
Methyl-tert-butyl ether	ug/l	ND	5.0	
Naphthalene	ug/l	ND	5.0	
Toluene	ug/l	ND	5.0	
m&p-Xylene	ug/l	ND	10.	
o-Xylene	ug/l	ND	5.0	
Toluene-d8 (S)	%	102		
4-Bromofluorobenzene (S)	%	97		
Dibromofluoromethane (S)	%	103		
1.2-Dichloroethane-d4 (S)	%	113		

LABORATORY CONTROL SAMPLE: 923973960

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Benzene	ug/l	50.00	60.46	121	
Ethylbenzene	ug/l	50.00	58.66	117	
Methyl-tert-butyl ether	ug/l	50.00	62.80	126	
Naphthalene	ug/l	50.00	50.38	101	
Toluene	ug/l	50.00	62.45	125	
m&p-Xylene	ug/l	100.00	119.2	119	
o-Xylene	ug/l	50.00	57.07	114	
Toluene-d8 (S)				101	
4-Bromofluorobenzene (S)				96	
Dibromofluoromethane (S)				96	
1,2-Dichloroethane-d4 (S)				118	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

QUALITY CONTROL DATA

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 923973978 923973986

Parameter	Units	923942023 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Benzene	ug/l	41.60	50.00	116.4	94.42	150	106	21	1
Toluene	ug/l	0	50.00	45.31	51.97	91	104	14	
Toluene-d8 (S)						104	102		
4-Bromofluorobenzene (S)						93	96		
Dibromofluoromethane (S)						97	94		
1,2-Dichloroethane-d4 (S)						112	117		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

QUALITY CONTROL DATA

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

QC Batch: 93802 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: Metals by Trace ICP
Associated Lab Samples: 923941991 923942007 923942023 923942049

METHOD BLANK: 923948129
Associated Lab Samples: 923941991 923942007 923942023 923942049

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Lead	mg/l	0.0022	0.0050	

LABORATORY CONTROL SAMPLE: 923948137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Lead	mg/l	0.5000	0.4970	99	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 923948145 923948152

Parameter	Units	923942064 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Lead	mg/l	0.00336	0.5000	0.5180	0.5130	103	102	1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Lab Project Number: 9261592
Client Project ID: Smith Grocery 09322/21388:P

QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines, unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

LCS(D)	Laboratory Control Sample (Duplicate)
MS(D)	Matrix Spike (Duplicate)
DUP	Sample Duplicate
ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
RPD	Relative Percent Difference
(S)	Surrogate
[1]	The surrogate and/or spike recovery was outside acceptance limits.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Asheville Certification IDs

NC Wastewater	40
NC Drinking Water	37712
SC Environmental	99030
FL NELAP	E87648

Charlotte Certification IDs

NC Wastewater	12
NC Drinking Water	37706
SC	99006
FL NELAP	E87627

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAR 11 2004

MS LOIS B SMITH
3176 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit **#09322**
Release 1 Reported June 30, 1993
Corrective Action Plan Addendum received December 23, 2003
UIC Permit Application received February 25, 2004
York County

Dear Mr. Bekish:

The Underground Storage Tank (UST) Program has reviewed the referenced document. Further, as required by Section 280.67 of the South Carolina Underground Storage Tank Regulations R.61-92, the Bureau has provided a public notice period including notice of the pending corrective actions to the surrounding land owners. No objections to the proposed actions were expressed and the plan is approved; therefore, corrective action activities may proceed at this time. A Copy of the Underground Injection Control Permit is enclosed.

On all correspondence regarding this site, please reference the UST Permit #09322. If you have any questions, please contact me at (803) 896-6633, (800) 826-5435 (within South Carolina only), or by Fax (803) 896-6245.

Sincerely,

Paula Anderson

Paula Anderson, Hydrogeologist
Owner/Operator Support Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

enc: UIC Permit

cc: Mr. John Paul Bbekish, SEI Environmental Inc., 3021 McNaughton Dr., Columbia, SC 29223 (w/ enc)
Technical File (no enc)

DHEC/UST/011404

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical®
www.pacelabs.com

773555

Page: 1 of 1

Required Client Information: Section A

Company: SCDHEC/UST Program
Address: 2600 Bull St.
Cola., S.C. 29201
Phone: (803) 896-6240 Fax: (803) 896-6245

Required Client Information: Section B

Report To: P. Thomas
Copy To:
Invoice To: Finance
P.O. 416276
Project Name: Smith Grocery
Project Number: 09322/21388:P

Client Information (Check quote/contract):
Requested Due Date:
*TAT: 7 Days

*Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

To Be Completed by Pace Analytical and Client Section C

Quote Reference:
Project Manager:
Project #: 92615g2
Profile #: 1700-1
Requested Analysis: (8260) BTEX, MAPH, EDB, Total Lead

Section D Required Client Information:

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID (One character per box. (A–Z, 0–9 / .–) Sample IDs MUST BE UNIQUE)	MATRIX CODE	DATE COLLECTED mm/dd/yy	TIME COLLECTED hh:mm a/p	# Containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	(8260)	BTEX, MAPH, EDB	Total Lead	Remarks / Lab ID
1	SMITH KYS	WT	3/4/04	1515	4			X	X					X		X	923941991
2	STRIFE PRE-GAC			1530	7			X	X					X		X	923942007
3	STRIFE POST-GAC			1535	7			X	X					X		X	923942015
4	SWIFT PRE-GAC			1540	7			X	X					X		X	923942023
5	SWIFT POST GAC			1545	7			X	X					X		X	923942031
6	HILL PRE-GAC			1600	7			X	X					X		X	923942049
7	HILL POST-GAC			1605	7			X	X					X		X	923942056
8																	
9																	
10																	
11																	
12																	

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
			1	1	[illegible] Cantrell/UST	3/5/04	8:45	[illegible]	3-5-04	8:41
				2	RG [illegible]	3/5/04	11:40	Tim Funk	3/5	11:40
				3						

SAMPLE CONDITION

Temp in °C	
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

SAMPLE NOTES

Additional Comments:

3

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Robert G. Fowler
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM / DD / YY): 3/4/04

SEE REVERSE SIDE FOR INSTRUCTIONS

Form COC01 Rev 0402

Instructions for completing Chain of Custody (COC)

1. Complete all Client Information at top of sheet: name, address, phone, contact (person to whom report will be sent and contact can be made if questions arise), billing information if different from client, PO#, Project Name and/or Project Number as it will appear on the report.
2. Quote Reference, Project Manager, Project No. and Profile No. will be completed by Pace.
3. A separate COC must be filled out for each day of sample collection.
4. Sampler should print their name in the space provided and sign their name followed by the date of the sampling event.
5. Complete Sample Description as it will appear on the laboratory report; include time of sampling, sample matrix, no. of containers and preservative used.
6. Analysis Requested: Complete analysis on the lines provided and place a check in the column for the samples requiring the analysis. It may be necessary to use the space provided for additional comments or include attachments for extended lists of parameters.
7. Submission of samples to laboratory: Indicate Item Number of those samples being transferred; sign relinquished by, and include your affiliation.

*** IMPORTANT NOTE:**

Standard Turnaround Time is 2 weeks. If this does not satisfy your requirements, arrangements must be made prior to samples being submitted to the laboratory. Contact your project manager.

Special Project Requirements such as Low Level Detection Limits or level of QC reported must be indicated on the chain of custody. (Use Additional Comments Section.)

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

February 24, 2004

RECEIVED
FEB 25 2004
UNDERGROUND STORAGE
TANK PROGRAM

Ms. Lois B. Smith
3176 Charlotte Highway
York, SC 29745

Re: Underground Injection Control Permit #563
Smith's Grocery Site
York County

Dear Ms. Smith:

Enclosed is a Permit to Operate for eighteen (18) Class VA-I (Aquifer Remediation) injection wells at Smith's Grocery Site, York County, SC.

Affected parties may appeal this permit decision in accordance with State Regulation R.61-72. To contest a case, a request for a hearing must be made to the Clerk of the DHEC Board within 15 days of the date of this letter. All requests must include the following information:

1) name of the party requesting the hearing,
2) issue(s) for which the hearing is requested,
3) caption or other information sufficient to identify the decision, order, action or inaction which is the subject of the hearing,
4) relief requested.

Note further that Administrative Law Judge (ALJ) Division rules require that persons requesting a contested case hearing must file a copy of the request and pay a filing fee in the amount of $250 dollars (US) with the ALJ Division at the following address:

Clerk, ALJ Division
1205 Pendleton Street, Suite 224
P.O. Box 11667
Columbia, SC 29211

If you have any question, please call me at (803) 898-3549.

Sincerely,

Todd Adams, Hydrologist
Groundwater Management Section
Bureau of Water

cc: Paula Anderson, BLWM-USTP
Paul Bekish, SEI

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

Water Monitoring Assessment & Protection Division

Injection Well Operating Approval
for

Class II, III, and V.A. Injection Well(s)

Permit #563

Date of Issue: February 24, 2004

In accordance with the provisions of Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, and pursuant to receiving a Permit to Construct eighteen (18) Class V.A.-I (Aquifer Remediation) injection wells, authorization is granted to Ms. Smith to operate eighteen (18) Class V.A.-I injection wells located at the Smith's Grocery Site, York County, SC, and are subject to the attached provisos noted for the operator.

Pursuant to Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, this authorization may be rescinded if these injection wells should, at any time, contaminate, pollute, or otherwise adversely affect other water in the vicinity or for any other conditions contained in R61-87, Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended.

Expires: October 22, 2011

Todd Adams, Hydrologist
Groundwater Management Section
Bureau of Water

February 24, 2004
Date

DHEC 2104 (6/88)

Provisos to the Injection Well Operating Approval
for
Underground Injection Well Permit #563
Smith's Grocery Site
York County, S.C.
February 24, 2004

1) Construction of new or abandonment of existing wells must be reported to the Department within thirty (30) days of completion.

2) Only hydrogen peroxide as described in the Corrective Action Plan may be injected into the subsurface. Any changes in the system operation other than as presented in the UIC Permit Application must be reported to the Department prior to implementation.

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

FEB 17 2004

MS LOIS SMITH
3176 CHARLOTTE HWY
YORK SC 29745-9802

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit #09322 CA #21387
Release 1 Reported June 30, 1993
Cost Agreement Received February 11, 2004
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) recognizes your commitment to continue work at this site utilizing your own contractor. SCDHEC has reviewed the Assessment Component Cost Agreement for necessary work on the Strife residence's Granular Activated Carbon (GAC) unit submitted by SEI Environmental, Inc. The work to be implemented at the Strife Residence's GAC unit is installation of heat tape and insulation to prevent pipes from freezing and a reroute of the GAC unit's drain pipe. Cost Agreement **#21387** has been approved in the amount shown on the enclosed Approved Cost Agreement to complete the necessary work.

SEI Environmental, Inc. can submit an invoice for direct billing from the SUPERB Account. Please note that all applicable South Carolina certification requirements apply to the laboratory services, well installation, and report preparation. Please note that Sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that no costs will be allowed unless prior approval from the Department is obtained. If for any reason additional tasks will be completed, these additional tasks and the associated cost must be pre-approved by the Department for the cost to be paid. The SCDHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, SCDHEC reserves the right to question and/or reject costs if deemed unreasonable or excessive. The SCDHEC reserves the right to audit project records at any time during the project or after completion of work.

A report documenting the GAC unit work is due within 30 days of the date of this letter, and the invoice is due within 90 days from the date of this letter. If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

On all correspondence concerning this site, please reference **UST Permit #09322 and Cost Agreement #21387.** If there are any questions concerning this project, please contact me at (803) 896-6633, (800) 826-5435 (within South Carolina only), by e-mail at anderspe@dhec.sc.gov or by fax (803) 896-6245.

Sincerely,

Paula Anderson

Paula Anderson, Hydrogeologist
Owner/Operator Support Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

enc: Approved Cost Agreement (ACA)

cc: Mr. David Pitman, SEI Environmental, Inc., 3021 McNaughton Dr. Suite 9, Columbia SC 29223-1854 (with copy of ACA)
Technical File (with copy of ACA)

SCDHEC/UST/021104

Approved Cost Agreement [redacted]387

Facility: 09322 SMITHS GROCERY
ANDERSPE
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB					
		B PERSONNEL	2.0000	250.00	500.00
18 MISCELLANEOUS					
		INSTALL & REROUTE 3/4 PVC PIPE	1.0000	15.27	15.27
		INSTALL HEAT TAPE & INSULATION	1.0000	35.14	35.14
19 RPT/PROJECT MNGT & COORDINATIO					
		PCT PERCENT	0.1500	550.41	82.56
			Total Amount		632.97

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

FEB 17 2004

SHERRI STABEL
PACE ANALYTICAL SERVICES
9800 KINCEY AVE STE 100
HUNTERSVILLE NC 28078-8400

Re: Laboratory Analyses
Bid # SB-19780-6/11/02-EMW, PO # 416276

Dear Ms. Stabel:

Under the terms and conditions of the referenced bid package, analytical sampling has been approved for the referenced facility. The facility has been assigned an individual Cost Agreement (CA) number as listed below. Please reference the CA number and Purchase Order #416276 on the appropriate invoice submitted for payment against the facility. SCDHEC personnel will perform the sampling in February 2004

UST Permit #	County	Analyses-Groundwater	CA #	Bottles (Y/N)	Date Needed
09322	York	8-BTEX, Naph, MTBE (8260) 8-Lead	21388:P	N	

If you have any questions or need further assistance, please contact me at (803) 896-6633, by fax at (803) 896-6245, or e-mail anderspe@dhec.sc.gov.

Sincerely,

Paula Anderson

Paula Anderson, Hydrogeologist
Owner/Operator Assistance Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

enc: Approved Cost Agreement

cc: Debra Thoma, State Lead & Field Services
Technical File

Approved Cost Agreement [redacted]1388

Facility: 09322 SMITHS GROCERY
ANDERSPE
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
11 ANALYSES						
	GW GROUNDWATER	A	BTEX+NAPTH+MTBE	8.0000	30.00	240.00
		E	LEAD	8.0000	7.50	60.00
				Total Amount		300.00

D H E C

FROMOTE PROTECT PROSPER

2600 Bull Street
Columbia, SC 29201-1708

FAX MESSAGE

Date: 2-11-04

Number of Pages including cover sheet: 2

PLEASE DELIVER THIS FAX MESSAGE

TO: Rob Strife Global Business Development Manager
Name

Chicago Pneumatic Tool Company
Organization/Department

(803) 817-7115 ( )
Fax Machine Telephone Number

FROM: **Paula Anderson, Hydrogeologist**
Owner/Operator Support Section
Bureau of Land & Waste Management
Underground Storage Tank Program

(803) 896-6245 (803) 896-6633 or (800) 826-5435 in SC only!
Fax Number Telephone Number

SUBJECT/COMMENT: Response to your e-mail on Jan. 27, 2004. Original letter will follow.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Confirmation Report – Memory Send

Job number	:	010
Date & Time	:	Feb-11 02:47pm
To	:	918038177115
Number of pages	:	002
Start time	:	Feb-11 02:47pm
End time	:	Feb-11 02:47pm
Pages sent	:	002
Status	:	OK
Job number	:	010 *** SEND SUCCESSFUL ***

Date & Time: Feb-11-2004 02:47pm
Tel line : 803 898 4330
Machine ID : UST PROGRAM

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

FEB 12 2004

MR ROB STRIFE
3035 CLOVER CIR
YORK SC 29745-9802

Re: Smith's Grocery, SC Hwy 49, York, South Carolina
UST Permit # 09322
E-mail received January 27, 2004
York County

Dear Mr. Strife:

The Underground Storage Tank (UST) Program received the referenced e-mail. We regret that you have experienced these inconveniences. The following is provided in response to your questions.

- You asked if anything can be done to ensure that the pipes do not freeze again and explode. You also stated that the drain from the granular activated carbon (GAC) unit was causing a mess in your yard. SEI Environmental, Ms. Smith's contractor of choice, should be in contact with you soon to evaluate these problems. They will visit your residence to determine what can be done to help allievate the problems. An estimate of costs will be submitted for my approval to be paid from the State Underground Petroleum Environmental Response Bank (SUPERB) Fund.
- You asked if the GAC unit was really necessary since you have your own water treatment system. The UST Program is required to protect human health and we must insure the safety of water from your well. The UST Program has no control over your treatment system, and as such, we could not insure the protection of human health without the GAC unit. The GAC unit is maintained at no cost to you.
- You asked how long the GAC unit would have to stay in your yard. This cannot be predicted based on the many variable factors in remediating petroleum contamination.
- You also stated that you are trying to sell your house. If you would like, the UST Program can write a letter outlining the situation and liability issues regarding the release at Smith's Grocery. The request may be submitted to me via e-mail, fax, or letter.

If you have any questions, please contact me at (803) 896-6633 or (800) 826-5435 (within South Carolina only), by fax at (803) 896-6245, or by e-mail at anderspe@dhec.sc.gov.

Sincerely,

Paula Anderson

Paula Anderson, Hydrogeologist
Owner/Operator Support Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

cc: Mr. John Paul Bekish, SEI Environmental Inc., 3021 McNaughton Dr. Suite 9, Columbia, SC 29223
Ms. Lois Smith, 3176 Charlotte Hwy, York, SC 29745-9802
Technical File

Paula E. Anderson - UST Permit # 09322

From: Rob Strife <rob.strife@chicagopneumatic.com>
To: anderspe@dhec.sc.gov <anderspe@dhec.sc.gov>
Date: 1/27/04 4:35 PM
Subject: UST Permit # 09322

Paula,

I live at 3035 Clover Circle in York, SC. There are a few temp wells on my property and have been there for quite some time. We also have a filter system installed in the back of the house which caused big problems for us last year. The pipes froze and exploded flooding my back yard to the point that I had to have a french drain installed. When this happened I called the number on the tank and was told to fix the problem with the broken pipes myself that they would not do it.
Sorry for that I know that you can't do anything about it. I have a few questions for you.

1. Can anything be done to ensure that the pipes do not freeze again this year and explode?
2. I am trying to sell my house and this big unit in my yard is a deterent. I have my own $3,000 water treatment system in my garage do I really need another? 3. How long will I need to have this in my yard? It has been a couple of years already.
4. There is a drain pipe coming from this system which is draining into my yard causing a mess currently. Is there a way this can be altered or is that also my responsibility?

Sorry to lay all this on you but this is the first time I have seen a letter with any contact information on it.

Regards,

Rob Strife - Global Business Development Manager
Chicago Pneumatic Tool Company
Telephone # 803-817-7112
Fax # 803-817-7115
Mobile#: 803-370-0313
E-Mail: rob.strife@chicagopneumatic.com
http://www.chicagopneumatic.com

SEI ENVIRONMENTAL, INC.

3021 McNaughton Drive, Suite 9, Columbia, S.C. 29223
Phone (803)788.2535 Fax (803) 788.2399

ATTENTION: Paula Anderson

COMPANY: SCDHEC

DATE: 2/11/04

FAX NUMBER: 896 6245

PHONE NUMBER:

FROM: David B Britton

PAGES: (2) (INCLUDING COVERSHEET)

COMMENTS Attn Tracey -09322

Revised GAC repairs est. note

David

PLEASE CALL IF YOU HAVE QUESTIONS OR IF THIS FAX IS NOT COMPLETE.

PROVIDING PRACTICAL SOLUTIONS FOR TODAY'S ENVIRONMENTAL NEEDS.....

HARD COPY BEING SENT VIA:

( )First Class Mail ( )Federal Express ( )Messenger( )None

RECEIVED
FEB 11 2004
UNDERGROUND STORAGE TANK PROGRAM

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

CA# 21387

February 11, 2004

Paula Anderson, Hydrogeologist
SCDHEC
Division of UST Management
2600 Bull Street
Columbia, South Carolina 29201-1708

Re: Estimate for Repairs to Strife Residential GAC Unit
Re: Smith Grocery # 09322

Dear Sir;

SEI Environmental, Inc. submits the following estimate to SCDHEC for the above referenced project. SEI will include all material and labor to complete the following tasks:

- Mobilization/Demobilization for site visit to obtain repair estimate – 1 personnel - **$250.00**
- Mobilization/Demobilization to repair GAC unit- 1 personnel - **$250.00**
- Misc. repairs material requirement:

1. Install heat tape and insulation as required – **$35.14**
2. Install and reroute ¾" schedule 40 PVC- **$15.27**

Total - $550.41

RECEIVED
FEB 1 1 2004
UNDERGROUND STORAGE
TANK PROGRAM

If you have any questions and / or comments, please contact David Pittman at (803) 788-2535.

David B. Pittman
Project Manager
SEI – Columbia, South Carolina

Paula E. Anderson - 09322

From: Robert F. Hodges, Jr.
To: Anderson, Paula E.
Date: 1/2/04 2:34 PM
Subject: 09322

Paula,
SEI called to tell me their samples arrived at the lab too late (exp. holding time). They will re-sample on Jan. 8. Report now due Feb. 6.

Robert

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

MEMORANDUM

DATE: January 15, 2004

TO: Dale Stoudemire
Compliance Section
Regulatory Compliance Division

FROM: Paula Anderson
Owner/Operator Support Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

SUBJECT: Public Notice # 09322-02
Smith's Grocery, UST Permit # 09322
York County

Per section 280.67 of the South Carolina Underground Storage Tank Control Regulations R. 61-91, the South Carolina Department of Health and Environmental Control (SCDHEC) is required to provide public notice of proposed corrective actions at underground storage tank facilities.

The Assessment & Corrective Action Division requests your assistance in posting the enclosed notice at public offices (e.g. post offices, court houses, etc.) located in close proximity to the referenced facility.

If possible, the notice should be posted for 15 days. The attached notice has been postdated to January 26, 2004 to allow your office time to have it posted prior to its beginning date. Your assistance is greatly appreciated.

Questions may be referred to my attention at (803) 896-6633.

enc: Public Notice (4 copies)

cc: Technical File

SCDHEC/UST/011404

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

CHARLES S & KIMBERLY D SWIFT
3043 CLOVER CIR
YORK SC 29745

JAN 16 2004

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit # 09322
Tax Map # 4890401024
Corrective Action Plan Amendment Received December 23, 2003
York County

Dear Mr. & Ms. Swift:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental Inc. has been retained to initiate corrective action of the impacted soil and groundwater using chemical treatment (hydrogen peroxide injection) to be followed by in situ bioremediation and natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 896-6633 or 1-800-826-5435 (in South Carolina only). All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Support Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
Phone: (803) 896-6240 Fax: (803) 896-6245

enc: Public Notice (copy)

cc: Technical File (without enclosure)

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

JAN 16 2004

TONY H & SUSAN W HILL
3049 CLOVER CIR
YORK SC 29745

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit # 09322
Tax Map # 4890401023
Corrective Action Plan Amendment Received December 23, 2003
York County

Dear Mr. & Ms. Hill:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental Inc. has been retained to initiate corrective action of the impacted soil and groundwater using chemical treatment (hydrogen peroxide injection) to be followed by in situ bioremediation and natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 896-6633 or 1-800-826-5435 (in South Carolina only). All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Support Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
Phone: (803) 896-6240 Fax: (803) 896-6245

enc: Public Notice (copy)

cc: Technical File (without enclosure)

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

ROBERT J STRIFE
3035 CLOVER CIR
YORK SC 29745

JAN 16 2004

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit # 09322
Tax Map # 4890401001
Corrective Action Plan Amendment Received December 23, 2003
York County

Dear Mr. Strife:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental Inc. has been retained to initiate corrective action of the impacted soil and groundwater using chemical treatment (hydrogen peroxide injection) to be followed by in situ bioremediation and natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 896-6633 or 1-800-826-5435 (in South Carolina only). All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Support Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
Phone: (803) 896-6240 Fax: (803) 896-6245

enc: Public Notice (copy)

cc: Technical File (without enclosure)

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

JAN 16 2004

FRONTIS T HEMPHILL
2146 OLD MCKINNEY RD
YORK SC 29745

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit # 09322
Tax Map # 4560000041 & 4560000003
Corrective Action Plan Amendment Received December 23, 2003
York County

Dear Mr. Hemphill:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental Inc. has been retained to initiate corrective action of the impacted soil and groundwater using chemical treatment (hydrogen peroxide injection) to be followed by in situ bioremediation and natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 896-6633 or 1-800-826-5435 (in South Carolina only). All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Support Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
Phone: (803) 896-6240 Fax: (803) 896-6245

enc: Public Notice (copy)

cc: Technical File (without enclosure)

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

JOSEPH J GALAMBOS
3029 CLOVER CIR
YORK SC 29745

JAN 16 2004

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit # 09322
Tax Map # 4890401002
Corrective Action Plan Amendment Received December 23, 2003
York County

Dear Mr. Galambos:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental Inc. has been retained to initiate corrective action of the impacted soil and groundwater using chemical treatment (hydrogen peroxide injection) to be followed by in situ bioremediation and natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 896-6633 or 1-800-826-5435 (in South Carolina only). All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Support Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
Phone: (803) 896-6240 Fax: (803) 896-6245

enc: Public Notice (copy)

cc: Technical File (without enclosure)

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

JAN 16 2004

LORRAIN CAROTHERS
3252 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit # 09322
Tax Map # 4560000008
Corrective Action Plan Amendment Received December 23, 2003
York County

Dear Lorrain Carothers:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental Inc. has been retained to initiate corrective action of the impacted soil and groundwater using chemical treatment (hydrogen peroxide injection) to be followed by in situ bioremediation and natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 896-6633 or 1-800-826-5435 (in South Carolina only). All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Support Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
Phone: (803) 896-6240 Fax: (803) 896-6245

enc: Public Notice (copy)

cc: Technical File (without enclosure)

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

JAN 1 6 2004

FORREST L MONTGOMERY
3243 CHARLOTTE HWY
YORK SC 29745

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit # 09322
Tax Map # 4890401021
Corrective Action Plan Amendment Received December 23, 2003
York County

Dear Mr. Montgomery:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental Inc. has been retained to initiate corrective action of the impacted soil and groundwater using chemical treatment (hydrogen peroxide injection) to be followed by in situ bioremediation and natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 896-6633 or 1-800-826-5435 (in South Carolina only). All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Support Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
Phone: (803) 896-6240 Fax: (803) 896-6245

enc: Public Notice (copy)

cc: Technical File (without enclosure)

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

JAN 1 6 2004

WILLIAM T & DAISY LOWERY
2143 OLD SON LOWERY RD
YORK SC 29745

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit # 09322
Tax Map # 4560000007 &4560000006
Corrective Action Plan Amendment Received December 23, 2003
York County

Dear Mr. & Ms. Lowery:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental Inc. has been retained to initiate corrective action of the impacted soil and groundwater using chemical treatment (hydrogen peroxide injection) to be followed by in situ bioremediation and natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 896-6633 or 1-800-826-5435 (in South Carolina only). All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Support Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
Phone: (803) 896-6240 Fax: (803) 896-6245

enc: Public Notice (copy)

cc: Technical File (without enclosure)

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

JAN 16 2004

ROGER R JR & KELLY B FOSTER
2102 PINEWILD CT
YORK SC 29745

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit # 09322
Tax Map # 4890401022
Corrective Action Plan Amendment Received December 23, 2003
York County

Dear Mr. & Ms. Foster:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental Inc. has been retained to initiate corrective action of the impacted soil and groundwater using chemical treatment (hydrogen peroxide injection) to be followed by in situ bioremediation and natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 896-6633 or 1-800-826-5435 (in South Carolina only). All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Support Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
Phone: (803) 896-6240 Fax: (803) 896-6245

enc: Public Notice (copy)

cc: Technical File (without enclosure)

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

MS LOIS B SMITH
3176 CHARLOTTE HWY
YORK SC 29745

JAN 16 2004

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit # 09322
Tax Map # 4560000005 & 4560000043
Corrective Action Plan Amendment Received December 23, 2003
York County

Dear Ms. Smith:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental Inc. has been retained to initiate corrective action of the impacted soil and groundwater using chemical treatment (hydrogen peroxide injection) to be followed by in situ bioremediation and natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 896-6633 or 1-800-826-5435 (in South Carolina only). All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Support Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
Phone: (803) 896-6240 Fax: (803) 896-6245

enc: Public Notice (copy)

cc: Technical File (without enclosure)

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

NOTICE

State of South Carolina
Department of Health and Environmental Control
Columbia, South Carolina

Public Notice # 09322-02 Date: January 26, 2004

NOTICE OF PROPOSED CORRECTIVE ACTION

Section 280.67 of the S.C. Underground Storage Tank Control Regulations (R.61-92) requires that any Corrective Action Plan prepared to meet the requirements of 280.66 must be placed on notice for public comment. The following applicant has submitted a Corrective Action Plan for the rehabilitation of groundwater contaminated by petroleum constituents released from underground storage tanks (USTs).

Applicant: Ms. Lois B. Smith, Smith's Grocery, 3175 Charlotte Hwy, York, SC. The Smith's Grocery has no active USTs used for storage of petroleum products; two gasoline USTs were removed in December 1991. The facility is located at 3175 Charlotte Hwy, York in York County, South Carolina.

Corrective action will consist of chemical treatment (hydrogen peroxide injection) to be followed by in situ bioremediation and natural attenuation.

A copy of the Corrective Action Plan is available for review at the Department's Freedom of Information Office, 2600 Bull Street in Columbia, SC. Please call (803) 898-3882 to schedule an appointment.

Persons wishing to comment upon or object to Corrective Action approval are invited to submit same in writing within fifteen (15) days of the date of this notice to South Carolina Department of Health and Environmental Control, Underground Storage Tank Program, 2600 Bull Street, Columbia, S.C. 29201 or call Paula Anderson at (803) 898-4318. The public notice # 09322-02 should be placed at the top of the first page of comments. Where there is a significant degree of public interest, the Department will hold a public hearing.

Please bring the foregoing to the attention of persons who you know will be interested in this matter.

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
DEC 23 2003
UNDERGROUND STORAGE
TANK PROGRAM

December 17, 2003

Todd Adams
Hydrologist
Groundwater Management Section
Bureau of Water
2600 Bull Street
Columbia, SC 29201-1708

Re: Request for Change in Injectate in Class VA-I Injection Wells
Smith Grocery
3176 Charlotte Highway, SC Hwy 49
York, South Carolina 29745-7609
York County
UST Permit # 09322
UIC Permit # 563

Dear Mr. Adams;

SEI Environmental, Inc. (SEI) requests approval from the South Carolina Bureau of Water for changing the injectate in the eighteen (18) Class VA-I injection wells at the above referenced facility. Attached are Figure 1, a topographic map illustrating the site and Figure 2, a site map depicting the monitoring wells and injection wells.

October 10, 2001, SEI submitted a letter to the Bureau of Water and SCDHEC notifying of the advancement of six (6) injection wells (IW-1 – IW-6) on August 22, 2001 and the advancement of twelve (12) additional injection wells (IW-7 – IW-18) on September 25 and 26, 2001. The purpose of the advancement of the injection wells, as described in the July 13, 2001 Corrective Action Plan, was for the purpose of injection of nutrients and microbial bacteria to enhance bio-remediation.

January 10, 2003, SEI requested that the UIC permit be amended to allow for the introduction of urea nitrogen, which is 46 percent nitrogen, with water into the existing eighteen (18) injection wells.

SEI submits that the periodic injection of nutrients, microbial bacteria and urea nitrogen has been halted. SEI requests approval from the Bureau of Water, permitting SEI to

SEI
Environmental, Inc.

amend the UIC Permit to allow SEI to use the existing eighteen (18) injection well(s) for the purpose of injecting a mild hydrogen peroxide solution to remediate the dissolved Chemicals of Concern (COC) in the groundwater. SEI submits that the injection of the mild hydrogen peroxide solution will have no impact on the local water quality or pose a threat to human health or the environment. SEI proposes that inoculation of the injection wells will commence upon written approval from the Bureau of Water and SCDHEC. It is proposed that injection will occur at a minimum of once per quarter and until laboratory analytical data shows that the COC's are below Site Specific Target Levels for all sample points. SEI anticipates that remediation activities, via the injection of a mild hydrogen peroxide solution, will take approximately fifteen (15) months to complete.

The existing quarterly monitoring and sampling plan for the monitoring wells and drinking water wells will continue with no change.

If you have any question(s) and / or comments concerning the above referenced request, please contact John Paul Bekish at (803) 788-2535.

Sincerely,

12/22/05

John Paul Bekish
Operations Manager
SEI-Columbia, SC Office

12/23/05

Randy Casey
Professional Engineer
PE # 21054

Attachment

CC: Lois B. Smith, Property Owner – 3176 Charlotte Hwy, York, SC 29745
Paula Anderson, Hydrogeologist – SCDHEC
SEI Project Files

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
JAN 14 2004
UNDERGROUND STORAGE
TANK PROGRAM

January 14, 2004

Paula Anderson
Hydrogeologist
SCDHEC
2600 Bull Street
Columbia, SC 29201-1708

Re: Submittal of Tax Map Information
Smith Grocery
3176 Charlotte Highway, SC Hwy 49
York, South Carolina 29475-7609
York County
UST Permit # 09322

Dear Ms. Anderson;

SEI Environmental, Inc., SEI, submits the attached tax map information for the above referenced facility per your request on January 13, 2003.

If you have any questions and / or comments, please contact John Paul Bekish at 803-788-2535.

Sincerely,

John Paul Bekish
Operations Manager
SEI - Columbia, SC Office

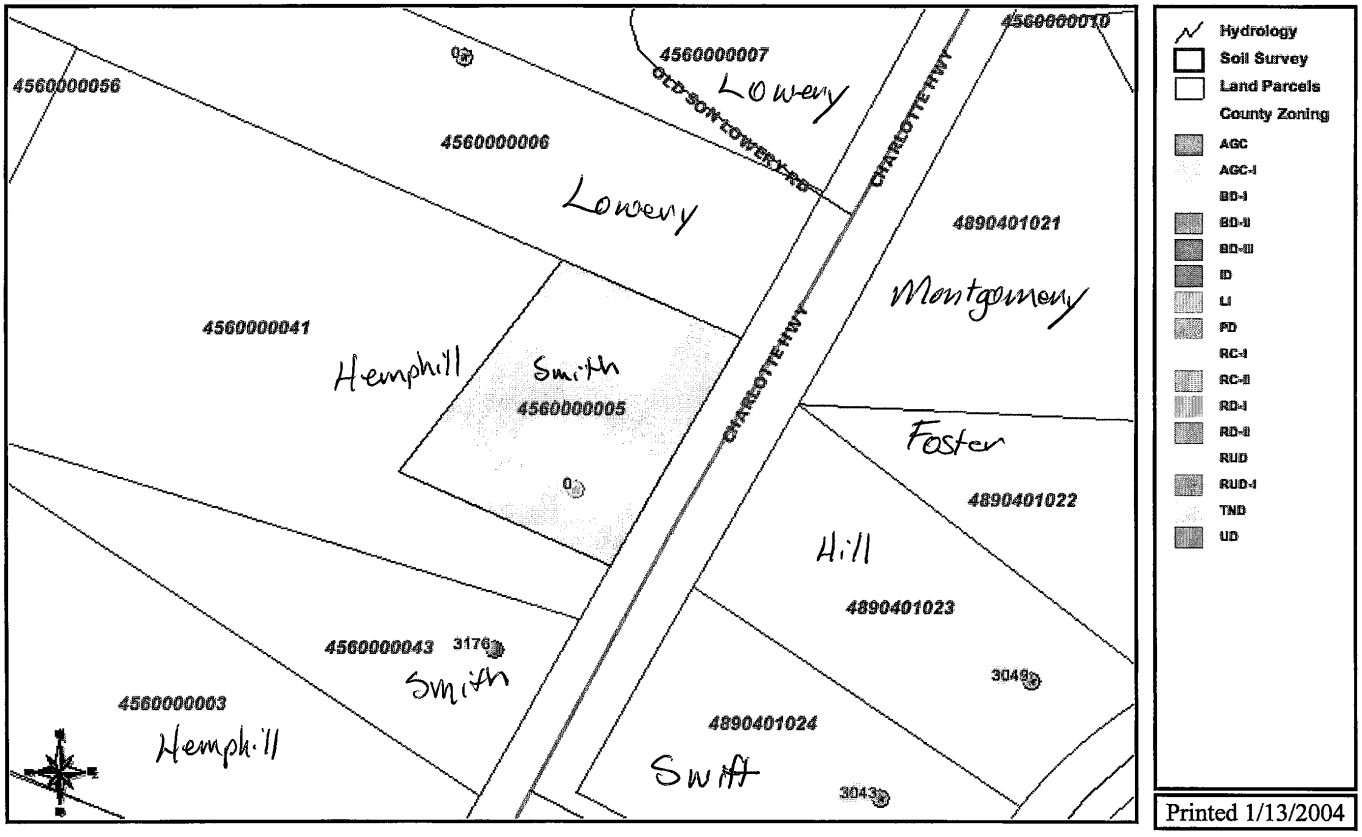
Attachment

CC: SEI Project Files

Property Tax Map Information Smith Grocery UST ID No.: 09322	
Tax Map No.	*Property Owner*
4560000005	Lois B. Smith 3176 Charlotte Hwy York, SC 29745
4890401023	Tony H & Susan W. Hill 3049 Clover Circle York, SC 29745
4560000041	Frontis T. Hemphill 2146 Old McKinney Road York, SC 29745
4560000043	Lois B. Smith 3176 Charlotte Hwy York, SC 29745
4890401001	Robert J. Strife 3035 Clover Circle York, SC 29745
4890401002	Joseph J. Galambos 3029 Clover Circle York, SC 29745
4560000003	Frontis Tyree Hemphill 2146 Old McKinney Road York, SC 29745
4890401024	Charles S. & Kimberly D. Swift 3043 Clover Circle York, SC 29745
4560000008	Lorrain Carothers 3252 Charlotte Hwy York, SC 29745
4560000007	Daisy Lowery 2143 Old Son Lowery Road York, SC 29745
4560000006	William T. Lowery 2143 Old Son Lowery Road York, SC 29745
4890401021	Forrest L. Montgomery 3243 Charlotte Highway York, SC 29745
4890401022	Roger R. Jr. & Kelly B. Foster 2102 Pinewild Court York, SC 29745

Carothers Galambos Strife

York County GIS



YORK COUNTY GOVERNMENT SOUTH CAROLINA, AND ITS MAPPING CONTRACTORS DO NOT WARRANT THE ACCURACY OF THE DISPLAYED INFORMATION AND SPECIFICALLY DISCLAIM ANY WARRANTY FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS MAP IS NOT A LEGAL SURVEY

SEI Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-4999

RECEIVED
OCT 07 2003
UNDERGROUND STORAGE TANK PROGRAM

September 26, 2003

Ms. Paula Anderson
SCDHEC - UST Program
Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201

Re: Summary of Corrective Action and Gauging Results
Second and Third Quarter
Smith's Grocery
#176 Charlotte Highway (Highway 49)
York, South Carolina 29745
York County
UST Permit # 09322

Dear Ms. Anderson;

SEI Environmental, Inc. (SEI) submits summary of gauging results and laboratory analytical results for samples collected on April 2, 2003 and August 26, 2003. Attached, Appendix A, Figure 1, a topographic map depicting the location of the site and Figure 2, a site map illustrating the location of the monitoring wells.

April 2 and August 26, 2003, SEI personnel were on site to gauge the monitoring wells, remove free product and collect groundwater samples. Twenty three (23) monitoring were gauged each site visit. No free product was found during either sampling event. A total of four (4) drums of petroleum-impacted water were generated from the purging of the sixteen(16) wells during each sampling event. Attached in Appendix C is Table 2, which summarizes the April 2 and August 26, 2003 gauging, and field screening information and copies of the Field Data Information Sheet(s) for Ground Water Sampling. Upon completion of purging and collection of field screening information, a representative sample was collected from each sample point. Each sample was submitted to Environmental Science Laboratory in Nashville, Tennessee for analysis for Benzene, Toluene, Ethylbenzene, Xylene (BTEX) by EPA method 8260B, Methyl Tert-butyl Ether (MTBE) by EPA method 8260B, Naphthalene by EPA method 8260B, Ethylene Dibromide by EPA method 8011, and Lead by EPA method 6010B. Attached in Appendix D is Table 3, which summarizes the laboratory analytical results and copies of the laboratory analytical results and a copy of the Chain of Custody. Attached in Appendix E is Figure 3, a CoC map based on the April 22, 2003 laboratory analytical data.

April 2 and August 29, 2003, a total of four (4) drums of petroleum-impacted water, which were generated from the purging of the sample points, was disposed at G & K Tank Services, Inc. in Sumter, SC. Attached in Appendix F are copies of the Non-Hazardous Waste Manifests and Certificate for Disposals for the four (4) drums of petroleum-impacted water.

SEI
Environmental, Inc.

The evaluation of the corrective action activities' effectiveness consists of comparing the April 2, 2003 laboratory analytical data against the baseline SSTL concentrations and determining the percent of total concentration reduction. The percent of total concentration reduction is calculated by using the following formula:

> Percent of Total Concentration Reduction = (Initial Con. Above SSTL) – (Current Conc. Above SSTL) *(100)) / (Initial Conc. Above SSTL)

The calculation for the April 2, 2003 Percent of Total Concentration Reduction was found to be **43.7%.** Attached in Appendix G is Table 4, which illustrates the system's effectiveness analysis.

The evaluation of the corrective action activities' effectiveness consists of comparing the August 26, 2003 laboratory analytical data against the baseline SSTL concentrations and determining the percent of total concentration reduction. The percent of total concentration reduction is calculated by using the following formula:

> Percent of Total Concentration Reduction = (Initial Conc. Above SSTL) – (Current Conc. Above SSTL) *(100)) / (Initial Conc. Above SSTL)

The calculation for the August 26, 2003 Percent of Total Concentration Reduction was found to be **62.5%.** Attached in Appendix G is Table 4, which illustrates the system's effectiveness analysis.

SEI will continue to collect groundwater samples as required in the next quarterly sampling period as specified in the February 12, 2003 directive. Upon receipt of the laboratory analytical data, SEI will submit a report summarizing the findings.

If you have any questions and / or comments, concerning the information provided in this document, please contact David Pittman at (803) 788-2535.

Sincerely,

David B. Pittman
Project Manager
SEI – Columbia Office

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 21054
9/26/03
Randy Casey
P.E. #21054
R. CASEY

Attachment(s)

cc: Lois B. Smith, Smith's Grocery
SEI Project Files

Appendix A

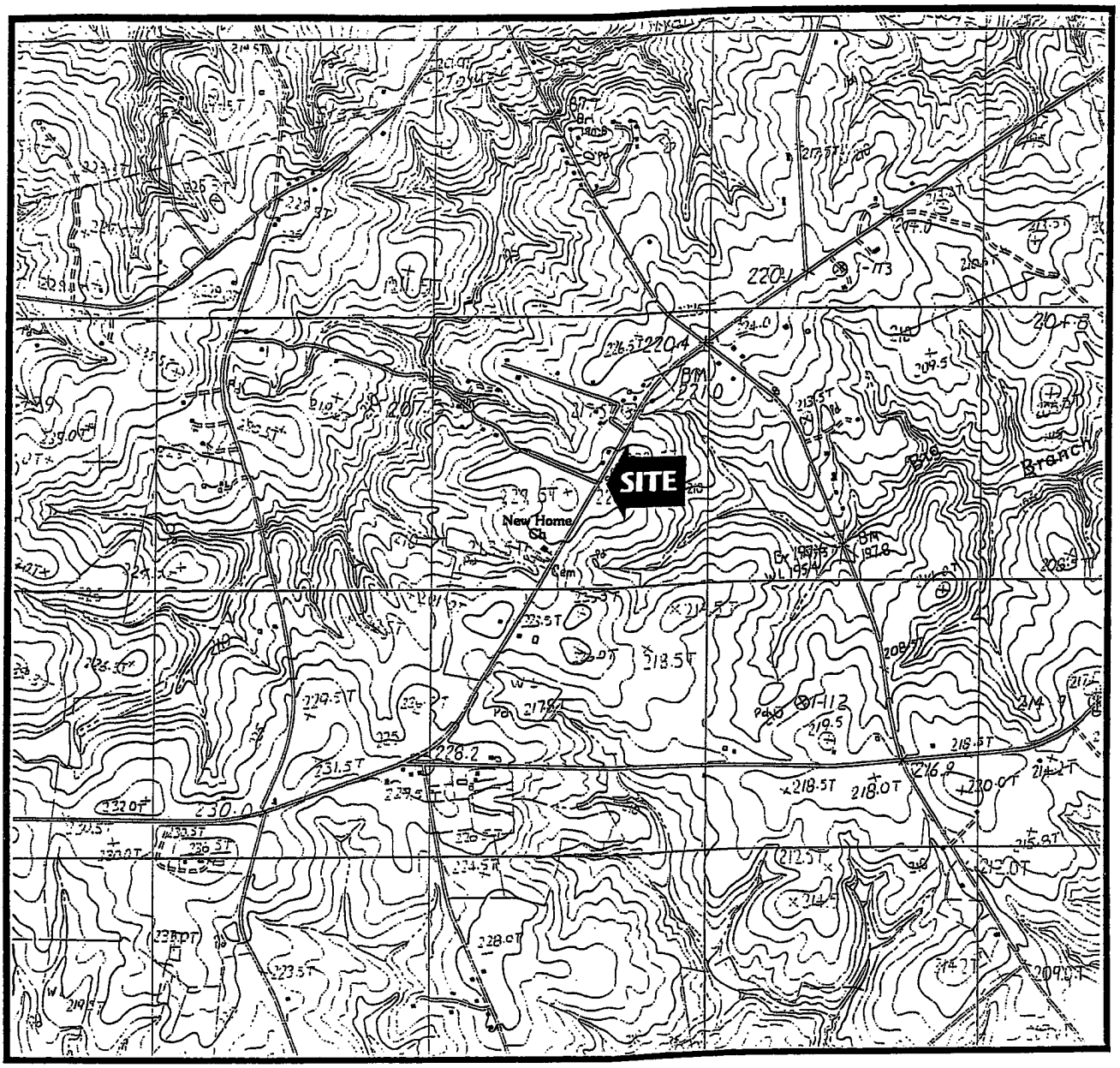
Figure 1 - Topographic Map

&

Figure 2 - Site Map

7.5 MINUTE SERIES(TOPOGRAPHIC)

CLOVER QUADRANGLE



SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

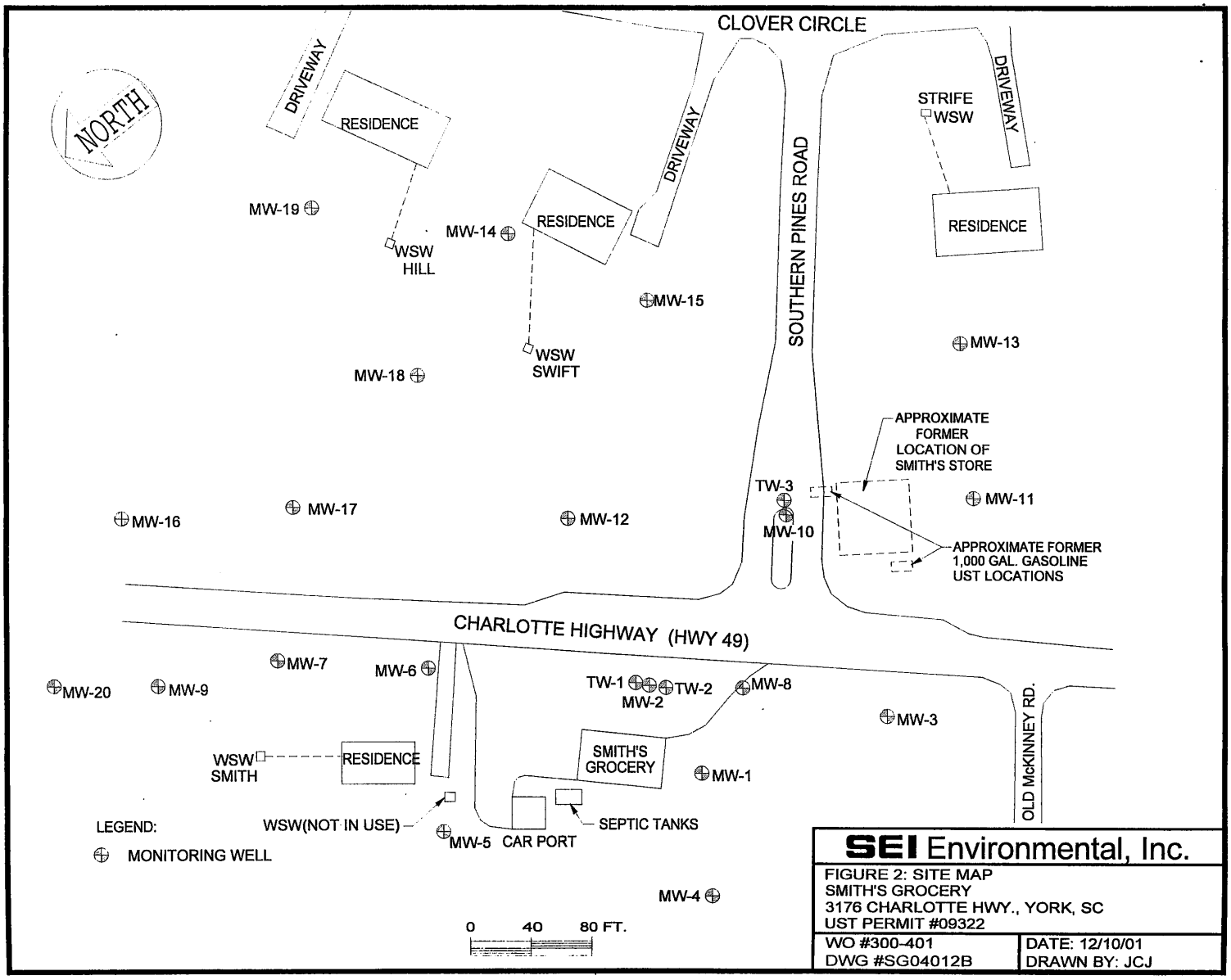
1 .5 0 1 KILOMETER

NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

WO #300-401	DATE: 12/7/01
DWG #	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 12/10/01
DWG #SG04012B	DRAWN BY: JCJ

Appendix B

Table 1 – Summary of April 2, 2003 Groundwater Elevations

Table 1 – Summary of August 26, 2003 Groundwater Elevations

TABLE I Groundwater Elevation Data Smith's Grocery / York, South Carolina					
Monitor Well Number	**Date Measured**	**Top of Casing Elevation (feet)**	**Depth to Ground Water (feet)**	**Total Depth of Well (feet)**	**Groundwater Elevation (feet)**
MW-1	04/02/03	91.16	28.05	35	63.11
MW-2	04/02/03	94.57	31.92	38	62.65
MW-3	04/02/03	91.91	29.02	35	62.89
MW-4	04/02/03	86.20	22.73	27	63.47
MW-5	04/02/03	89.29	25.00	30	64.29
MW-6	04/02/03	93.91	31.66	37	62.25
MW-7	04/02/03	91.68	29.40	36	62.28
MW-8	04/02/03	94.72	32.02	38	62.70
MW-9	04/02/03	90.54	28.20	36	62.34
MW-10	04/02/03	99.77	37.77	44	62.00
MW-11	04/02/03	100.46	38.36	44	62.10
MW-12	04/02/03	99.61	37.78	44	61.83
MW-13	04/02/03	100.39	41.13	47	59.26
MW-14	04/02/03	98.89	42.10	50	56.79
MW-15	04/02/03	100.18	43.24	50	56.94
MW-16	04/02/03	89.91	29.00	37	60.91
MW-17	04/02/03	94.46	34.63	40	59.83
MW-18	04/02/03	98.14	41.26	46	56.88
MW-19	04/02/03	98.27	43.31	50	54.96
MW-20	04/02/03	88.35	25.79	35	62.56
TW-1	04/02/03	94.72	31.86	61	62.86
TW-2	04/02/03	94.72	32.04	88	62.68
TW-3	04/02/03	99.21	36.97	71	62.24

Top of casing elevation is referenced to an assumed elevation.

TABLE I
Groundwater Elevation Data
Smith's Grocery / York, South Carolina

Monitor Well Number	Date Measured	Top of Casing Elevation (feet)	Depth to Ground Water (feet)	Total Depth of Well (feet)	Groundwater Elevation (feet)
MW-1	08/26/03	91.16	24.07	35	67.09
MW-2	08/26/03	94.57	27.81	38	66.76
MW-3	08/26/03	91.91	25.98	35	65.93
MW-4	08/26/03	86.20	15.07	27	71.13
MW-5	08/26/03	89.29	22.70	30	66.59
MW-6	08/26/03	93.91	27.51	37	66.40
MW-7	08/26/03	91.68	26.88	36	64.80
MW-8	08/26/03	94.72	27.58	38	67.14
MW-9	08/26/03	90.54	26.10	36	64.44
MW-10	08/26/03	99.77	33.36	44	66.41
MW-11	08/26/03	100.46	33.88	44	67.08
MW-12	08/26/03	99.61	33.78	44	65.83
MW-13	08/26/03	100.39	37.20	47	63.19
MW-14	08/26/03	98.89	38.39	50	60.50
MW-15	08/26/03	100.18	39.58	50	60.60
MW-16	08/26/03	89.91	27.54	37	64.17
MW-17	08/26/03	94.46	37.08	40	57.38
MW-18	08/26/03	98.14	37.47	46	60.67
MW-19	08/26/03	98.27	39.24	50	59.03
MW-20	08/26/03	88.35	24.98	35	63 .37
TW-1	08/26/03	94.72	27.96	61	66.76
TW-2	08/26/03	94.72	27.54	88	67.18
TW-3	08/26/03	99.21	32.80	71	66.41

Top of casing elevation is referenced to an assumed elevation.

Appendix C

Table 2 – Summary of April 2 and August 26, 2003 Gauging and Field Screening Activities

&

Field Data Information Sheet(s) for Ground Water Sampling

Table 2
Summary of Field Observations - April 2, 2003
Smith's Grocery
York South Carolina
Site ID No. 09322

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-1				28.05	35.00	N/A	N/A	N/A	N/A	2.00	baled dry@2 gal
MW-2				31.92	38.00	N/A	N/A	N/A	N/A	2.97	
MW-6				31.66	37.00	N/A	N/A	N/A	N/A	2.61	
MW-7				29.40	36.00	N/A	N/A	N/A	N/A	3.21	
MW-8				32.02	38.00	N/A	N/A	N/A	N/A	3.00	
MW-10				37.77	40.00	N/A	N/A	N/A	N/A	1.01	
MW-11	Initial			38.36	44.00	4.57	0.087	18.0	2.08	2.00	
MW-11	1st Volume				44.00	4.54	0.092	17.1	2.22		
MW-11	2nd Volume				44.00	4.50	0.092	17.0	2.20		
MW-11	3rd Volume				44.00	4.50	0.087	17.3	2.78		
MW-12				37.78	44.00	N/A	N/A	N/A	N/A	3.03	
MW-13	Initial			41.13	47.00	4.89	0.094	18.0	4.72	2.85	
MW-13	1st Volume				47.00	4.87	0.055	17.4	4.37		
MW-13	2nd Volume				47.00	4.88	0.054	17.0	4.42		
mw-13	3rd Volume				47.00	4.88	0.053	17.0	4.76		
MW-13	Post Sampling				47.00	4.88	0.050	17.6	4.61		
MW-14	Initial			42.10	50.00	6.08	0.046	18.2	4.44	3.87	
MW-14	1st Volume				50.00	6.10	0.048	17.1	4.13		
MW-15	Initial			43.24	50.00	5.87	0.098	17.50	4.340	0.75	bailed dry@0.75 gal
MW-17	Initial			34.63	40.00	5.50	0.019	17.3	3.67	2.75	
MW-17	1st Volume				40.00	5.11	0.015	16.5	4.98		
MW-17	2nd Volume				40.00	4.99	0.015	16.7	4.85		
MW-17	3rd Volume				40.00	4.98	0.015	16.9	4.81		
MW-17	Post Sampling				40.00	5.01	0.015	17.1	4.65		
MW-18	Initial			41.26	46.00	5.72	0.040	17.2	6.85	2.50	
MW-18	1st Volume				46.00	5.84	0.039	16.5	5.01		
MW-18	2nd Volume				46.00	5.88	0.039	16.4	5.18		

MW-18	3rd Volume				46.00	5.83	0.038	16.3	5.22		
MW-18	Post Sampling				46.00	5.82	0.038	16.3	5.13		
MW-19	Initial			43.31	50.00	5.51	0.055	17.1	8.08	1.75	bailed dry@1.75 gal
MW-19	1st Volume				50.00	5.36	0.054	16.7	8.27		
TW-2				32.04	88.00	N/A	N/A	N/A	N/A	27.36	
TW-3	Initial			36.97	71.00	5.17	0.116	22.2	3.92	16.63	
	1st Volume				71.00	5.76	0.111	20.1	2.37		
	2nd Volume				71.00	5.91	0.120	18.1	4.12		
	3rd Volume				71.00	5.82	0.117	19.0	3.11		
	Post Sampling				71.00	5.77	0.115	18.5	2.01		

Notes: NA-Not Applicable *

Table 2
Summary of Field Observations - August 26, 2003
Smith's Grocery
York South Carolina
Site ID No. 09322

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-1				24.07	35.00	N/A	N/A	N/A	N/A	5.34	Petroleum Odor
MW-2				27.81	38.00	N/A	N/A	N/A	N/A	4.98	Petroleum Odor
MW-6				27.91	37.00	N/A	N/A	N/A	N/A	4.44	Petroleum Odor
MW-7				26.88	36.00	N/A	N/A	N/A	N/A	5.43	Petroleum Odor
MW-8				27.98	38.00	N/A	N/A	N/A	N/A	4.89	Petroleum Odor
MW-10				33.36	40.00	N/A	N/A	N/A	N/A	5.20	Petroleum Odor
MW-11				33.88	44.00	N/A	N/A	N/A	N/A	4.94	**
MW-12				33.78	44.00	N/A	N/A	N/A	N/A	4.79	**
MW-13				37.20	47.00	N/A	N/A	N/A	N/A	4.79	**
MW-14				38.89	50.00	N/A	N/A	N/A	N/A	5.67	**
MW-15				39.58	50.00	N/A	N/A	N/A	N/A	5.09	**
MW-17				37.08	40.00	N/A	N/A	N/A	N/A	1.42	**
MW-18				37.47	46.00	N/A	N/A	N/A	N/A	4.17	**
MW-19				39.24	50.00	N/A	N/A	N/A	N/A	5.26	**
TW-2				27.94	88.00	N/A	N/A	N/A	N/A	29.36	**
TW-3				32.80	71.00	N/A	N/A	N/A	N/A	18.67	**

Notes: NA-Not Applicable *
** Horiba Instrument malfunction

Appendix D

Table 3 – Summary of April 5 and August 29, 2003 Laboratory Analytical Data

&

Copies of Laboratory Analytical Data and Chain of Custody

Table 3

Summary of April 5, 2003 Laboratory Analytical Results

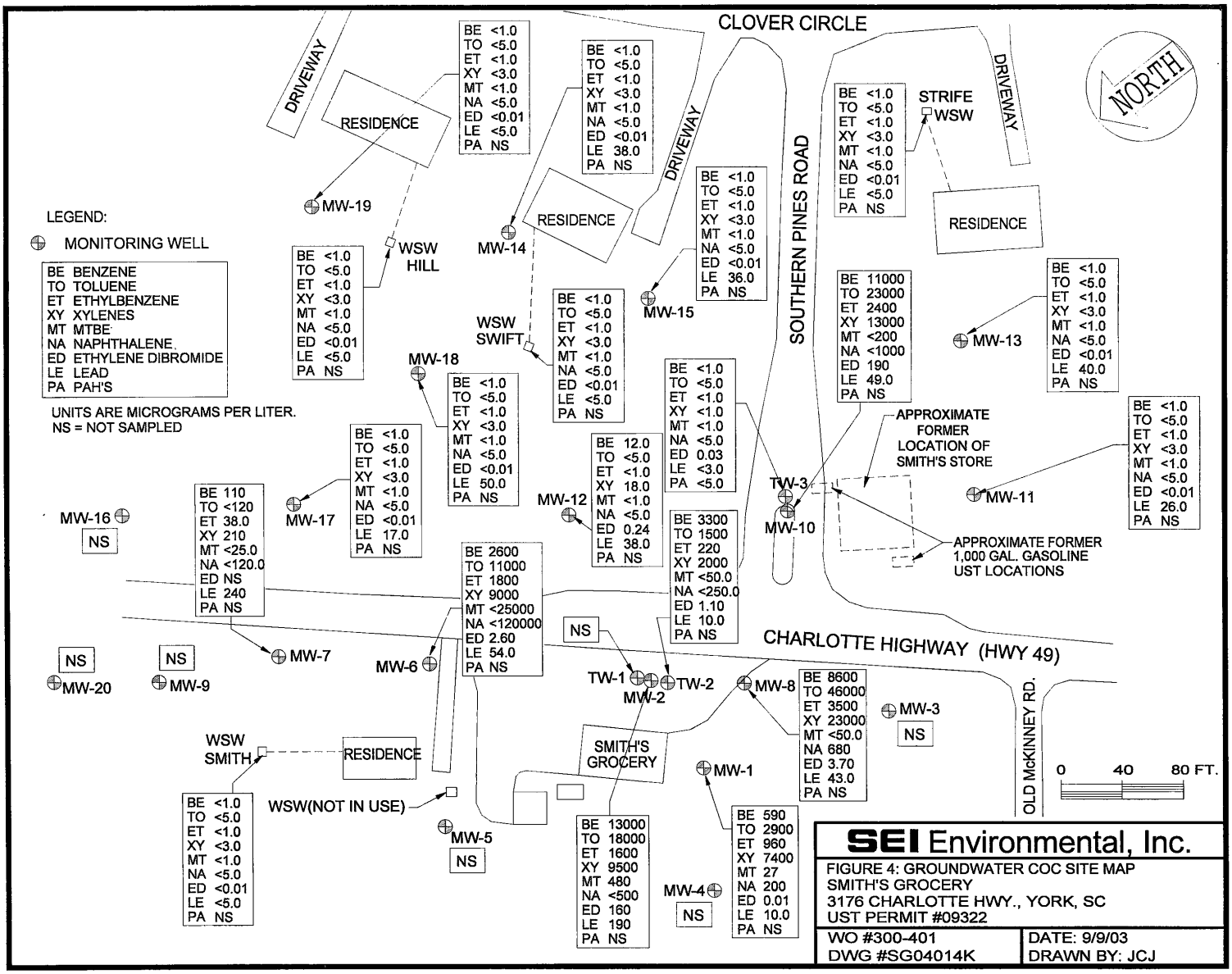
Smith's Grocery
York, South Carolina
Site ID No 09322

Monitor Well	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)
Swift WSW	1.00	5.00	1.00	3.00	1.00	23.00	0.010	5.00
Hill WSW	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00
Smith WSW	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00
Strife WSW	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00
MW-1	**590.00**	**2900.00**	**960.00**	7400.00	27.00	10.00	0.010	**200.00**
MW-2	**13000.00**	**18000.00**	**1600.00**	9500.00	**480.00**	**190.00**	**160.00**	**500.00**
MW-6	**2600.00**	**11000.00**	**1800.00**	9000.00	**250.00**	**54.00**	**2.60**	**1200.00**
MW-7	**240.00**	110.00	120.00	38.00	**210.00**	**240.00**	**1.7 ***	**120.00**
MW-8	**8600.00**	**46000.00**	**3500.00**	**23000.00**	**50.00**	**43.00**	**3.70**	**680.00**
MW-10	**11000.00**	**23000.00**	**2400.00**	**13000.00**	**200.00**	**49.00**	**190.00**	**1000.00**
MW-11	1.00	5.00	1.00	3.00	1.00	**26.00**	0.010	5.00
MW-12	**12.00**	5.00	1.00	1.80	1.00	**38.00**	**0.24**	5.00
MW-13	1.00	5.00	1.00	3.00	1.00	**40.00**	0.010	5.00
MW-14	1.00	5.00	1.00	3.00	1.00	**39.00**	0.010	5.00
MW-15	1.00	5.00	1.00	3.00	1.00	**36.00**	0.010	5.00
MW-17	1.00	5.00	1.00	3.00	1.00	**17.00**	0.010	5.00
MW-18	1.00	5.00	1.00	3.00	1.00	**50.00**	0.010	5.00
MW-19	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00
TW-2	**3300.00**	**1500.00**	220.00	2000.00	**50.00**	10.00	**1.10**	**250.00**
TW-3	1.00	5.00	1.00	3.00	1.00	5.00	0.031	5.00

Bold concentrations are above SSTL * Data from 1st quarter 2003 due to laboratory sample emulsified

Appendix E

Figure 3 – April 2 and August 29, 2003 CoC Map
Groundwater Elevation Contour Map



BE <1.0 TO <5.0 ET <1.0 XY <3.0 MT <1.0 NA <5.0 ED <0.01 LE <5.0 PA NS

BE <1.0 TO <5.0 ET <1.0 XY <3.0 MT <1.0 NA <5.0 ED <0.01 LE 38.0 PA NS

BE <1.0 TO <5.0 ET <1.0 XY <3.0 MT <1.0 NA <5.0 ED <0.01 LE 36.0 PA NS

BE <1.0 TO <5.0 ET <1.0 XY <3.0 MT <1.0 NA <5.0 ED <0.01 LE <5.0 PA NS

BE <1.0 TO <5.0 ET <1.0 XY <3.0 MT <1.0 NA <5.0 ED <0.01 LE <5.0 PA NS

BE <1.0 TO <5.0 ET <1.0 XY <3.0 MT <1.0 NA <5.0 ED <0.01 LE <5.0 PA NS

BE 11000 TO 23000 ET 2400 XY 13000 MT <200 NA <1000 ED 190 LE 49.0 PA NS

BE <1.0 TO <5.0 ET <1.0 XY <3.0 MT <1.0 NA <5.0 ED <0.01 LE 40.0 PA NS

BE <1.0 TO <5.0 ET <1.0 XY <3.0 MT <1.0 NA <5.0 ED <0.01 LE 26.0 PA NS

BE <1.0 TO <5.0 ET <1.0 XY <1.0 MT <1.0 NA <5.0 ED 0.03 LE <3.0 PA <5.0

BE 3300 TO 1500 ET 220 XY 2000 MT <50.0 NA <250.0 ED 1.10 LE 10.0 PA NS

BE 12.0 TO <5.0 ET <1.0 XY 18.0 MT <1.0 NA <5.0 ED 0.24 LE 38.0 PA NS

BE <1.0 TO <5.0 ET <1.0 XY <3.0 MT <1.0 NA <5.0 ED <0.01 LE 50.0 PA NS

BE <1.0 TO <5.0 ET <1.0 XY <3.0 MT <1.0 NA <5.0 ED <0.01 LE 17.0 PA NS

BE 110 TO <120 ET 38.0 XY 210 MT <25.0 NA <120.0 ED NS LE 240 PA NS

BE 2600 TO 11000 ET 1800 XY 9000 MT <25000 NA <120000 ED 2.60 LE 54.0 PA NS

BE 8600 TO 46000 ET 3500 XY 23000 MT <50.0 NA 680 ED 3.70 LE 43.0 PA NS

BE <1.0 TO <5.0 ET <1.0 XY <3.0 MT <1.0 NA <5.0 ED <0.01 LE <5.0 PA NS

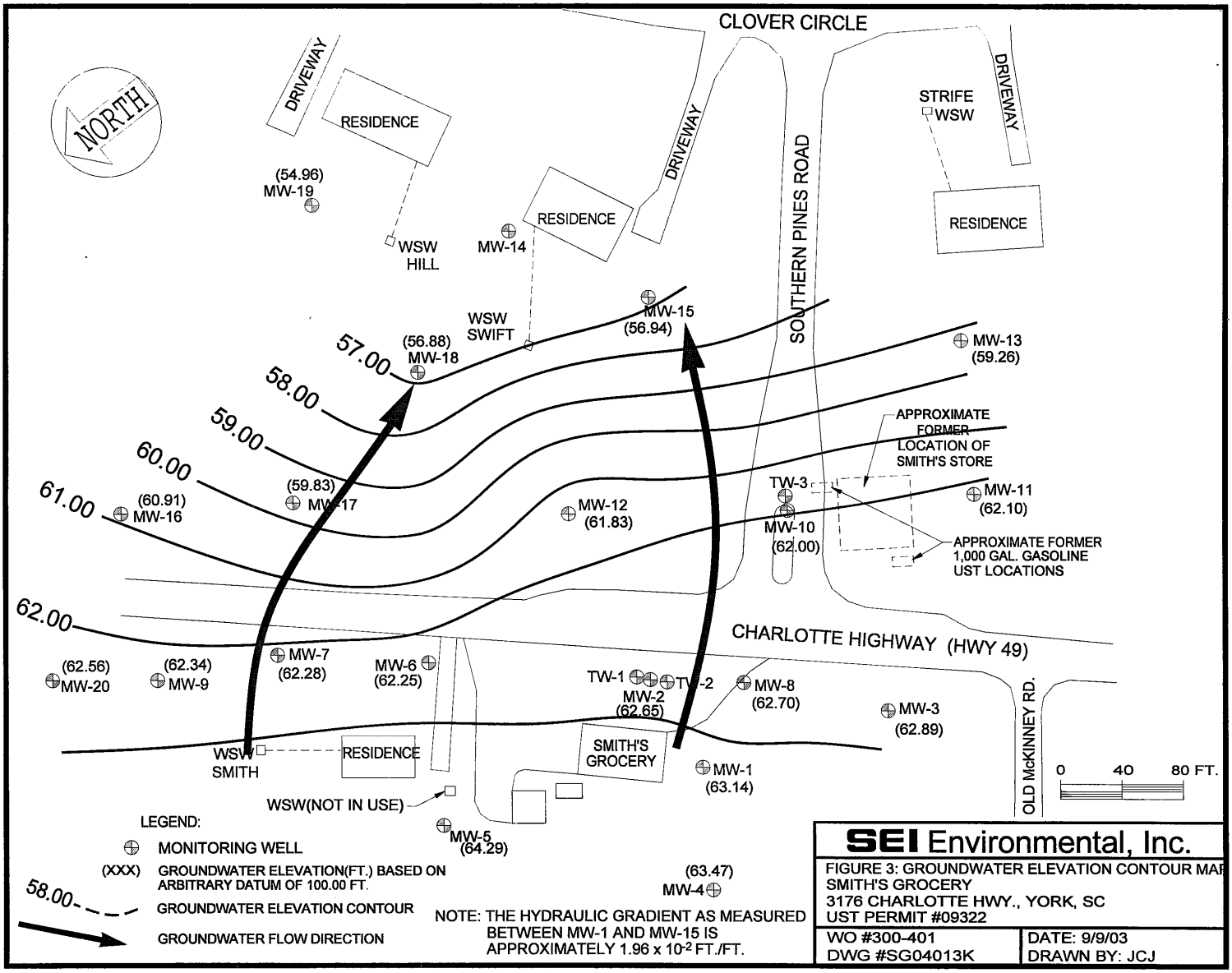
BE 13000 TO 18000 ET 1600 XY 9500 MT 480 NA <500 ED 160 LE 190 PA NS

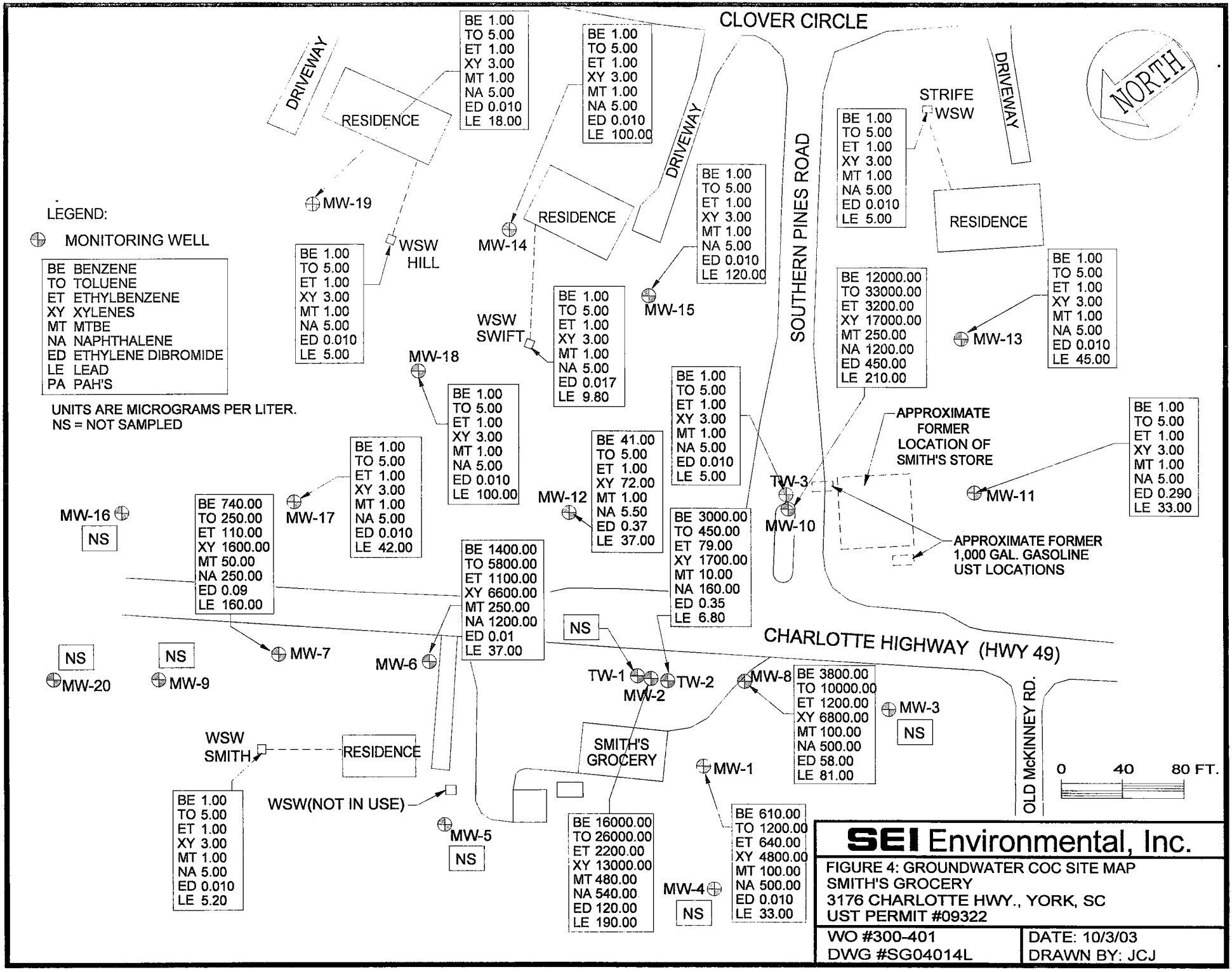
BE 590 TO 2900 ET 960 XY 7400 MT 27 NA 200 ED 0.01 LE 10.0 PA NS

SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401 | DATE: 9/9/03
DWG #SG04014K | DRAWN BY: JCJ

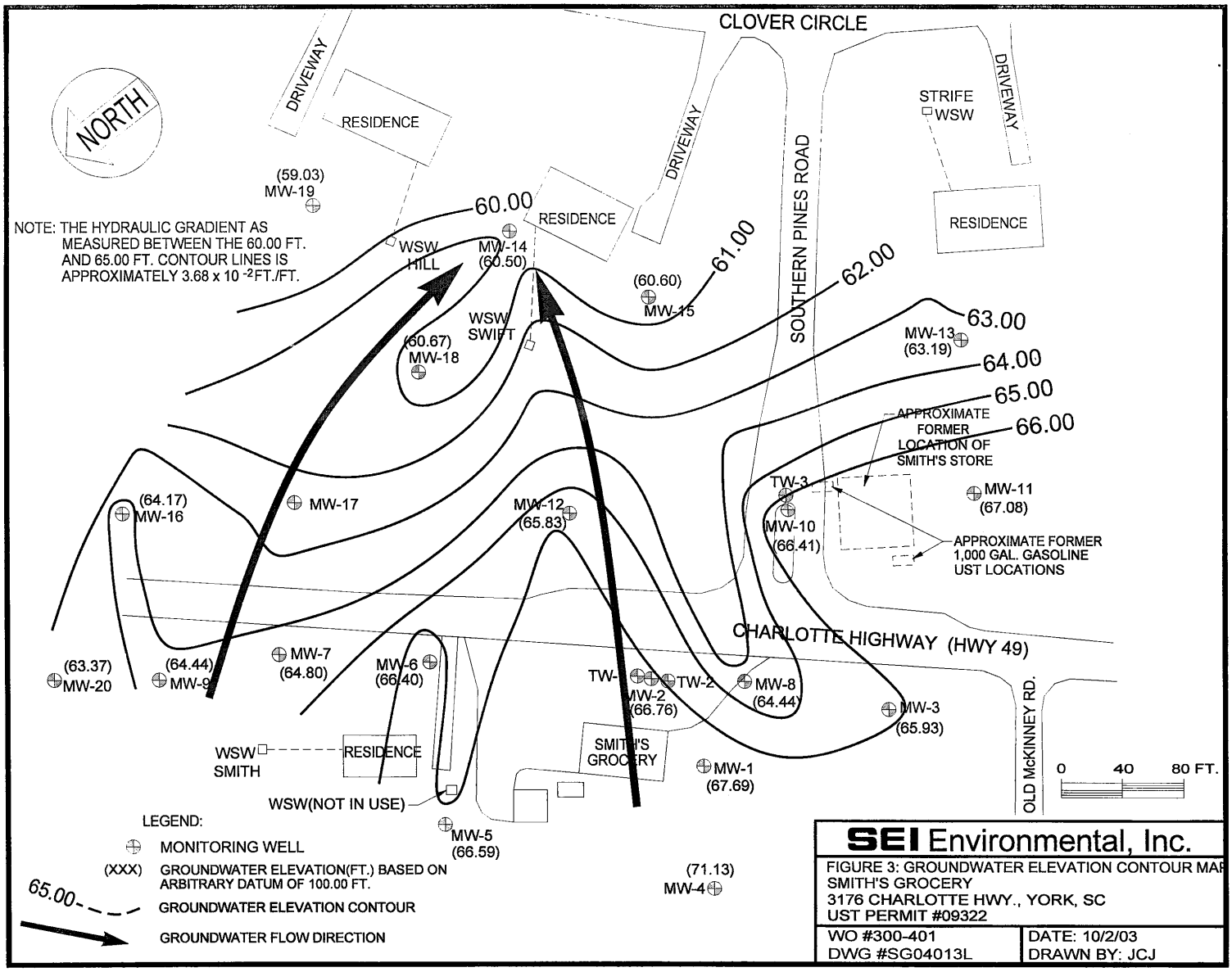

CLOVER CIRCLE
NORTH
DRIVEWAY
RESIDENCE
(54.96)
MW-19
WSW
HILL
MW-14
RESIDENCE
DRIVEWAY
SOUTHERN PINES ROAD
STRIFE
WSW
DRIVEWAY
RESIDENCE
WSW
SWIFT
(56.88)
MW-18
MW-15
(56.94)
MW-13
(59.26)
57.00
58.00
59.00
60.00
61.00
62.00
APPROXIMATE
FORMER
LOCATION OF
SMITH'S STORE
(59.83)
MW-17
(60.91)
MW-16
MW-12
(61.83)
TW-3
MW-10
(62.00)
MW-11
(62.10)
APPROXIMATE FORMER
1,000 GAL. GASOLINE
UST LOCATIONS
CHARLOTTE HIGHWAY (HWY 49)
(62.56)
MW-20
(62.34)
MW-9
MW-7
(62.28)
MW-6
(62.25)
TW-1
TW-2
MW-2
(62.65)
MW-8
(62.70)
MW-3
(62.89)
WSW
SMITH
RESIDENCE
SMITH'S
GROCERY
MW-1
(63.14)
OLD McKINNEY RD.
0
40
80 FT.
WSW(NOT IN USE)
MW-5
(64.29)
(63.47)
MW-4
LEGEND:
MONITORING WELL
(XXX) GROUNDWATER ELEVATION(FT.) BASED ON ARBITRARY DATUM OF 100.00 FT.
58.00 GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
NOTE: THE HYDRAULIC GRADIENT AS MEASURED BETWEEN MW-1 AND MW-15 IS APPROXIMATELY 1.96 x 10-2 FT./FT.
SEI Environmental, Inc.
FIGURE 3: GROUNDWATER ELEVATION CONTOUR MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322
WO #300-401
DWG #SG04013K
DATE: 9/9/03
DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 10/3/03
DWG #SG04014L	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: GROUNDWATER ELEVATION CONTOUR MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 10/2/03
DWG #SG04013L	DRAWN BY: JCJ

Appendix F

Non-Hazardous Manifest & Disposal Receipt

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
. . . . .	GK5397	04/04/03

GENERATOR

3. Generator's Name and Mailing Address
SEI ENVIRONMENTAL, INC
3021 MCNAUGHTON DR. SUITE 9
COLUMBIA, SC 29223

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
SEI ENVRIONMENTAL, INC	. . . . .	803-788-2535
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
	. . . . .	

9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
G & K TANK SERVICES PO BOX 1384 SUMTER, SC 29151	.987573557.	800-800-6840

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER SMITH'S GROCERY YORK, SC	2	DM	. . . . .	
b. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER QUICK MART #1 BISHOPVILLE, SC	1	DM	. . . . .	
c. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER Little Cricket #323 Lexington, SC	1	DM	. . . . .	
d. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER ABERNATHY'S SPARTANBURG, SC	1	DM	. . . . .	

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JOHN MONEGHAN	John Monaghan	10	4	03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
S. Collett	S. Collett	10	4	03

ORIGINAL - RETURN TO GENERATOR

G & K
TANK SERVICES, INC.
Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 2 Drums
Smith's Grocery
York, SC

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to cerify the above ~~soil~~ water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. [illegible]

Date 04/04/03

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	

GENERATOR

3. Generator's Name and Mailing Address
SEI ENVIRONMENTAL INC
3521 MCNAUGHTON DR., SUITE [illegible]
COLUMBIA, SC 29223

4. Generator's Phone (   )

5. Transporter 1 Company Name SEI ENVIRONMENTAL INC	6. US EPA ID Number	A. Transporter's Phone 803-782-25[illegible]
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address S & K TANK SERVICE PO BOX 1354 SUMTER SC 29151	10. US EPA ID Number 987575557	C. Facility's Phone 800-800-6840

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINANTED SOIL CONOCO CONOCO #414 COLUMBIA, SC	100	M		
b. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER SMITH GROCERY YORK, SC	020	M		
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
K Balloge	KB	8	[illegible]	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
S. [illegible]	S. [illegible]	8	[illegible]	02

G & K
TANK SERVICES, INC.

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 2 Drums
Smith Grocery
York, SC

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to cerify the above ~~soil~~ water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. Sligh

Date 08/27/03

Appendix G

Table 4 – April 5 and August 29, 2003 System Effectiveness

Table 4

System Effectiveness -April 5, 2003 Laboratory Analytical Results

Smith's Grocery

York, South Carolina

Site ID No. 09322

Monitor Well	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Total Conc. (ppb)
Swift WSW	1.00	5.00	1.00	3.00	1.00	**23.00**	0.010	5.00	39.01
Hill WSW	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00	21.01
Smith WSW	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00	21.01
Strife WSW	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00	21.01
MW-1	**590.00**	**2900.00**	**960.00**	7400.00	27.00	10.00	0.010	**200.00**	12087.01
MW-2	**13000.00**	**18000.00**	**1600.00**	9500.00	**480.00**	**190.00**	**160.00**	**500.00**	43430.00
MW-6	**2600.00**	**11000.00**	**1800.00**	9000.00	**250.00**	**54.00**	**2.60**	**1200.00**	25906.60
MW-7	**240.00**	110.00	120.00	38.00	**210.00**	**240.00**	**1.7 ***	**120.00**	1078.00
MW-8	**8600.00**	**46000.00**	**3500.00**	**23000.00**	**50.00**	**43.00**	**3.70**	**680.00**	81876.70
MW-10	**11000.00**	**23000.00**	**2400.00**	**13000.00**	**200.00**	**49.00**	**190.00**	**1000.00**	50839.00
MW-11	1.00	5.00	1.00	3.00	1.00	**26.00**	0.010	5.00	42.01
MW-12	**12.00**	5.00	1.00	1.80	1.00	**38.00**	0.24	5.00	64.04
MW-13	1.00	5.00	1.00	3.00	1.00	**40.00**	0.010	5.00	56.01
MW-14	1.00	5.00	1.00	3.00	1.00	**39.00**	0.010	5.00	55.01
MW-15	1.00	5.00	1.00	3.00	1.00	**36.00**	0.010	5.00	52.01
MW-17	1.00	5.00	1.00	3.00	1.00	**17.00**	0.010	5.00	33.01
MW-18	1.00	5.00	1.00	3.00	1.00	**50.00**	0.010	5.00	66.01
MW-19	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00	21.01
TW-2	**3300.00**	**1500.00**	220.00	2000.00	**50.00**	10.00	1.10	**250.00**	7331.10
TW-3	1.00	5.00	1.00	3.00	1.00	5.00	0.031	5.00	21.03
Initial Conc	47644.00	158164.00	19824.00	84035.00	1694.00	1716.00	322.43	4820.00	318219.43
SSTL Conc.	120.00	10975.00	7772.00	80343.00	490.00	199.00	53.33	391.00	100343.33
Initial Conc.above SSTL	47524.00	147189.00	12052.00	3692.00	1204.00	1517.00	269.10	4429.00	217876.10
Current Conc.	39354.00	102575.00	10613.00	63975.80	1280.00	890.00	357.79	4015.00	223060.59
Current Conc. Above SSTL	39234.00	91600.00	2841.00	0.00	790.00	691.00	304.46	3624.00	122717.26

(Initial Conc above SSTL - Current Conc. Above SSTL)(100)/(Initial Conc. Above SSTL)=(217876.10 - 122718.96) (100) / 217876.10)=43.7%

Bold concentrations are above SSTL * Data from 1st quarter 2003 due to laboratory sample emulsified

Table 4

System Effectiveness -August 29, 2003 Laboratory Analytical Results

Smith's Grocery

York, South Carolina

Site ID No. 09322

Monitor Well	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Lead (ppb)	EDB (ppb)	Naphthalene (ppb)	Total Conc. (ppb)
Swift WSW	1.00	5.00	1.00	3.00	1.00	9.80	0.017	5.00	25.82
Hill WSW	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00	21.01
Smith WSW	1.00	5.00	1.00	3.00	1.00	5.20	0.010	5.00	21.21
Strife WSW	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00	21.01
MW-1	**610.00**	**1200.00**	640.00	4800.00	**100.00**	**33.00**	0.010	**500.00**	7883.01
MW-2	**16000.00**	**26000.00**	**2200.00**	**13000.00**	**480.00**	**190.00**	**120.00**	**540.00**	58530.00
MW-6	**1400.00**	**5800.00**	**1100.00**	6600.00	**250.00**	**37.00**	0.01	**1200.00**	16387.01
MW-7	**740.00**	250.00	110.00	1600.00	**50.00**	**160.00**	**0.09**	**250.00**	3160.09
MW-8	**3800.00**	**10000.00**	**1200.00**	6800.00	**100.00**	**81.00**	**58.00**	**500.00**	22539.00
MW-10	**12000.00**	**33000.00**	**3200.00**	**17000.00**	**250.00**	**210.00**	**450.00**	**1200.00**	67310.00
MW-11	1.00	5.00	1.00	3.00	1.00	**33.00**	**0.290**	5.00	49.29
MW-12	**41.00**	5.00	1.00	72.00	1.00	**37.00**	**0.37**	5.50	162.87
MW-13	1.00	5.00	1.00	3.00	1.00	**45.00**	0.010	5.00	61.01
MW-14	1.00	5.00	1.00	3.00	1.00	**100.00**	0.010	5.00	116.01
MW-15	1.00	5.00	1.00	3.00	1.00	**120.00**	0.010	5.00	136.01
MW-17	1.00	5.00	1.00	3.00	1.00	**42.00**	0.010	5.00	58.01
MW-18	1.00	5.00	1.00	3.00	1.00	**100.00**	0.010	5.00	116.01
MW-19	1.00	5.00	1.00	3.00	1.00	**18.00**	0.010	5.00	34.01
TW-2	**3000.00**	450.00	79.00	1700.00	10.00	6.80	**0.35**	**160.00**	5406.15
TW-3	1.00	5.00	1.00	3.00	1.00	5.00	0.010	5.00	21.01
Initial Conc	47644.00	158164.00	19824.00	84035.00	1694.00	1716.00	322.43	4820.00	318219.43
SSTL Conc.	120.00	10975.00	7772.00	80343.00	490.00	199.00	53.33	391.00	100343.33
Initial Conc.above SSTL	47524.00	147189.00	12052.00	3692.00	1204.00	1517.00	269.10	4429.00	217876.10
Current Conc.	37603.00	76765.00	8542.00	51608.00	1253.00	1242.80	629.24	4415.50	182058.54
Current Conc. Above SSTL	37483.00	65790.00	770.00	0.00	763.00	1043.80	575.91	4024.50	81715.21

(Initial Conc above SSTL - Current Conc. Above SSTL)(100)/(Initial Conc. Above SSTL)=(217876.10 - 81715.21) (100) / 217876.10)=62.5%

Bold concentrations are above SSTL

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
MAR 0 5 2003
Underground Storage
Tank Program

February 26, 2003

Ms. Paula Anderson, Hydrogeologist
SCDHEC – UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Re: Quarterly Groundwater Sampling Report
Smith's Grocery
3176 Charlotte Highway
York, South Carolina
UST Permit #09322

Dear Ms. Anderson:

Attached is the Corrective Action Quarterly Groundwater Sampling Report for Smith's Grocery. Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,
SEI Environmental, Inc.

Robert G. Bolton, Jr.
Project Manager

Attachment

cc: Ms. Lois B. Smith, Smith's Grocery

SEI Environmental, Inc.

CORRECTIVE ACTION
QUARTERLY SAMPLING REPORT

Smith's Grocery
3176 Charlotte Highway
York, South Carolina
York County
UST Permit #09322

PREPARED FOR:

Ms. Paula Anderson
SCDHEC – UST Program
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201

PREPARED BY:

SEI Environmental, Inc.
3021 McNaughton Drive, Suite 9
Columbia, South Carolina 29223
(803) 788-2535

Robert G. Bolton, Jr.
Project Manager

Jesse L. Keeffe, Jr., P.G. #2308

February 26, 2003

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 METHODOLOGY 1

3.0 LABORATORY ANALYTICAL RESULTS 2

4.0 REMEDIATION EFFECTIVENESS 3

5.0 CONCLUSIONS 4

6.0 REPORT LIMITATIONS 6

LIST OF TABLES

TABLE I	Groundwater Elevation Data
TABLE II	Historical Groundwater Elevation Data
TABLE III	Groundwater Analytical Results
TABLE IV	Historical Groundwater Analytical Results
TABLE V	System Effectiveness Analysis

LIST OF FIGURES

FIGURE 1	Site Location Map
FIGURE 2	Site Map
FIGURE 3	Groundwater Elevation Contour Map
FIGURES 4-5	CoC Concentrations Maps

LIST OF APPENDICES

APPENDIX A	Groundwater Sampling Field Measurements
APPENDIX B	Laboratory Analytical Results and Chain-of-Custody
APPENDIX C	Disposal Manifest

1.0 INTRODUCTION

South Carolina Department of Health and Environmental Control (SCDHEC) contracted SEI Environmental, Inc. (SEI) to conduct corrective action and quarterly groundwater sampling activities at the Smith's Grocery facility (UST Permit #09322) located at 3176 Charlotte Highway in York, South Carolina. The approximate location of the project site is shown on the United States Geological Survey (USGS), 7.5-Minute Series Topographic Map provided as Figure 1. The corrective action and sampling activities were approved by SCDHEC in correspondence dated March 26, 2001.

2.0 METHODOLOGY

2.1 Site Hydrogeology

During the January 6, 2003, gauging event, liquid phase hydrocarbons (LPH) were not detected in any monitor wells. Groundwater flow direction is toward the east with a hydraulic gradient of 0.0178 feet per foot, as measured between Monitor Wells MW-1 and MW-19. Groundwater measurements are summarized in Table I, and a groundwater elevation contour map is depicted in Figure 3.

2.2 Groundwater Sampling and Analysis

On January 6-7, 2003, SEI personnel obtained groundwater samples from Monitor Wells MW-1 through MW-20 and TW-1 through TW-3. In addition, four drinking water wells (identified as Hill, Smith, Strife, and Swift) were also sampled on these dates. A new, disposable, polyethylene bailer was used for the collection of the water samples from the monitor wells. Each groundwater sample was obtained after pH values and temperature had equilibrated unless petroleum odor was emanating from the well. If petroleum odors were observed in the monitor well, the groundwater sample was obtained after three well volumes were purged. All purge water was drummed for proper disposal at a permitted treatment facility. Field measurements

are presented in Appendix A. New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The groundwater samples were placed in laboratory supplied containers, placed on ice, and delivered to Access Analytical, Inc. in Irmo, South Carolina for proper analysis. Proper preservation methods and chain-of-custody procedures were followed throughout the sampling process. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene by EPA method 8260; ethylene dibromide (EDB) by EPA method 8011; and lead by EPA method 7421.

3.0 LABORATORY ANALYTICAL RESULTS

Groundwater analytical results for the samples collected January 6-7, 2003, detected the presence of benzene concentrations at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, TW-1, and TW-2. Toluene concentrations were detected at Monitor Wells MW-1, MW-2, MW-6, MW-8, MW-9, MW-10, MW-12, TW-1, and TW-2. Ethylbenzene concentrations were detected at Monitor Wells MW-1, MW-2, MW-6 through MW-12, TW-1, and TW-2. Xylenes concentrations were detected at Monitor Wells MW-1, MW-2, MW-5, MW-6 through MW-10, MW-12, TW-1, and TW-2. MTBE concentrations were detected at Monitor Wells MW-2, MW-7, MW-8, and TW-2. MTBE concentrations may exist at Monitor Wells MW-1, MW-6, MW-10, and TW-1 due to high dilution factors that caused results to be less than their respective detection limits. Naphthalene concentrations were detected at Monitor Wells MW-1, MW-2, MW-6 through MW-13, TW-1, TW-2, TW-3, and the Hill water well. EDB concentrations were detected at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, TW-1, TW-2, and TW-3. Lead concentrations were detected at Monitor Wells MW-1 through MW-6, MW-8 through MW-12, MW-15, MW-16, MW-17, MW-19, MW-20, TW-1, TW-2, and the four potable water wells.

At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2, benzene concentrations were detected greater than its site-specific threshold levels (SSTL) computed

specifically for these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-8, MW-10, MW-12, and TW-2, toluene concentrations were detected greater than its SSTLs computed specifically for these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2, ethylbenzene concentrations were detected greater than its SSTLs computed specifically for these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-12, and TW-2, xylenes concentrations were detected greater than its SSTL computed specifically for these wells. At Monitor Wells MW-2 and TW-2, MTBE concentrations were detected greater than its SSTLs computed specifically for these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, and TW-2, naphthalene concentrations were detected greater than its SSTLs computed specifically for these wells. At Monitor Wells MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2, EDB concentrations were detected greater than its SSTLs computed specifically for these wells. At Monitor Wells MW-1, MW-8, MW-10, MW-11, MW-17, TW-2, Hill well, Strife well, and Swift well, lead concentrations were detected greater than its SSTL calculated for each of these wells. Groundwater analytical results are presented in Table III. Historical groundwater analytical results that compare current and past results with the SSTLs are presented in Table IV. Groundwater concentrations are depicted in Figures 4 and 5. Laboratory analyses and chain-of-custody are presented in Appendix B.

4.0 REMEDIATION EFFECTIVENESS

Chemicals of concern (CoC) concentration reduction is evaluated by verifying if the CoC concentrations reduction goals have been achieved in Monitor Wells MW-1 through MW-20, TW-1 through TW-3, and four drinking water wells named Hill, Smith, Strife, and Swift (previously named Vickery). Furthermore, chemical test data from Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, MW-18, MW-19, TW-2, and TW-3 are used to evaluate the effectiveness of the bioremediation.

The evaluation of the remediation effectiveness consists in comparing the January 2003, CoC concentrations against the baseline concentrations and determining the percent of total concentration reduction. This is calculated by subtracting the current sample concentrations

above SSTLs from the baseline concentrations above SSTLs and multiplying this amount by 100. This number is then divided by the baseline concentrations above SSTLs. The calculation of the total concentration reduction is presented in Table V.

According to calculations made from the January 2003, sampling event, approximately 0.00 percent of the CoC concentrations has been removed from the site. 24.4

5.0 CONCLUSIONS

- Groundwater flow at the site is in an eastern direction with a hydraulic gradient of 0.0178 feet per foot, as measured between Monitor Wells MW-1 and MW-19.
- Liquid phase hydrocarbons were not detected in any monitor wells during the current sampling activities.
- Benzene concentrations were detected greater than their calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2.
- Toluene concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-8, MW-10, MW-12, and TW-2.
- Ethylbenzene concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2.
- Xylenes concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-12, and TW-2.
- Naphthalene concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, and TW-2.
- MTBE concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-2 and TW-2.
- EDB concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2.
- Lead concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-8, MW-10, MW-11, MW-17, TW-2, Hill well, Strife well, and Swift well.

- According to calculation made from the January 2003, sampling event, approximately 0.00 percent of the CoC concentrations has been removed from the site.
- SEI personnel last injected Microbac™ microbes and nutrients in the injection wells on November 25, 2002. SEI personnel will inject these microbes on a quarterly basis with the next scheduled event planned for ~~February~~ April 2003.
- Due to the presence of benzene concentrations in the Hill's potable water well, the GAC filter on this well was replaced January 23, 2003.

6.0 REPORT LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the current UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

REFERENCES

SCDHEC, May 15, 2001, *Risk-Based Corrective Action for Petroleum Releases*, Columbia, South Carolina.

SEI Environmental, Inc., December 9, 2002, *Corrective Action Quarterly Groundwater Sampling Report – Smith's Grocery*, Columbia, South Carolina.

TABLE I
Groundwater Elevation Data
Smith's Grocery / York, South Carolina

Monitor Well Number	Date Measured	Top of Casing Elevation (feet)	Depth to Ground Water (feet)	Total Depth of Well (feet)	Groundwater Elevation (feet)
MW-1	01/06/03	91.16	29.88	35	61.28
MW-2	01/06/03	94.57	33.76	38	60.81
MW-3	01/06/03	91.91	30.87	35	61.04
MW-4	01/06/03	86.20	24.58	27	61.62
MW-5	01/06/03	89.29	27.96	30	61.33
MW-6	01/06/03	93.91	33.57	37	60.34
MW-7	01/06/03	91.68	31.57	36	60.11
MW-8	01/06/03	94.72	33.84	38	60.88
MW-9	01/06/03	90.54	30.41	36	60.13
MW-10	01/06/03	99.77	39.71	44	60.06
MW-11	01/06/03	100.46	40.37	44	60.09
MW-12	01/06/03	99.61	39.64	44	59.97
MW-13	01/06/03	100.39	42.87	47	57.52
MW-14	01/06/03	98.89	43.66	50	55.23
MW-15	01/06/03	100.18	44.97	50	55.21
MW-16	01/06/03	89.91	31.07	37	58.84
MW-17	01/06/03	94.46	36.81	40	57.65
MW-18	01/06/03	98.14	42.83	46	55.31
MW-19	01/06/03	98.27	45.14	50	53.13
MW-20	01/06/03	88.35	28.09	35	60.26
TW-1	01/06/03	94.72	34.33	61	60.39
TW-2	01/06/03	94.72	33.91	88	60.81
TW-3	01/06/03	99.21	38.81	71	60.4

Top of casing elevation is referenced to an assumed elevation.

TABLE II
Historical Groundwater Elevation Data
Smith's Grocery / York, South Carolina

Monitor Well Number	Top of Casing Elevation	Depth to Groundwater (feet)		Groundwater Elevation (feet)	
		07/08/02	10/24/02	07/08/02	10/24/02
MW-1	91.16	30.23	31.22	60.93	59.94
MW-2	94.57	33.90	34.97	60.67	59.60
MW-3	91.91	30.97	32.08	60.94	59.83
MW-4	86.20	25.10	Dry	Not Applicable	Not Applicable
MW-5	89.29	28.83	Dry	Not Applicable	Not Applicable
MW-6	93.91	34.00	35.03	59.91	58.88
MW-7	91.68	32.86	33.67	58.82	58.01
MW-8	94.72	33.96	35.07	60.76	59.65
MW-9	90.54	31.77	32.58	58.77	57.96
MW-10	99.77	39.72	41.82	60.05	57.95
MW-11	100.46	40.49	41.60	59.97	58.86
MW-12	99.61	39.94	40.94	59.67	58.67
MW-13	100.39	43.36	44.33	57.03	56.06
MW-14	98.89	44.00	44.71	54.89	54.18
MW-15	100.18	45.11	45.87	55.07	54.31
MW-16	89.91	32.37	33.08	57.54	56.83
MW-17	94.46	37.02	39.62	57.44	54.84
MW-18	98.14	43.07	43.77	55.07	54.37
MW-19	98.27	45.77	46.61	52.50	51.66
MW-20	88.35	29.54	30.35	58.81	58.00
TW-1	94.72	33.96	34.47	60.76	60.25
TW-2	94.72	34.06	35.12	60.66	59.60
TW-3	99.21	38.98	40.00	60.23	49.21

TABLE III

Groundwater Analytical Results, dated January 2003

Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1 (µg/l)	MW-2 (µg/l)	MW-3 (µg/l)	MW-4 (µg/l)	MW-5 (µg/l)	MW-6 (µg/l)	MW-7 (µg/l)	MW-8 (µg/l)	MW-9 (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	911	18400	<1.0	<1.0	<1.0	4840	1020	6770	<1.0
Toluene	9810	31100	<1.0	<1.0	<1.0	20400	<1.0	84600	2.2
Ethylbenzene	2660	3180	<1.0	<1.0	<1.0	3540	2290	3560	5.7
Xylenes	18650	18920	<3.0	<3.0	5.4	19020	16940	24740	579
Total BTEX	32031	71600	<6.0	<6.0	<8.4	47800	<20251	119670	587.9
MTBE	<250	395	<1.0	<1.0	<1.0	<25	1.0	7.3	<1.0
Naphthalene	743	514	<1.0	<1.0	<1.0	640	826	362	109
EDB	0.10	67.0	<0.02	<0.02	<0.02	7.0	1.7	1.9	<0.02
Lead	56	28	350	12	9	11	<5	24	24

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, January 2003
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10 (µg/l)	MW-11 (µg/l)	MW-12 (µg/l)	MW-13 (µg/l)	MW-14 (µg/l)	MW-15 (µg/l)	MW-16 (µg/l)	MW-17 µg/l)	MW-18 (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	7980	<1.0	720	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	24900	<1.0	17.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	3540	<1.0	13.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes	18180	<3.0	1550	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Total BTEX	54600	<6.0	2300.6	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0
MTBE	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	299	7.8	113	1.3	<1.0	<1.0	<1.0	<1.0	<1.0
EDB	78	<0.02	12.0	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Lead	35	6	6	<5	<5	9	18	44	<5

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated January 2003
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19 (µg/l)	MW-20 (µg/l)	TW-1 (µg/l)	TW-2 (µg/l)	TW-3 (µg/l)	Hill (µg/l)	Smith (µg/l)	Strife (µg/l)	Swift (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	<1.0	<1.0	3380	6620	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	<1.0	<1.0	1510	6860	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	1860	620	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes	<3.0	<3.0	9370	4110	<3.0	<3.0	<3.0	<3.0	<3.0
Total BTEX	<6.0	<6.0	16120	18210	<6.0	<6.0	<6.0	<6.0	<6.0
MTBE	<1.0	<1.0	<25	50.2	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	278	160	8.9	4.8	<1.0	<1.0	<1.0
EDB	<0.02	<0.02	1.5	5.2	0.13	<0.02	<0.02	<0.02	<0.02
Lead	6	11	30	6	<5	9	5	28	10

NA = Not Applicable

TABLE IV
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1				MW-2				MW-3			
Sampling Date	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	11	**1240**	**1620**	**911**	10	**19100**	**18300**	**18400**	NA	<1.00	<1.0	<1.0
Toluene	2223	**14400**	**17800**	**9810**	2021	**33400**	**36300**	**31100**	NA	<1.00	<1.0	<1.0
Ethylbenzene	1558	**2400**	**3230**	**2660**	1416	**2520**	**2900**	**3180**	NA	<1.00	<1.0	<1.0
Xylenes	10000	**16100**	**20620**	**18650**	15000	14700	**16430**	**18920**	NA	<1.00	<3.0	<3.0
Total BTEX	13792	34140	43270	32031	18447	69720	73930	71600	NA	<4.00	<6.0	<6.0
MTBE	80	**<100**	13.9	**<250**	81	**580**	**424**	**395**	NA	<5.00	<1.0	<1.0
Naphthalene	56	**542**	**925**	**743**	51	**580**	**668**	**514**	NA	<5.00	<1.0	<1.0
EDB	0.32	0.30	**0.36**	0.10	10	**139**	**69**	**67.0**	NA	<0.02	<0.02	<0.02
Lead	2	**5.0**	**7**	**56**	30	**208**	**49**	28	NA	27.0	10	350

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-4				MW-5				MW-6			
Sampling Date	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)
Free Product Thickness	NA	None	NA	None	NA	None	NA	None	NA	None	None	None
Benzene	NA	<1.00	NS	<1.0	NA	<1.00	NS	<1.0	6	**3320**	**5870**	**4840**
Toluene	NA	<1.00	NS	<1.0	NA	<1.00	NS	<1.0	1212	**16400**	**24100**	**20400**
Ethylbenzene	NA	<1.00	NS	<1.0	NA	<1.00	NS	<1.0	850	**2120**	**3100**	**3540**
Xylenes	NA	<1.00	NS	<3.0	NA	<1.00	NS	5.4	8000	**12600**	**18810**	**19020**
Total BTEX	NA	<4.00	NA	<6.0	NA	<4.00	NA	<8.4	10068	34440	51880	47800
MTBE	NA	<5.00	NS	<1.0	NA	<5.00	NS	<1.0	48	**<50.0**	<25	<25
Naphthalene	NA	<5.00	NS	<1.0	NA	<5.00	NS	<1.0	31	**587**	**881**	**640**
EDB	NA	<0.02	NS	<0.02	NA	<0.02	NS	<0.02	4.83	**7.19**	**7.4**	**7.0**
Lead	NA	<3.0	NS	12	NA	<3.0	NS	9	18	11.0	**49**	11

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable; NS = Not Sampled

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-7				MW-8				MW-9			
Sampling Date	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	6	**849**	**1200**	**1020**	12	**6400**	**7490**	**6770**	NA	<2.00	1.1	<1.0
Toluene	1212	**2230**	**15400**	<1.0	2424	**45600**	**42300**	**84600**	NA	<2.00	7.9	2.2
Ethylbenzene	850	**1350**	470	**2290**	1700	**3750**	**3310**	**3560**	NA	3.20	5.9	5.7
Xylenes	12123	9040	**29580**	**16940**	16000	**22000**	**25990**	**24740**	NA	451	752	579
Total BTEX	14191	13469	46650	<20251	20136	77750	79090	119670	NA	458.2	766.9	587.9
MTBE	48	**<50.0**	<1.0	1.0	96	**<250**	4.4	7.3	NA	<2.00	<1.0	<1.0
Naphthalene	31	**889**	**1160**	**826**	62	**655**	**748**	**362**	NA	47.0	82.4	109
EDB	0.66	**1.10**	**4.2**	**1.7**	0.48	**1.47**	**1.7**	**1.9**	NA	<0.02	<0.02	<0.02
Lead	18	**24.0**	**33**	<5	4	**263**	**180**	**24**	NA	30.0	20	24

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10				MW-11				MW-12			
Sampling Date	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	9	**19400**	**8120**	**7980**	5	<2.00	<1.0	<1.0	7	**425**	**665**	**720**
Toluene	1819	**46400**	**26200**	**24900**	5	<2.00	1.3	<1.0	5	4.20	**11.5**	**17.2**
Ethylbenzene	1274	**3280**	**3310**	**3540**	5	<2.00	1.2	<1.0	68	11.1	19.9	13.4
Xylenes	18185	17000	16640	18180	10	<2.00	<3.0	<3.0	730	651	**1160**	**1550**
Total BTEX	21287	86080	54270	54600	25	<8.00	<6.5	<6.0	810	1091.3	1856.4	2300.6
MTBE	43	**<100**	<25	<25	5	<2.00	<1.0	<1.0	5	<2.00	<1.0	<1.0
Naphthalene	46	**290**	**436**	**299**	5	<5.00	4.1	**7.8**	36	**66.2**	**112**	**113**
EDB	9	**345**	**80**	**78**	0.02	<0.02	<0.02	<0.02	7	**8.12**	**9.5**	**12.0**
Lead	21	**79.0**	21	**35**	5	**22.0**	<5	**6**	7	**78.0**	**32**	6

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-13				MW-14				MW-15			
Sampling Date	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	<2.00	<1.0	<1.0	5	<2.00	<1.0	<1.0	NA	<2.00	<1.0	<1.0
Toluene	5	<2.00	<1.0	<1.0	5	<2.00	<1.0	<1.0	NA	<2.00	<1.0	<1.0
Ethylbenzene	5	<2.00	<1.0	<1.0	5	<2.00	<1.0	<1.0	NA	<2.00	<1.0	<1.0
Xylenes	10	<2.00	<3.0	<3.0	10	<2.00	<3.0	<3.0	NA	<2.00	<3.0	<3.0
Total BTEX	25	<8.00	<6.0	<6.0	25	<8.00	<6.0	<6.0	NA	<8.00	<6.0	<6.0
MTBE	5	<2.00	<1.0	<1.0	5	<2.00	<1.0	<1.0	NA	<2.00	<1.0	<1.0
Naphthalene	5	<5.00	2.5	1.3	5	<5.00	<1.0	<1.0	NA	<5.00	<1.0	<1.0
EDB	0.02	<0.02	<0.02	<0.02	0.51	0.02	<0.02	<0.02	NA	0.09	<0.02	<0.02
Lead	5	**50.0**	5	<5	5	**22.0**	<5	<5	NA	19.0	50	9

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-16				MW-17				MW-18			
Sampling Date	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	NA	<2.00	<1.0	<1.0	5	<2.00	<1.0	<1.0	5	<2.00	<1.0	<1.0
Toluene	NA	<2.00	<1.0	<1.0	5	<2.00	1.0	<1.0	5	<2.00	<1.0	<1.0
Ethylbenzene	NA	<2.00	<1.0	<1.0	5	<2.00	<1.0	<1.0	5	<2.00	<1.0	<1.0
Xylenes	NA	<2.00	<3.0	<3.0	10	<2.00	<3.0	<3.0	10	<2.00	<3.0	<3.0
Total BTEX	NA	<8.00	<6.0	<6.0	25	<8.00	<6.0	<6.0	25	<8.00	<6.0	<6.0
MTBE	NA	<2.00	<1.0	<1.0	5	<2.00	<1.0	<1.0	5	<2.00	<1.0	<1.0
Naphthalene	NA	<5.00	<1.0	<1.0	5	<5.00	<1.0	<1.0	5	<5.00	<1.0	<1.0
EDB	NA	<0.02	<0.02	<0.02	0.02	**0.03**	<0.02	<0.02	0.12	0.06	<0.02	<0.02
Lead	NA	35.0	10	18	15	<3.0	**34**	**44**	15	**26.0**	13	<5

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19				MW-20				TW-1			
Sampling Date	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	<2.00	<1.0	<1.0	NA	<2.00	<1.0	<1.0	NA	3740	3020	3380
Toluene	5	<2.00	<1.0	<1.0	NA	<2.00	<1.0	<1.0	NA	3920	1100	1510
Ethylbenzene	5	<2.00	<1.0	<1.0	NA	<2.00	<1.0	<1.0	NA	1720	1640	1860
Xylenes	10	<2.00	<3.0	<3.0	NA	<2.00	<3.0	<3.0	NA	9180	8470	9370
Total BTEX	25	<8.00	<6.0	<6.0	NA	<8.00	<6.0	<6.0	NA	18560	14230	16120
MTBE	5	<2.00	<1.0	<1.0	NA	<2.00	<1.0	<1.0	NA	<100	<25	<25
Naphthalene	5	<5.00	<1.0	<1.0	NA	<5.00	<1.0	<1.0	NA	352	354	278
EDB	0.02	<0.02	<0.02	<0.02	NA	<0.02	<0.02	<0.02	NA	1.48	1.9	1.5
Lead	15	**47.0**	**34**	6	NA	11.0	14	11	NA	<3.0	21	30

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	TW-2				TW-3				Hill			
Sampling Date	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	**5940**	**7860**	**6620**	5	<2.00	<1.0	<1.0	2	<2.00	<1.0	<1.0
Toluene	5	**5500**	**8050**	**6860**	5	<2.00	<1.0	<1.0	2	<2.00	<1.0	<1.0
Ethylbenzene	5	**330**	**520**	**620**	5	<2.00	<1.0	<1.0	2	<2.00	<1.0	<1.0
Xylenes	180	**2740**	**3810**	**4110**	10	<2.00	<3.0	<3.0	2	<2.00	<3.0	<3.0
Total BTEX	195	14510	20240	18210	25	<8.00	<6.0	<6.0	8	<8.00	<6.0	<6.0
MTBE	5	**<100**	**77.5**	**50.2**	5	<2.00	<1.0	<1.0	5	<2.00	<1.0	<1.0
Naphthalene	18	**142**	**168**	**160**	5	<5.00	<1.0	**8.9**	5	<5.00	<1.0	4.8
EDB	0.05	**7.10**	**6.8**	**5.2**	0.23	0.15	0.14	0.13	5	<0.02	<0.02	<0.02
Lead	2	<3.0	**5**	**6**	2	<3.0	<5	<5	5	<3.0	<5	**9**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	Smith				Strife				Swift (previously Vickery)			
Sampling Date	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)	SSTL (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	01/2003 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	<2.00	<1.0	<1.0	2	<2.00	<1.0	<1.0	5	<2.00	**11.9**	<1.0
Toluene	5	<2.00	<1.0	<1.0	2	<2.00	<1.0	<1.0	2	2.00	**11.7**	<1.0
Ethylbenzene	5	<2.00	<1.0	<1.0	2	<2.00	<1.0	<1.0	2	<2.00	<1.0	<1.0
Xylenes	15	<2.00	<3.0	<3.0	2	<2.00	<3.0	<3.0	26	<2.00	7.8	<3.0
Total BTEX	30	<8.00	<6.0	<6.0	8	<8.00	<6.0	<6.0	35	<8.00	<32.4	<6.0
MTBE	5	<2.00	<1.0	<1.0	2	<2.00	<1.0	<1.0	2	<2.00	<1.0	<1.0
Naphthalene	5	<5.00	<1.0	<1.0	5	<5.00	<1.0	<1.0	5	<5.00	1.7	<1.0
EDB	5	0.15	<0.02	<0.02	5	0.15	<0.02	<0.02	5	0.15	<0.02	<0.02
Lead	5	<3.0	**14**	5	5	<3.0	<5	**28**	5	<3.0	<5	**10**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

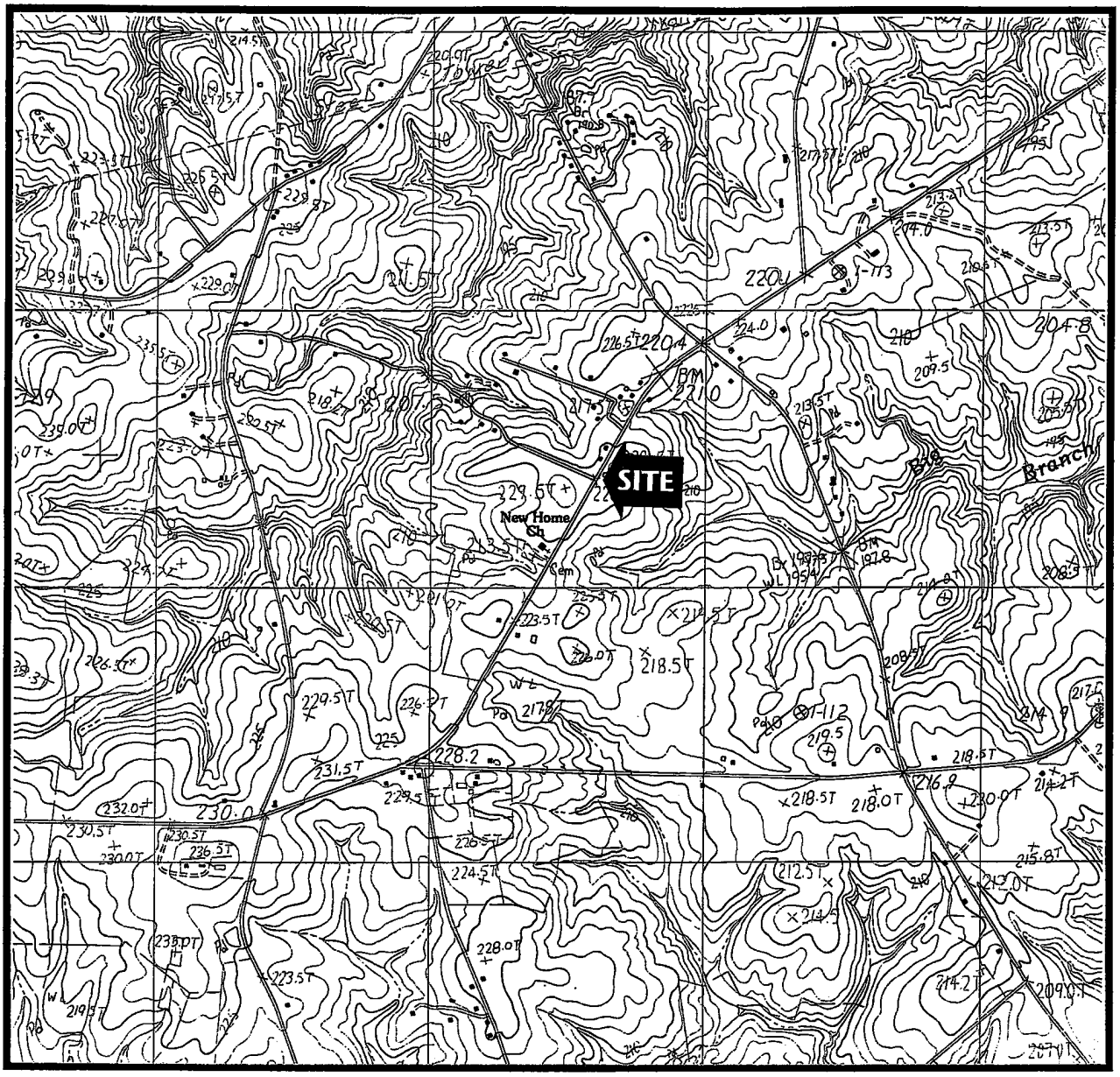
TABLE V
System Effectiveness Analysis
Smith's Grocery / York, South Carolina

Monitor Well Number	Date of Sample	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	Naphthalene (µg/l)	MTBE (µg/l)	Lead (µg/l)	EDB (µg/l)	Total CoC (µg/l)
MW-1	01/06/03	**911**	**9,810**	**2,660**	**18,650**	**743**	**250**	**56**	0.10	33,080.1
MW-2	01/06/03	**18,400**	**31,100**	**3,180**	**18,920**	**514**	**395**	28	**67**	72,604
MW-6	01/06/03	**4,840**	**20,400**	**3,540**	**19,020**	**640**	25	11	**7.0**	48,483
MW-7	01/06/03	**1,020**	1	**2,290**	**16,940**	**826**	1	5	**1.7**	21,084.7
MW-8	01/06/03	**6,770**	**84,600**	**3,560**	**24,740**	**362**	7.3	**24**	**1.9**	120,065.2
MW-10	01/07/03	**7,980**	**24,900**	**3,540**	18,180	**299**	25	**35**	**78**	55,037
MW-11	01/06/03	1	1	1	3	**7.8**	1	**6**	0.02	20.82
MW-12	01/07/03	**720**	**17.2**	13.4	**1,550**	**113**	1	6	**12**	2,432.6
MW-13	01/07/03	1	1	1	3	1.3	1	5	0.02	13.32
MW-14	01/07/03	1	1	1	3	1	1	5	0.02	13.02
MW-15	01/06/03	1	1	1	3	1	1	9	0.02	17.02
MW-17	01/06/03	1	1	1	3	1	1	44	0.02	52.02
MW-18	01/07/03	1	1	1	3	1	1	5	0.02	13.02
MW-19	01/07/03	1	1	1	3	1	1	6	0.02	14.02
TW-2	01/06/03	**6,620**	**6,860**	**620**	**4,110**	**160**	**50.2**	**6**	**5.2**	18,431.4
TW-3	01/07/03	1	1	1	3	8.9	1	5	0.13	21.03
Sample Concentration	NA	47,269	177,696.2	19,411.4	122,134	3,680	762.5	256	173.17	371,382.27
Baseline Concentration	NA	47,644	158,164	19,824	84,035	4,820	1,694	1,716	322.43	318,219.43
Total SSTL Concentration	NA	120	10,975	7,772	80,343	391	490	199	53.33	100,343.33
Sample Concentration above SSTL on 01/2003	NA	47,149	166,721.2	11,639.4	41,791	3,289	272.5	57	119.84	271,038.94

Bold concentrations represent those greater than the respective SSTL.

(Baseline Conc. Above SSTL – Sample Conc. Above SSTL on 01/03) (100) = (217876.1-271038.94) (100) = 0.00% complete
Baseline Conc. Above SSTL 217876.1

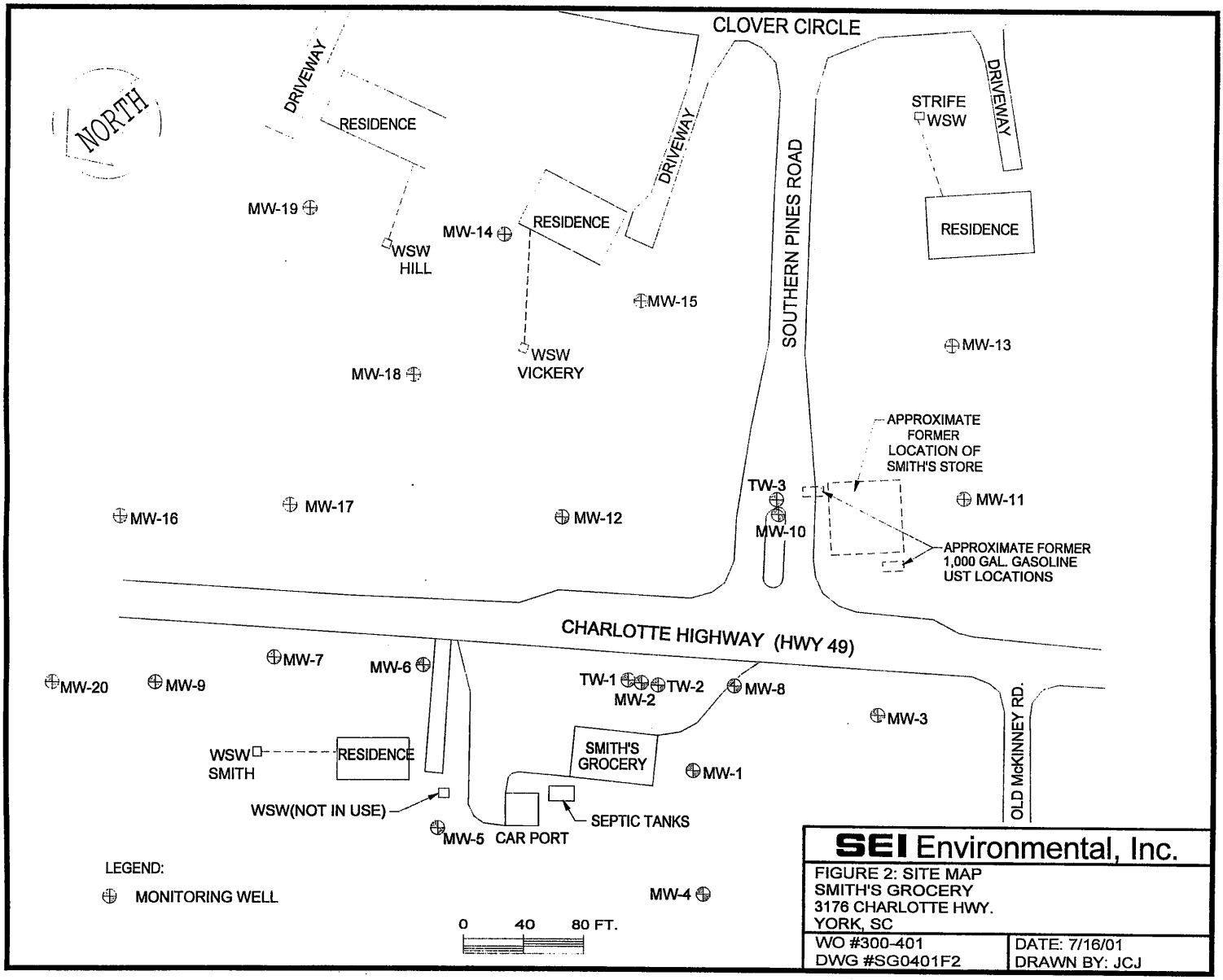
7.5 MINUTE SERIES(TOPOGRAPHIC) CLOVER QUADRANGLE



SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

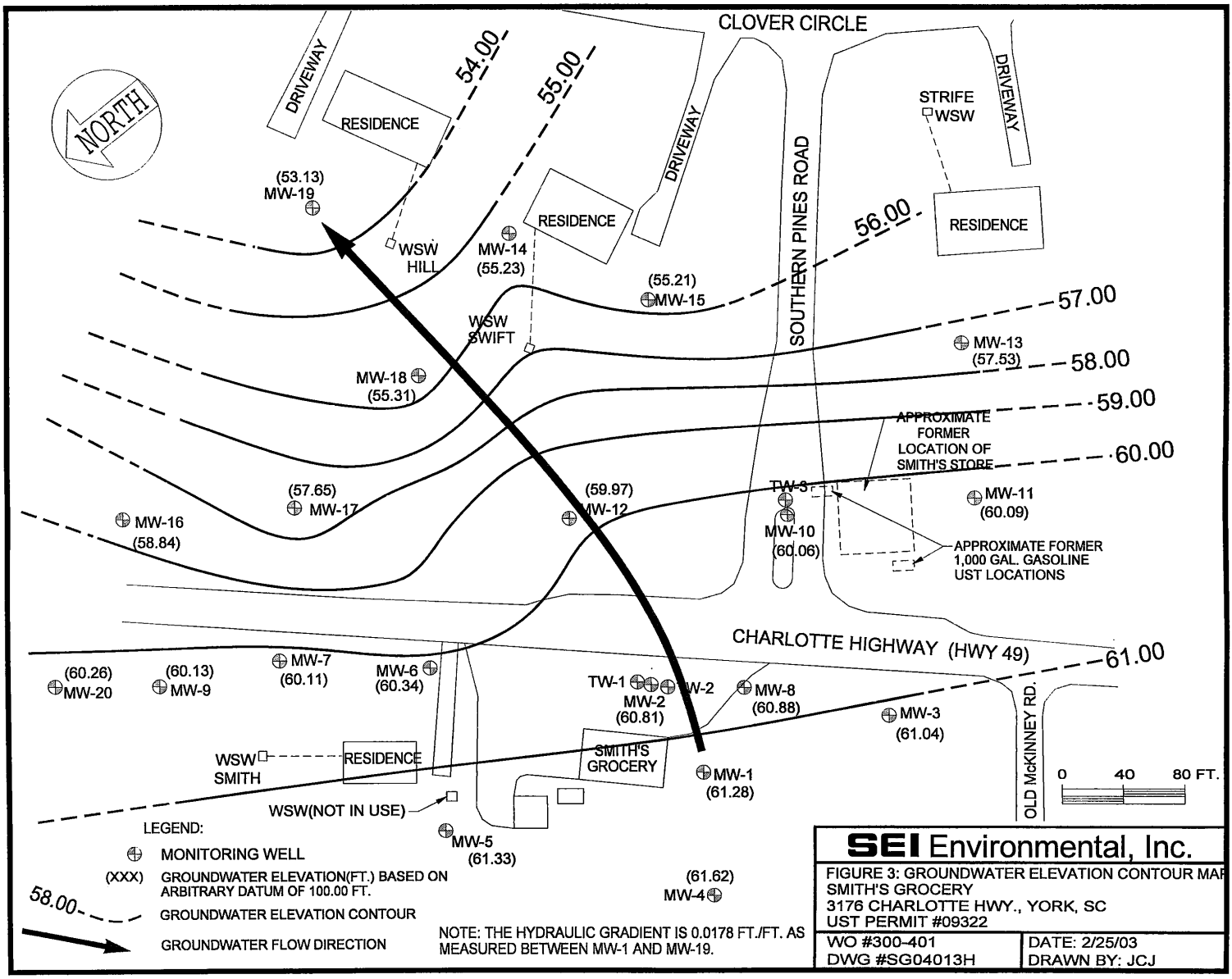
WO #300-401	DATE: 12/7/01
DWG #	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

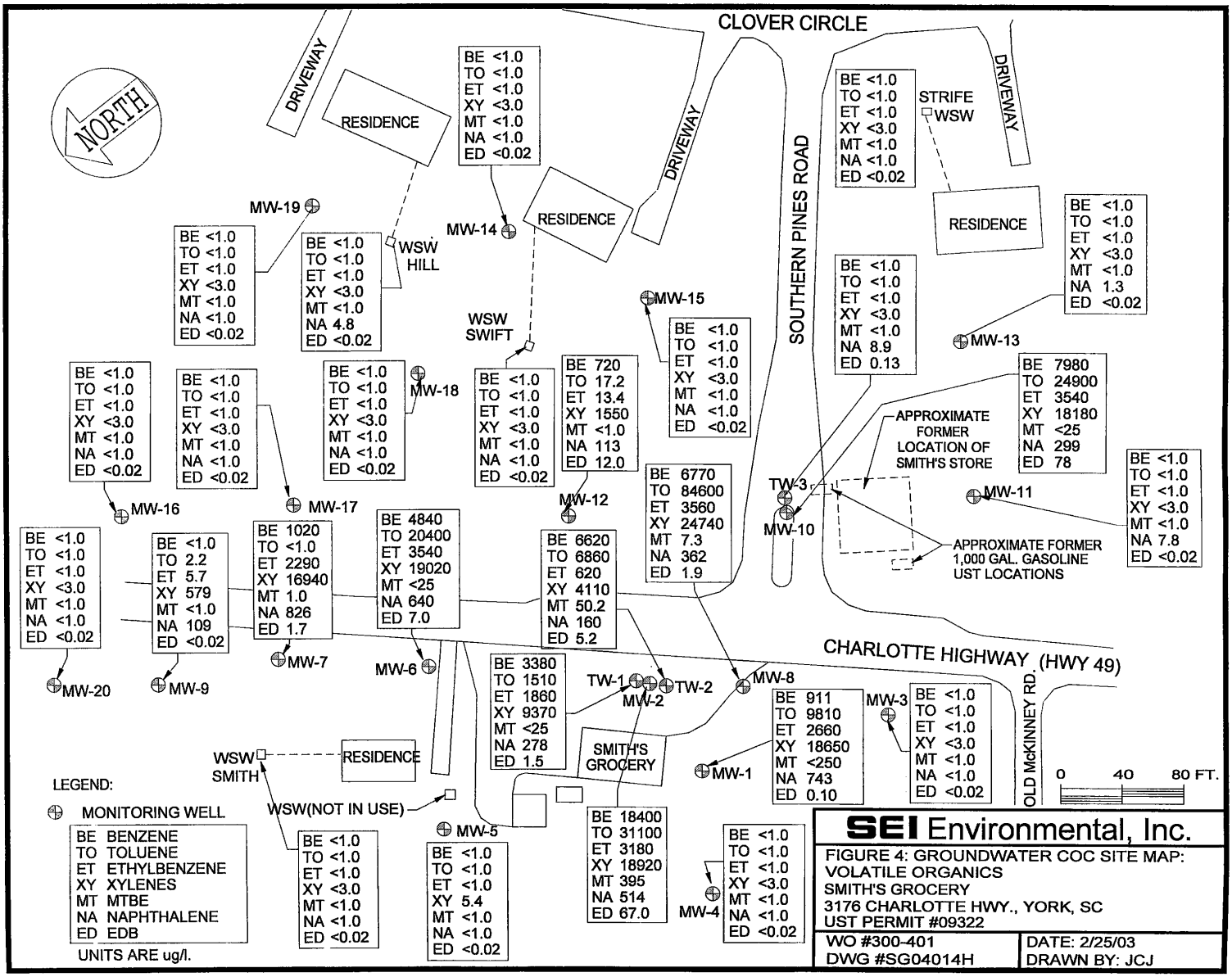
WO #300-401	DATE: 7/16/01
DWG #SG0401F2	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: GROUNDWATER ELEVATION CONTOUR MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

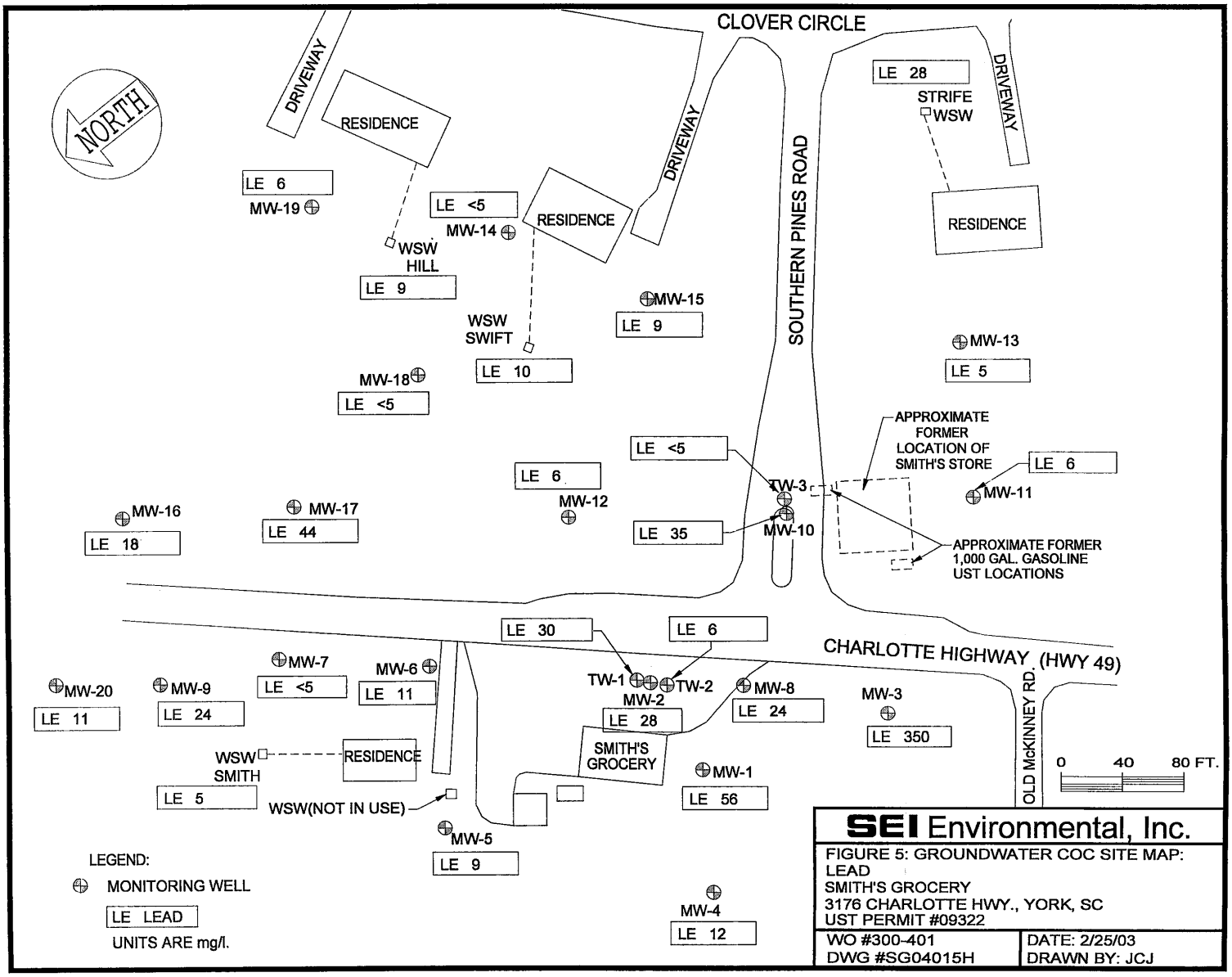
WO #300-401	DATE: 2/25/03
DWG #SG04013H	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP:
VOLATILE ORGANICS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 2/25/03
DWG #SG04014H	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 5: GROUNDWATER COC SITE MAP: LEAD
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 2/25/03
DWG #SG04015H	DRAWN BY: JCJ

APPENDIX A

Groundwater Sampling Field Measurements

G & K
TANK SERVICES, INC.

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 1 Drum
Smith's Grocery
York, SC

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to cerify the above ~~soil~~ water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. Gilley

Date 01/08/03

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT

Phone (803) 896-6240 Fax (803) 896-6245

MAR 1 2 2003

MS LOIS B SMITH
3176 CHARLESTON HWY
YORK SC 29745-9802

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit #09322
Release Reported June 30, 1993
Corrective Action Evaluation Report Received March 6, 2003
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced report submitted by SEI Environmental.

The next Quarterly Monitoring Report is due within forty-five (45) days after the April 2003 quarterly sampling event. On all correspondence regarding this site, please reference **UST Permit #09322**. If you have any questions regarding this correspondence, feel free to call me at (803) 896-6647 or (800) 826-5435 (within South Carolina only).

Sincerely,

K. Akhvlediani

Konstantine Akhvlediani, Hydrogeologist
Owner/Operator Support Section
Assessment and Corrective Action Division

cc: SEI Environmental, Inc., 3021 McNaughton Dr., Suite 9, Columbia, SC 29223
Technical File

DHEC/UST/OO/KTA/031103

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT

Phone (803) 896-6240 Fax (803) 896-6245

FEB 1 2 2003

MR ROBERT BOLTON
SEI ENVIRONMENTAL INC
3021 MCNAUGHTON DR STE 9
COLUMBIA SC 29223-1854

Re: Smith's Grocery, 3176 Charlotte Hwy, York, South Carolina
UST Permit #09322
Correspondence Received January 21, 2003
York County

Dear Mr. Bolton:

The Bureau of Land and Waste Management of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced correspondence and previous Corrective Action Performance Evaluation Reports.

In the correspondence you requested removing monitoring wells MW-3, MW-4, MW-5, MW-9, MW-16, MW-20, and TW-1 from quarterly sampling requirements for future sampling events. Complete exemption from sampling these monitoring wells cannot be granted at this time. However, since the data has shown plume stability or below detection limit concentrations in past sampling events, these monitoring wells can now be sampled on an annual schedule. Please continue to gauge all wells and sample monitoring wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, MW-18, MW-19, TW-2, and TW-3, and potable water wells identified as Smith, Hill, Swift, and Strife on a quarterly basis and sample monitoring wells MW-3, MW-4, MW-5, MW-9, MW-16, MW-20, and TW-1 in the first quarter annually.

On all correspondence regarding this site, please reference UST Permit #09322. If you have any questions concerning this correspondence, please contact Paula Anderson at 803-896-6633 or 800-826-5435 (within SC only).

Sincerely,

Paula Anderson

Paula Anderson, Hydrogeologist
Owner/Operator Support Section
Assessment & Corrective Action Division

cc: Ms. Lois Smith, 3176 Charlotte Hwy, York SC 29745-9802
Read and Technical File

UST Facility Name: Smith's Grocery 09322 **County: York**
UST Facility Address: Hwy 49, York, SC
UST Owner: Ms. Lois B. Smith

Description: Impacted Wells

The UST release from the referenced facility has impacted a total of four potable wells. These wells belong to the Hill, Smith, and Strife residences, and the former Vickery residence. Granular Activated Carbon (GAC) filter units have been installed on these individual wells so they are usable. No alternate public water source is readily available.

The tank owner's contractor is performing active corrective action in the affected area. A Corrective Action System Evaluation Report was received April 19, 2002.

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
JAN 21 2003
Underground Storage
Tank Program

January 20, 2003

Ms. Paula Anderson, Hydrogeologist
SCDHEC – UST Program
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Re: Quarterly Groundwater Sampling
Smith's Grocery
York County
UST Permit #09322

Dear Ms. Anderson:

SEI Environmental, Inc. (SEI) is currently conducting corrective action activities at Smith's Grocery. SEI respectfully requests that only the monitor wells used in the SSTL calculations be sampled quarterly. Specifically, these are MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, MW-18, MW-19, TW-2, TW-3, and the four potable water wells identified as Smith, Hill, Swift, and Strife. Currently, SEI samples all monitor wells associated with the subject property during the quarterly sampling events. This site was last sampled January 7, 2003.

Thank you for your assistance in this matter. Please contact me at 788-2535 should you have any questions or require more information.

Sincerely,
SEI Environmental, Inc.

Robert G. Bolton, Jr.
Project Manager

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
JAN 13 2003
UNDERGROUND STORAGE
TANK PROGRAM

January 10, 2003

Mr. Todd Adams
SCDHEC – Bureau of Water
2600 Bull Street
Columbia, South Carolina 29201

Re: Smith's Grocery
York, South Carolina
York County
UST Permit #09322
UIC Permit #563

Dear Mr. Adams:

SEI Environmental, Inc. (SEI) respectfully requests that the above referenced UIC Permit be amended to allow for the introduction of a mixture of urea nitrogen, which is 46 percent nitrogen, with water into the existing 18 injection wells. Specifically, approximately 0.5 pounds of urea nitrogen will be mixed with 55-gallons of water and injected into the injection wells. This mixture should provide nutrients to the existing microbes, which SEI has been injecting quarterly over the past year. As urea nitrogen (NH_2CONH_2) does not contain nitrates, there should not be a concern regarding this type of fertilizer for injection.

Thank you for your assistance in this matter. Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,
SEI Environmental, Inc.

Bob Bolton
Branch Manager

cc: Ms. Paula Anderson, SCDHEC

SEI Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

JAN 1 1 2002

Tank Program

January 9, 2002

Ms. Paula Anderson – Hydrogeologist
SCDHEC – UST Program
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Re: GAC Filter Installation
Smith's Grocery
York County
UST Permit #09322

Dear Ms. Anderson:

Enclosed is a copy of the SCDHEC invoice and supporting documentation for the GAC filter that SEI Environmental, Inc. contracted to have installed on the Strife potable water well. The original invoice has been forwarded to Ms. Pat Holland. Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,
SEI Environmental, Inc.

Bob Bolton
Project Manager

Enclosure

cc: Ms. Lois B. Smith, Smith's Grocery

ASSESSMENT COMPONENT INVOICE

SOUTH CAROLINA

Department of Health and Environmental Control (DHEC)

Division of Underground Storage Tank Management

ASSESSMENT COMPONENT INVOICE

*****See back of form for instructions.*****

FACILITY ID # 09322 COUNTY York

FACILITY NAME Smith's Grocery

STREET ADDRESS 3176 Charlotte Highway, York, South Carolina

INVOICE # 43388 **Cost Proposal #** 15367

For work performed during (specify time period) December 2001 to January 2002

I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, and any other information I may be aware of, I believe that the submitted information is true, accurate, and complete. I further agree, in accordance with any DHEC demand letter, to promptly repay any overpayment received.

**Please fill out both the Contractor and Owner/Operator Sections (original signatures). Also, indicate the Payee by placing a check in the box next to the Contractor or Owner/Operator. **

[X] **CONTRACTOR**

Fred Lyke	56-1903158	
Name (Type or Print)	Federal Tax ID or Social Security Number, if Payee	
SEI Environmental, Inc.		803-788-2535
Company		Phone Number
3021 McNaughton Drive, Suite 9	Columbia SC	29223
Address	City State	Zip Code
Fred Lyke	Branch Manager	
Signature (please use non-black ink), if Payee	Title	Date Signed

[ ] **OWNER OR OPERATOR**

Ms. Lois B. Smith		
Name (Type or Print)	Federal Tax ID or Social Security Number, if Payee	
Smith's Grocery		
Company		Phone Number
3175 Charlotte Highway	York SC	29745
Address	City State	Zip Code
Lois B. Smith		29745
Signature (please use non-black ink)	Title	Date Signed
		1-7-02

If payment is to be sent to an address other than above, please indicate below:

Name of Individual or Company (please print) — Federal Tax ID or Social Security Number

Address (please print) — City — State — Zip Code

		SCDHEC USE ONLY
Invoice Amount:	$2,494.35	$
Less Submitted/Paid Well Drilling Costs:	- $ 0.00	+ $
Total Amount Requested:	$2,494.35	= $

Amount Requested is for Assessment activities as Defined in the SCDHEC Letter

D H E C

PROMOTE PROTECT PROSPER

South Carolina Department of Health and Environmental Control

ASSESSMENT COMPONENT COST AGREEMENT
SOUTH CAROLINA
Department of Health and Environmental Control
Underground Storage Tank Program
State Underground Petroleum Environmental Response Bank Account

Facility Name Smith's Grocery

UST Permit # 09322 Cost Agreement # 15367

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1.Plan*				
A. Plan Preparation		x	$100.00	$
B. Tax Maps		x	$50.00	$
2.Receptor Survey *		x	$500.00	$
3. Comprehensive Survey		x	$1,000.00	$
4. Mob/Demob (List Component #)				
A. Equipment		x	$500.00	$
B. Personnel		x	$250.00	$
5. Soil Borings (hand auger)*		feet x	$14.00	$
6. Soil Borings (drilled)	(includes collection and quantification)			
and Field Screening*		feet x	$17.00	$
7. Soil Leachability Model		x	$200.00	$
8. Abandonment*		feet x	$4.00	$
9. Well Installation*	(includes drilling costs)			
A. Water Table (hand auger)		feet x	$20.00	$
B. Water Table (drilled)		feet x	$38.00	$
C. Telescoping		feet x	$58.00	$
D. Rock Drilling		feet x	$58.00	$
10. Sample Collection*				
A.Ground-water		samples x	$55.00	$
B. Air/Vapor		samples x	$90.00	$
11. Analyses-Groundwater	(See Analytical Methodology for analyses)			
A. BTEX+Napth.+MTBE		samples x	$100.00	$
B. Rush BTEX analysis		samples x	$120.00	$
C. BTEX+napth.+MTBE Trimethylbenzene		samples x	$135.00	$
D. PAH's		samples x	$120.00	$
E. Lead		samples x	$20.00	$
F. EDB		samples x	$55.00	$
G. 8 RCRA Metals		samples x	$140.00	$
H.TPH (9070)		samples x	$55.00	$
I. pH		samples x	$10.00	$
J. BOD		samples x	$40.00	$
K. Nitrate		samples x	$20.00	$
L. Sulfate		samples x	$20.00	$
M. Ferrous Iron		samples x	$20.00	$
N. Methane		samples x	$110.00	$
O. Organic Lead		samples x	$100.00	$
P. 8 Oxygenates		samples x	$85.00	$

Continue on back of page

11. Analyses-Soil				
Q. BTEX + Napth.		samples x	$100.00	$
R. PAH's		samples x	$120.00	$
S. 8 RCRA Metals		samples x	$150.00	$
T. TPH (9071)		samples x	$60.00	$
U. TPH (3550)		samples x	$65.00	$
V. TPH (5035)		samples x	$65.00	$
W. Grain size/hydrometer		samples x	$75.00	$
X. Total Organic Carbon		samples x	$35.00	$
12. Aquifer Characterization*				
A. Pumping Test		hours x	$120.00	$
B. Slug Test		tests x	$150.00	$
13. Free Product Recovery Rate Test*		tests x	$120.00	$
14. Fate/Transport Modeling				
A. Mathematical Model		models x	$300.00	$
B. Computer Model		models x	$500.00	
15. Risk Evaluation				
A. Tier 1		x	$300.00	$
B. Tier II		x	$500.00	$
16. Subsequent Survey*		x	$260.00	$
17. Disposal				
A. Wastewater				
1. Purging/Sampling		drums x	$90.00	$
2. Pumping Test		gallons x	$0.60	$
B. Free Product		drums x	$110.00	$
C. Soil (Treatment/Disposal)		tons x	$50.00	$
18. Miscellaneous *				
GAC unit	1	x	1744.00	$ 1744.00
GAC housing	1	x	350.00	$ 350.00
GAC mobilization	1	x	75.00	$ 75.00
19. Report/Project Management and Coordination	0.15	x	2169.00	$ 325.35
20. **TOTAL**				$ 2494.35

*The appropriate mobilization cost can be added to complete these tasks, as necessary

Palmetto Environmental Group, Inc.

P. O. Box 427
Elgin, SC 29045

Invoice

DATE	INVOICE #
12/27/2001	392

BILL TO
SEI Environmental Inc. 3021 McNaughton Dr. Ste. 9 Columbia, SC 29223

RECEIVED JAN 0 2 2002

P.O. NO.	TERMS	PROJECT
	Net 30	Robert Strite Well

ITEM	DESCRIPTION	QTY	RATE	AMOUNT
New GAC Unit	Furnish & install new GAC unit	1	1,744.00	1,744.00
Housing	Provide and install GAC housing	1	350.00	350.00
Mobilization	SCDHEC GAC contract mobilization	1	75.00	75.00

Thank you for your business.

Total $2,169.00

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT

Phone (800) 826-5435 Fax (803) 898-4330

JAN 09 2002

Mr. Jeffery Vickery
3043 Clover Circle
York, SC 29745

Re: Smith's Grocery, SC Hwy 49, York, SC
UST Permit # 09322
Adjacent property belonging to Mr. Jeffery Vickery
Phone conversation on December 21, 2001
York County

Dear Mr. Vickery:

In response to your request for information about environmental conditions and liability associated with the referenced facility and adjacent property, the following is provided.

Our records indicate that two Underground Storage Tanks (USTs) were registered with the Department by Ms. Lois Smith. The registered USTs were removed on March 27, 1996. An assessment report received on June 30, 1993 documented a release of petroleum products in the vicinity of the UST. Our records indicate that Ms. Lois Smith complied with the regulatory requirements and stopped the leak from the tanks. Additionally, she is currently pursuing the extent and severity of contamination under our direction. Active corrective action is in progress at the site.

This release of petroleum products from the USTs is qualified to receive funding under the conditions of the State Underground Petroleum Environmental Response Bank (SUPERB) Act. This means that reasonable costs up to $1,000,000 can be paid by the SUPERB account for site rehabilitation actions associated with this release. Should cleanup costs exceed $1,000,000, Ms. Lois Smith, under state and federal law, retains responsibility for any additional actions and associated costs.

Should the potential exist for petroleum contamination to migrate onto an adjacent property, the UST owner/operator and the Department may require access during reasonable hours to perform necessary rehabilitation activities. In such cases, all rehabilitation activities remain the responsibility of the Ms. Lois Smith. You should be aware that there are currently no laws or regulations that prohibit the use or development of adjacent properties and properties where a petroleum release has occurred.

If you have any questions, please do not hesitate to call Paula Anderson at (803) 898-4318 or (800) 826-5435 (within SC only).

Sincerely,

Paula Anderson

Paula Anderson, Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division

cc: Ms. Lois Smith, 3176 Charlotte Hwy, York, SC 29745-9802
Mr. Bryan Killian, 790 Stowe Road, Clover, SC 29710
SEI Environmental, Mr. Robert Bolton, 3021 McNaughton Drive Suite 9, Columbia, SC 29223
Read/Technical Files

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
DEC 10 2002
Underground Storage
Tank Program

December 9, 2002

Ms. Paula Anderson, Hydrogeologist
SCDHEC – UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Re: Quarterly Groundwater Sampling Report
Smith's Grocery
3176 Charlotte Highway
York, South Carolina
UST Permit #09322

Dear Ms. Anderson:

Attached is the Corrective Action Quarterly Groundwater Sampling Report for Smith's Grocery. Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,
SEI Environmental, Inc.

Robert G. Bolton, Jr.
Project Manager

Attachment

cc: Ms. Lois B. Smith, Smith's Grocery

SEI Environmental, Inc.

CORRECTIVE ACTION
QUARTERLY SAMPLING REPORT

Smith's Grocery
3176 Charlotte Highway
York, South Carolina
York County
UST Permit #09322

RECEIVED
DEC 10 2002
Underground Storage Tank Program

PREPARED FOR:

Ms. Paula Anderson
SCDHEC – UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

PREPARED BY:

SEI Environmental, Inc.
3021 McNaughton Drive, Suite 9
Columbia, South Carolina 29223
(803) 788-2535

Robert G. Bolton, Jr.
Project Manager

12/9/02
Randy R. Casey, P.E. #21054

December 9, 2002

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 METHODOLOGY 1

3.0 LABORATORY ANALYTICAL RESULTS 2

4.0 REMEDIATION EFFECTIVENESS 3

5.0 CONCLUSIONS 4

6.0 REPORT LIMITATIONS 5

LIST OF TABLES

TABLE I	Groundwater Elevation Data
TABLE II	Historical Groundwater Elevation Data
TABLE III	Groundwater Analytical Results
TABLE IV	Historical Groundwater Analytical Results
TABLE V	System Effectiveness Analysis

LIST OF FIGURES

FIGURE 1	Site Location Map
FIGURE 2	Site Map
FIGURE 3	Groundwater Elevation Contour Map
FIGURES 4-5	CoC Concentrations Maps

LIST OF APPENDICES

APPENDIX A	Groundwater Sampling Field Measurements
APPENDIX B	Laboratory Analytical Results and Chain-of-Custody
APPENDIX C	Disposal Manifest

1.0 INTRODUCTION

South Carolina Department of Health and Environmental Control (SCDHEC) contracted SEI Environmental, Inc. (SEI) to conduct corrective action and quarterly groundwater sampling activities at the Smith's Grocery facility (UST Permit #09322) located at 3176 Charlotte Highway in York, South Carolina. The approximate location of the project site is shown on the United States Geological Survey (USGS), 7.5-Minute Series Topographic Map provided as Figure 1. The corrective action and sampling activities were approved by SCDHEC in correspondence dated March 26, 2001.

2.0 METHODOLOGY

2.1 Site Hydrogeology

During the October 24, 2002, gauging event, liquid phase hydrocarbons (LPH) were not detected in any monitor wells. Groundwater flow direction is toward the east with a hydraulic gradient of 0.0178 feet per foot, as measured between Monitor Wells MW-1 and MW-19. Groundwater measurements are summarized in Table I, and a groundwater elevation contour map is depicted in Figure 3.

2.2 Groundwater Sampling and Analysis

On October 23-24, 2002, SEI personnel obtained groundwater samples from Monitor Wells MW-1, MW-2, MW-3, MW-6 through MW-20 and TW-1 through TW-3. Monitor Wells MW-4 and MW-5 were not sampled as these wells were dry. In addition, four drinking water wells (identified as Hill, Smith, Strife, and Swift) were also sampled on these dates. The drinking water well previously identified as Vickery has been renamed Swift since this is the name of the new owners. A new, disposable, polyethylene bailer was used for the collection of the water samples from the monitor wells. Each groundwater sample was obtained after pH values and

temperature had equilibrated unless petroleum odor was emanating from the well. If petroleum odors were observed in the monitor well, the groundwater sample was obtained after three well volumes were purged. All purge water was drummed for proper disposal at a permitted treatment facility. Field measurements are presented in Appendix A. New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The groundwater samples were placed in laboratory supplied containers, placed on ice, and delivered to Access Analytical, Inc. in Irmo, South Carolina for proper analysis. Proper preservation methods and chain-of-custody procedures were followed throughout the sampling process. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene by EPA method 8260B; ethylene dibromide (EDB) by EPA method 8011; and lead by EPA method 6010B.

3.0 LABORATORY ANALYTICAL RESULTS

Groundwater analytical results for the samples collected October 23-24, 2002, detected the presence of benzene concentrations at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-9, MW-10, MW-12, TW-1, TW-2, and the Swift water well. Toluene concentrations were detected at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, TW-1, TW-2, and the Swift water well. Ethylbenzene concentrations were detected at Monitor Wells MW-1, MW-2, MW-6 through MW-12, TW-1, and TW-2. Xylenes concentrations were detected at Monitor Wells MW-1, MW-2, MW-6 through MW-10, MW-12, TW-1, TW-2, and the Swift water well. MTBE concentrations were detected at Monitor Wells MW-1, MW-2, MW-8, and TW-2. Naphthalene concentrations were detected at Monitor Wells MW-1, MW-2, MW-6 through MW-13, TW-1, TW-2, and the Swift water well. EDB concentrations were detected at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, TW-1, TW-2, and TW-3. Lead concentrations were detected at Monitor Wells MW-1, MW-2, MW-3, MW-6 through MW-10, MW-12, MW-15 through MW-20, TW-1, TW-2, and the Smith water well.

At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2, benzene, toluene, ethylbenzene, naphthalene, and EDB concentrations were detected greater than their respective site specific threshold levels (SSTL) computed specifically for these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-12, and TW-2, xylenes concentrations were detected greater than its SSTL computed specifically for these wells. At Monitor Wells MW-1, MW-2, and TW-2, MTBE concentrations were detected greater than its SSTLs computed specifically for these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-12, MW-17, MW-19, and TW-2, lead concentrations were detected greater than its SSTL calculated for each of these wells. Groundwater analytical results are presented in Table III. Historical groundwater analytical results which compare current and past results with the SSTLs are presented in Table IV. Groundwater concentrations are depicted in Figures 4 and 5. Laboratory analyses and chain-of-custody are presented in Appendix B.

4.0 REMEDIATION EFFECTIVENESS

Chemicals of concern (CoC) concentration reduction is evaluated by verifying if the CoC concentrations reduction goals have been achieved in Monitor Wells MW-1 through MW-20, TW-1 through TW-3, and four drinking water wells named Hill, Smith, Strife, and Swift (previously named Vickery). Furthermore, chemical test data from Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, MW-18, MW-19, TW-2, and TW-3 are used to evaluate the effectiveness of the bioremediation.

The evaluation of the remediation effectiveness consists in comparing the October 2002, CoC concentrations against the baseline concentrations and determining the percent of total concentration reduction. This is calculated by subtracting the current sample concentrations above SSTLs from the baseline concentrations above SSTLs and multiplying this amount by 100. This number is then divided by the baseline concentrations above SSTLs. The calculation of the total concentration reduction is presented in Table V.

According to calculations made from the October 2002, sampling event, approximately 0.00 percent of the CoC concentrations has been removed from the site.

5.0 CONCLUSIONS

- Groundwater flow at the site is in an eastern direction with a hydraulic gradient of 0.0178 feet per foot, as measured between Monitor Wells MW-1 and MW-19.
- Liquid phase hydrocarbons were not detected in any monitor wells during the current sampling activities.
- Benzene, toluene, ethylbenzene, naphthalene, and EDB concentrations were detected greater than their calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2.
- Xylenes concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-12, and TW-2
- MTBE concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, and TW-2.
- Lead concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-12, MW-17, MW-19, and TW-2.
- According to calculation made from the October 2002, sampling event, approximately 0.00 percent of the CoC concentrations has been removed from the site.
- The Vickery potable water well has been renamed Swift, as the Vickery's no longer live at this location.
- SEI personnel last injected Microbac™ microbes and nutrients in the injection wells on August 21, 2002, and November 25, 2002. SEI personnel will inject these microbes on a quarterly basis with the next scheduled event planned for February 2002.
- Due to the presence of benzene concentrations in the Swift's potable water well, the GAC filter on this well was replaced November 20, 2002.

6.0 REPORT LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the current UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

REFERENCES

SCDHEC, May 15, 2001, *Risk-Based Corrective Action for Petroleum Releases*, Columbia, South Carolina.

SEI Environmental, Inc., August 5, 2002, *Corrective Action Quarterly Groundwater Sampling Report – Smith's Grocery*, Columbia, South Carolina.

TABLE I
Groundwater Elevation Data
Smith's Grocery / York, South Carolina

Monitor Well Number	Date Measured	Top of Casing Elevation (feet)	Depth to Ground Water (feet)	Total Depth of Well (feet)	Groundwater Elevation (feet)
MW-1	10/24/02	91.16	31.22	35	59.94
MW-2	10/24/02	94.57	34.97	38	59.60
MW-3	10/24/02	91.91	32.08	35	59.83
MW-4	10/24/02	86.20	Dry	27	Not Applicable
MW-5	10/24/02	89.29	Dry	30	Not Applicable
MW-6	10/24/02	93.91	35.03	37	58.88
MW-7	10/24/02	91.68	33.67	36	58.01
MW-8	10/24/02	94.72	35.07	38	59.65
MW-9	10/24/02	90.54	32.58	36	57.96
MW-10	10/24/02	99.77	41.82	44	57.95
MW-11	10/24/02	100.46	41.60	44	58.86
MW-12	10/24/02	99.61	40.94	44	58.67
MW-13	10/24/02	100.39	44.33	47	56.06
MW-14	10/24/02	98.89	44.71	50	54.18
MW-15	10/24/02	100.18	45.87	50	54.31
MW-16	10/24/02	89.91	33.08	37	56.83
MW-17	10/24/02	94.46	39.62	40	54.84
MW-18	10/24/02	98.14	43.77	46	54.37
MW-19	10/24/02	98.27	46.61	50	51.66
MW-20	10/24/02	88.35	30.35	35	58.00
TW-1	10/24/02	94.72	34.47	61	60.25
TW-2	10/24/02	94.72	35.12	88	59.60
TW-3	10/24/02	99.21	40.00	71	49.21

Top of casing elevation is referenced to an assumed elevation.

TABLE II
Historical Groundwater Elevation Data
Smith's Grocery / York, South Carolina

Monitor Well Number	Top of Casing Elevation	Depth to Groundwater (feet)		Groundwater Elevation (feet)	
		04/01/02	07/08/02	04/01/02	07/08/02
MW-1	91.16	29.82	31.22	61.34	60.93
MW-2	94.57	33.64	34.97	60.93	60.67
MW-3	91.91	30.73	32.08	61.18	60.94
MW-4	86.20	24.37	Dry	61.83	61.10
MW-5	89.29	27.88	Dry	61.41	60.46
MW-6	93.91	33.57	35.03	60.34	59.91
MW-7	91.68	32.08	33.67	59.60	58.82
MW-8	94.72	33.93	35.07	60.79	60.76
MW-9	90.54	30.99	32.58	59.55	58.77
MW-10	99.77	40.66	41.82	59.11	60.05
MW-11	100.46	40.27	41.60	60.19	59.97
MW-12	99.61	39.62	40.94	59.99	59.67
MW-13	100.39	43.08	44.33	57.31	57.03
MW-14	98.89	44.68	44.71	54.21	54.89
MW-15	100.18	44.15	45.87	56.03	55.07
MW-16	89.91	31.54	33.08	58.37	57.54
MW-17	94.46	36.57	39.62	57.89	57.44
MW-18	98.14	42.88	43.77	55.26	55.07
MW-19	98.27	45.19	46.61	53.08	52.50
MW-20	88.35	28.69	30.35	59.66	58.81
TW-1	94.72	33.62	34.47	61.10	60.76
TW-2	94.72	33.78	35.12	60.94	60.66
TW-3	99.21	38.74	40.00	60.47	60.23

TABLE III
Groundwater Analytical Results, dated October 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1 (µg/l)	MW-2 (µg/l)	MW-3 (µg/l)	MW-4 (µg/l)	MW-5 (µg/l)	MW-6 (µg/l)	MW-7 (µg/l)	MW-8 (µg/l)	MW-9 (µg/l)
Free Product Thickness	None	None	None	NA	NA	None	None	None	None
Benzene	1620	18300	<1.0	NS	NS	5870	1200	7490	1.1
Toluene	17800	36300	<1.0	NS	NS	24100	15400	42300	7.9
Ethylbenzene	3230	2900	<1.0	NS	NS	3100	470	3310	5.9
Xylenes	20620	16430	<3.0	NS	NS	18810	29580	25990	752
Total BTEX	43270	73930	<6.0	NA	NA	51880	46650	79090	766.9
MTBE	13.9	424	<1.0	NS	NS	<25	<1.0	4.4	<1.0
Naphthalene	925	668	<1.0	NS	NS	881	1160	748	82.4
EDB	0.36	69	<0.02	NS	NS	7.4	4.2	1.7	<0.02
Lead	7	49	10	NS	NS	49	33	180	20

NA = Not Applicable; NS = Not Sampled

TABLE III (continued)
Groundwater Analytical Results, October 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10 (µg/l)	MW-11 (µg/l)	MW-12 (µg/l)	MW-13 (µg/l)	MW-14 (µg/l)	MW-15 (µg/l)	MW-16 (µg/l)	MW-17 µg/l)	MW-18 (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	8120	<1.0	665	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	26200	1.3	11.5	<1.0	<1.0	<1.0	<1.0	1.0	<1.0
Ethylbenzene	3310	1.2	19.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes	16640	<3.0	1160	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Total BTEX	54270	<6.5	1856.4	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0
MTBE	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	436	4.1	112	2.5	<1.0	<1.0	<1.0	<1.0	<1.0
EDB	80	<0.02	9.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Lead	21	<5	32	5	<5	50	10	34	13

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated October 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19 (µg/l)	MW-20 (µg/l)	TW-1 (µg/l)	TW-2 (µg/l)	TW-3 (µg/l)	Hill (µg/l)	Smith (µg/l)	Strife (µg/l)	Swift (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	<1.0	<1.0	3020	7860	<1.0	<1.0	<1.0	<1.0	11.9
Toluene	<1.0	<1.0	1100	8050	<1.0	<1.0	<1.0	<1.0	11.7
Ethylbenzene	<1.0	<1.0	1640	520	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes	<3.0	<3.0	8470	3810	<3.0	<3.0	<3.0	<3.0	7.8
Total BTEX	<6.0	<6.0	14230	20240	<6.0	<6.0	<6.0	<6.0	<32.4
MTBE	<1.0	<1.0	<25	77.5	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	354	168	<1.0	<1.0	<1.0	<1.0	1.7
EDB	<0.02	<0.02	1.9	6.8	0.14	<0.02	<0.02	<0.02	<0.02
Lead	34	14	21	5	<5	<5	14	<5	<5

NA = Not Applicable

TABLE IV
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1				MW-2				MW-3			
Sampling Date	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	11	**1180**	**1240**	**1620**	10	**16100**	**19100**	**18300**	NA	<2.0	<1.00	<1.0
Toluene	2223	**17500**	**14400**	**17800**	2021	**21100**	**33400**	**36300**	NA	<2.0	<1.00	<1.0
Ethylbenzene	1558	**3050**	**2400**	**3230**	1416	**2500**	**2520**	**2900**	NA	<2.0	<1.00	<1.0
Xylenes	10000	**18200**	**16100**	**20620**	15000	13900	14700	**16430**	NA	<2.0	<1.00	<3.0
Total BTEX	13792	39930	34140	43270	18447	53600	69720	73930	NA	<8.0	<4.00	<6.0
MTBE	80	11.5	**<100**	13.9	81	**361**	**580**	**424**	NA	<2.0	<5.00	<1.0
Naphthalene	56	**642**	**542**	**925**	51	**516**	**580**	**668**	NA	<5.0	<5.00	<1.0
EDB	0.32	**0.72**	0.30	**0.36**	10	**94.7**	**139**	**69**	NA	<0.02	<0.02	<0.02
Lead	2	**113**	**5.0**	**7**	30	**127**	**208**	**49**	NA	44.0	27.0	10

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-4				MW-5				MW-6			
Sampling Date	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)
Free Product Thickness	NA	None	None	NA	NA	None	None	NA	NA	None	None	None
Benzene	NA	<2.0	<1.00	NS	NA	<2.0	<1.00	NS	6	**4650**	**3320**	**5870**
Toluene	NA	<2.0	<1.00	NS	NA	<2.0	<1.00	NS	1212	**24000**	**16400**	**24100**
Ethylbenzene	NA	<2.0	<1.00	NS	NA	6.8	<1.00	NS	850	**3080**	**2120**	**3100**
Xylenes	NA	<2.0	<1.00	NS	NA	40.7	<1.00	NS	8000	**17000**	**12600**	**18810**
Total BTEX	NA	<8.0	<4.00	NA	NA	<51.5	<4.00	NA	10068	48730	34440	51880
MTBE	NA	<2.0	<5.00	NS	NA	<2.0	<5.00	NS	48	**<200**	**<50.0**	<25
Naphthalene	NA	<5.0	<5.00	NS	NA	6.0	<5.00	NS	31	**810**	**587**	**881**
EDB	NA	<0.02	<0.02	NS	NA	<0.02	<0.02	NS	4.83	**8.50**	**7.19**	**7.4**
Lead	NA	41.0	<3.0	NS	NA	25.0	<3.0	NS	18	**154**	11.0	**49**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable; NS = Not Sampled

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-7				MW-8				MW-9			
Sampling Date	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	6	**1070**	**849**	**1200**	12	**6360**	**6400**	**7490**	NA	2.9	<2.00	1.1
Toluene	1212	**5030**	**2230**	**15400**	2424	**41800**	**45600**	**42300**	NA	33.3	<2.00	7.9
Ethylbenzene	850	**2600**	**1350**	470	1700	**3880**	**3750**	**3310**	NA	7.8	3.20	5.9
Xylenes	12123	**17600**	9040	**29580**	16000	**24380**	**22000**	**25990**	NA	65	451	752
Total BTEX	14191	26300	13469	46650	20136	76420	77750	79090	NA	109	458.2	766.9
MTBE	48	**<200**	**<50.0**	<1.0	96	**<200**	**<250**	4.4	NA	<2.0	<2.00	<1.0
Naphthalene	31	**930**	**889**	**1160**	62	**910**	**655**	**748**	NA	114	47.0	82.4
EDB	0.66	**2.46**	**1.10**	**4.2**	0.48	**1.04**	**1.47**	**1.7**	NA	<0.02	<0.02	<0.02
Lead	18	**173**	**24.0**	**33**	4	**76.0**	**263**	**180**	NA	6.0	30.0	20

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10				MW-11				MW-12			
Sampling Date	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	9	**8550**	**19400**	**8120**	5	<2.0	<2.00	<1.0	7	**389**	**425**	**665**
Toluene	1819	**26600**	**46400**	**26200**	5	<2.0	<2.00	1.3	5	**8.6**	4.20	**11.5**
Ethylbenzene	1274	**3130**	**3280**	**3310**	5	<2.0	<2.00	1.2	68	16	11.1	19.9
Xylenes	18185	15370	17000	16640	10	<2.0	<2.00	<3.0	730	573	651	**1160**
Total BTEX	21287	53650	86080	54270	25	<8.0	<8.00	<6.5	810	986.6	1091.3	1856.4
MTBE	43	**<200**	**<100**	<25	5	<2.0	<2.00	<1.0	5	<2.0	<2.00	<1.0
Naphthalene	46	**580**	**290**	**436**	5	<5.0	<5.00	4.1	36	**53.4**	**66.2**	**112**
EDB	9	**128**	**345**	**80**	0.02	<0.02	<0.02	<0.02	7	**7.18**	**8.12**	**9.5**
Lead	21	**44.0**	**79.0**	21	5	**15.0**	**22.0**	<5	7	**65.0**	**78.0**	**32**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-13				MW-14				MW-15			
Sampling Date	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	<2.0	<2.00	<1.0	5	<2.0	<2.00	<1.0	NA	<2.0	<2.00	<1.0
Toluene	5	<2.0	<2.00	<1.0	5	<2.0	<2.00	<1.0	NA	<2.0	<2.00	<1.0
Ethylbenzene	5	<2.0	<2.00	<1.0	5	<2.0	<2.00	<1.0	NA	<2.0	<2.00	<1.0
Xylenes	10	<2.0	<2.00	<3.0	10	<2.0	<2.00	<3.0	NA	<2.0	<2.00	<3.0
Total BTEX	25	<8.0	<8.00	<6.0	25	<8.0	<8.00	<6.0	NA	<8.0	<8.00	<6.0
MTBE	5	<2.0	<2.00	<1.0	5	<2.0	<2.00	<1.0	NA	<2.0	<2.00	<1.0
Naphthalene	5	<5.0	<5.00	2.5	5	<5.0	<5.00	<1.0	NA	<5.0	<5.00	<1.0
EDB	0.02	<0.02	<0.02	<0.02	0.51	<0.02	0.02	<0.02	NA	0.07	0.09	<0.02
Lead	5	**27.0**	**50.0**	5	5	**38.0**	**22.0**	<5	NA	58.0	19.0	50

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-16				MW-17				MW-18			
Sampling Date	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	NA	<2.0	<2.00	<1.0	5	<2.0	<2.00	<1.0	5	<2.0	<2.00	<1.0
Toluene	NA	<2.0	<2.00	<1.0	5	<2.0	<2.00	1.0	5	<2.0	<2.00	<1.0
Ethylbenzene	NA	<2.0	<2.00	<1.0	5	<2.0	<2.00	<1.0	5	<2.0	<2.00	<1.0
Xylenes	NA	<2.0	<2.00	<3.0	10	<2.0	<2.00	<3.0	10	<2.0	<2.00	<3.0
Total BTEX	NA	<8.0	<8.00	<6.0	25	<8.0	<8.00	<6.0	25	<8.0	<8.00	<6.0
MTBE	NA	<2.0	<2.00	<1.0	5	<2.0	<2.00	<1.0	5	<2.0	<2.00	<1.0
Naphthalene	NA	<5.0	<5.00	<1.0	5	<5.0	<5.00	<1.0	5	<5.0	<5.00	<1.0
EDB	NA	<0.02	<0.02	<0.02	0.02	**0.06**	**0.03**	<0.02	0.12	0.08	0.06	<0.02
Lead	NA	6.0	35.0	10	15	**20.0**	<3.0	**34**	15	**28.0**	**26.0**	13

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19				MW-20				TW-1			
Sampling Date	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	<2.0	<2.00	<1.0	NA	<2.0	<2.00	<1.0	NA	4640	3740	3020
Toluene	5	<2.0	<2.00	<1.0	NA	<2.0	<2.00	<1.0	NA	7200	3920	1100
Ethylbenzene	5	<2.0	<2.00	<1.0	NA	<2.0	<2.00	<1.0	NA	2380	1720	1640
Xylenes	10	<2.0	<2.00	<3.0	NA	<2.0	<2.00	<3.0	NA	13100	9180	8470
Total BTEX	25	<8.0	<8.00	<6.0	NA	<8.0	<8.00	<6.0	NA	27320	18560	14230
MTBE	5	<2.0	<2.00	<1.0	NA	<2.0	<2.00	<1.0	NA	<100	<100	<25
Naphthalene	5	<5.0	<5.00	<1.0	NA	<5.0	<5.00	<1.0	NA	445	352	354
EDB	0.02	<0.02	<0.02	<0.02	NA	<0.02	<0.02	<0.02	NA	1.36	1.48	1.9
Lead	15	<3.0	**47.0**	**34**	NA	14.0	11.0	14	NA	<3.0	<3.0	21

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	TW-2				TW-3				Hill			
Sampling Date	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	**5650**	**5940**	**7860**	5	<2.0	<2.00	<1.0	2	<2.0	<2.00	<1.0
Toluene	5	**4210**	**5500**	**8050**	5	<2.0	<2.00	<1.0	2	<2.0	<2.00	<1.0
Ethylbenzene	5	**285**	**330**	**520**	5	<2.0	<2.00	<1.0	2	<2.0	<2.00	<1.0
Xylenes	180	**2530**	**2740**	**3810**	10	<2.0	<2.00	<3.0	2	<2.0	<2.00	<3.0
Total BTEX	195	12675	14510	20240	25	<8.0	<8.00	<6.0	8	<8.0	<8.00	<6.0
MTBE	5	**<100**	**<100**	**77.5**	5	<2.0	<2.00	<1.0	5	<2.0	<2.00	<1.0
Naphthalene	18	**270**	**142**	**168**	5	<5.0	<5.00	<1.0	5	<5.0	<5.00	<1.0
EDB	0.05	**6.02**	**7.10**	**6.8**	0.23	0.16	0.15	0.14	5	0.02	<0.02	<0.02
Lead	2	<3.0	<3.0	**5**	2	<3.0	<3.0	<5	5	<3.0	<3.0	<5

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	Smith				Strife				Swift (previously Vickery)			
Sampling Date	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)	SSTL (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	10/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	NA	None	None
Benzene	5	<2.0	<2.00	<1.0	2	<2.0	<2.00	<1.0	5	NS	<2.00	**11.9**
Toluene	5	<2.0	<2.00	<1.0	2	<2.0	<2.00	<1.0	2	NS	2.00	**11.7**
Ethylbenzene	5	<2.0	<2.00	<1.0	2	<2.0	<2.00	<1.0	2	NS	<2.00	<1.0
Xylenes	15	<2.0	<2.00	<3.0	2	<2.0	<2.00	<3.0	26	NS	<2.00	7.8
Total BTEX	30	<8.0	<8.00	<6.0	8	<8.0	<8.00	<6.0	35	NA	<8.00	<32.4
MTBE	5	<2.0	<2.00	<1.0	2	<2.0	<2.00	<1.0	2	NS	<2.00	<1.0
Naphthalene	5	<5.0	<5.00	<1.0	5	<5.0	<5.00	<1.0	5	NS	<5.00	1.7
EDB	5	<0.02	0.15	<0.02	5	<0.02	0.15	<0.02	5	NS	0.15	<0.02
Lead	5	<3.0	<3.0	**14**	5	<3.0	<3.0	<5	5	NS	<3.0	<5

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE V
System Effectiveness Analysis
Smith's Grocery / York, South Carolina

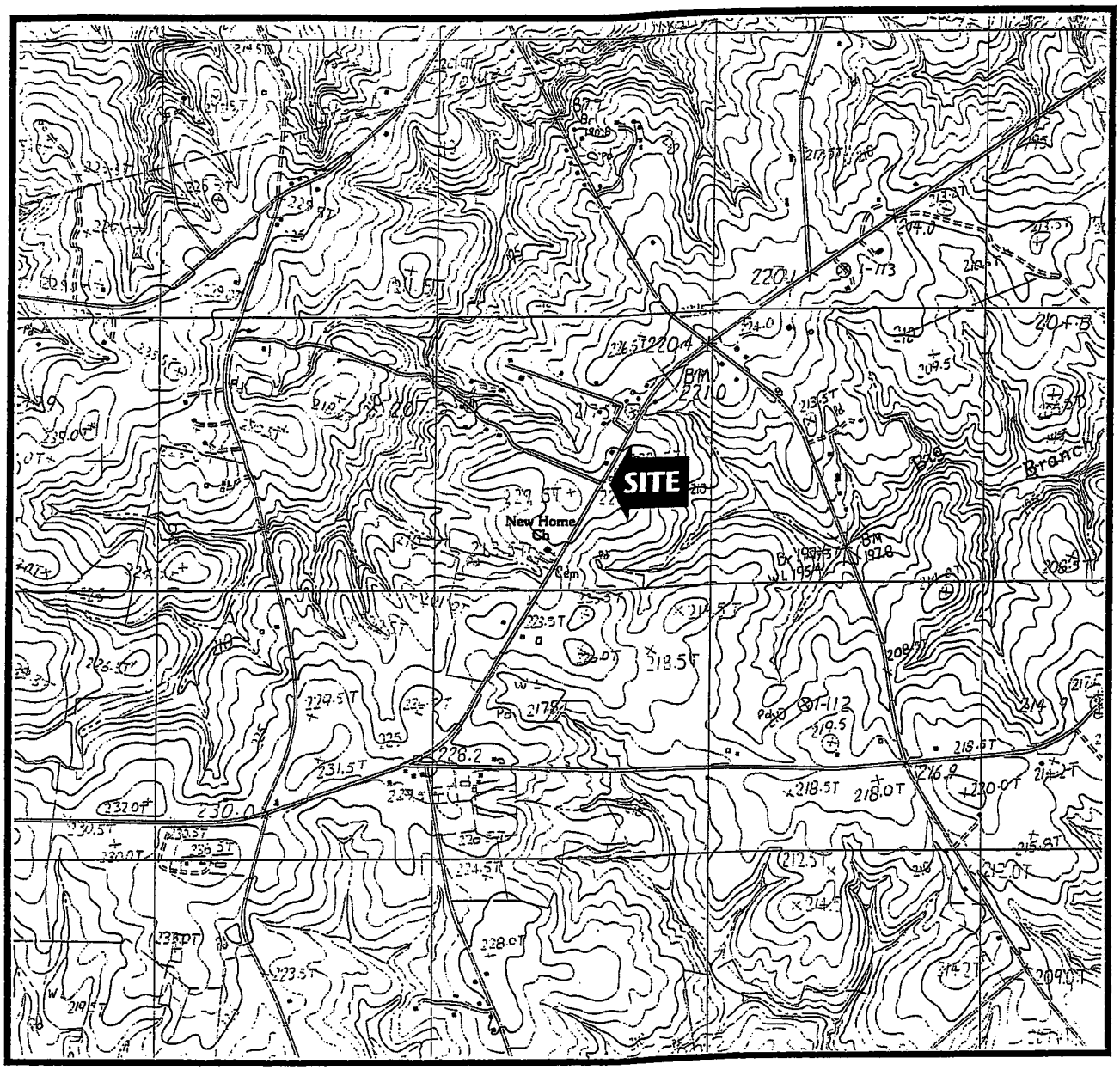
Monitor Well Number	Date of Sample	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	Naphthalene (µg/l)	MTBE (µg/l)	Lead (µg/l)	EDB (µg/l)	Total CoC (µg/l)
MW-1	10/23/02	**1,620**	**17,800**	**3,230**	**20,620**	**925**	**13.9**	**7**	**0.36**	44,216.26
MW-2	10/23/02	**18,300**	**36,300**	**2,900**	**16,430**	**668**	**424**	**49**	**69**	75,140
MW-6	10/23/02	**5,870**	**24,100**	**3,100**	**18,810**	**881**	25	**49**	**7.4**	52,842.4
MW-7	10/23/02	**1,200**	**15,400**	**470**	**29,580**	**1,160**	1	**33**	**4.2**	47,848.2
MW-8	10/23/02	**7,490**	**42,300**	**3,310**	**25,990**	**748**	4.4	**180**	**1.7**	80,024.1
MW-10	10/23/02	**8,120**	**26,200**	**3,310**	16,640	**436**	25	21	**80**	54,832
MW-11	10/23/02	1	1.3	1.2	3	4.1	1	5	0.02	16.62
MW-12	10/23/02	**665**	**11.5**	**19.9**	**1,160**	**112**	1	**32**	**9.5**	2,010.9
MW-13	10/23/02	1	1	1	3	2.5	1	5	0.02	14.52
MW-14	10/23/02	1	1	1	3	1	1	5	0.02	13.02
MW-15	10/24/02	1	1	1	3	1	1	50	0.02	58.02
MW-17	10/24/02	1	1	1	3	1	1	34	0.02	42.02
MW-18	10/24/02	1	1	1	3	1	1	13	0.02	21.02
MW-19	10/24/02	1	1	1	3	1	1	34	0.02	42.02
TW-2	10/24/02	**7,860**	**8,050**	**520**	**3,810**	**168**	**77.5**	**5**	**6.8**	20,497.3
TW-3	10/24/02	1	1	1	3	1	1	5	0.14	13.14
Sample Concentration	NA	51,133	170,169.8	16,868.1	133,064	5,110.6	579.8	527	179.24	377,631.54
Baseline Concentration	NA	47,644	158,164	19,824	84,035	4,820	1,694	1,716	322.43	318,219.43
Total SSTL Concentration	NA	120	10,975	7,772	80,343	391	490	199	53.33	100,343.33
Sample Concentration above SSTL on 10/2002	NA	51,013	159,194.8	9,096.1	52,721	4,719.6	89.8	328	125.91	277,288.21

Bold concentrations represent those greater than the respective SSTL.

(Baseline Conc. Above SSTL – Sample Conc. Above SSTL on 07/02) (100) = (217876.1-277288.21) (100) = 0.00% complete
Baseline Conc. Above SSTL 217876.1

7.5 MINUTE SERIES(TOPOGRAPHIC)

CLOVER QUADRANGLE



SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

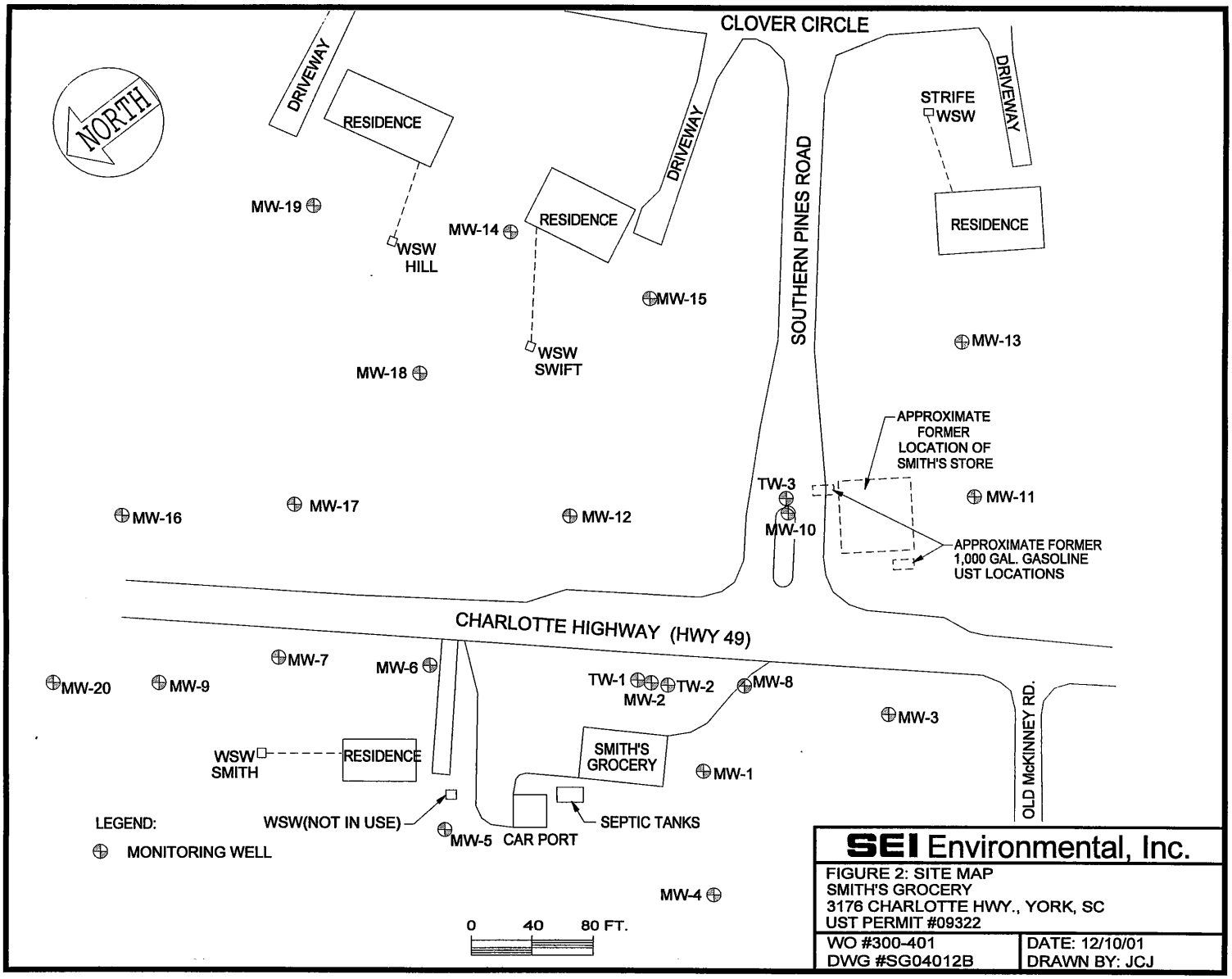
1 .5 0 1 KILOMETER

NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

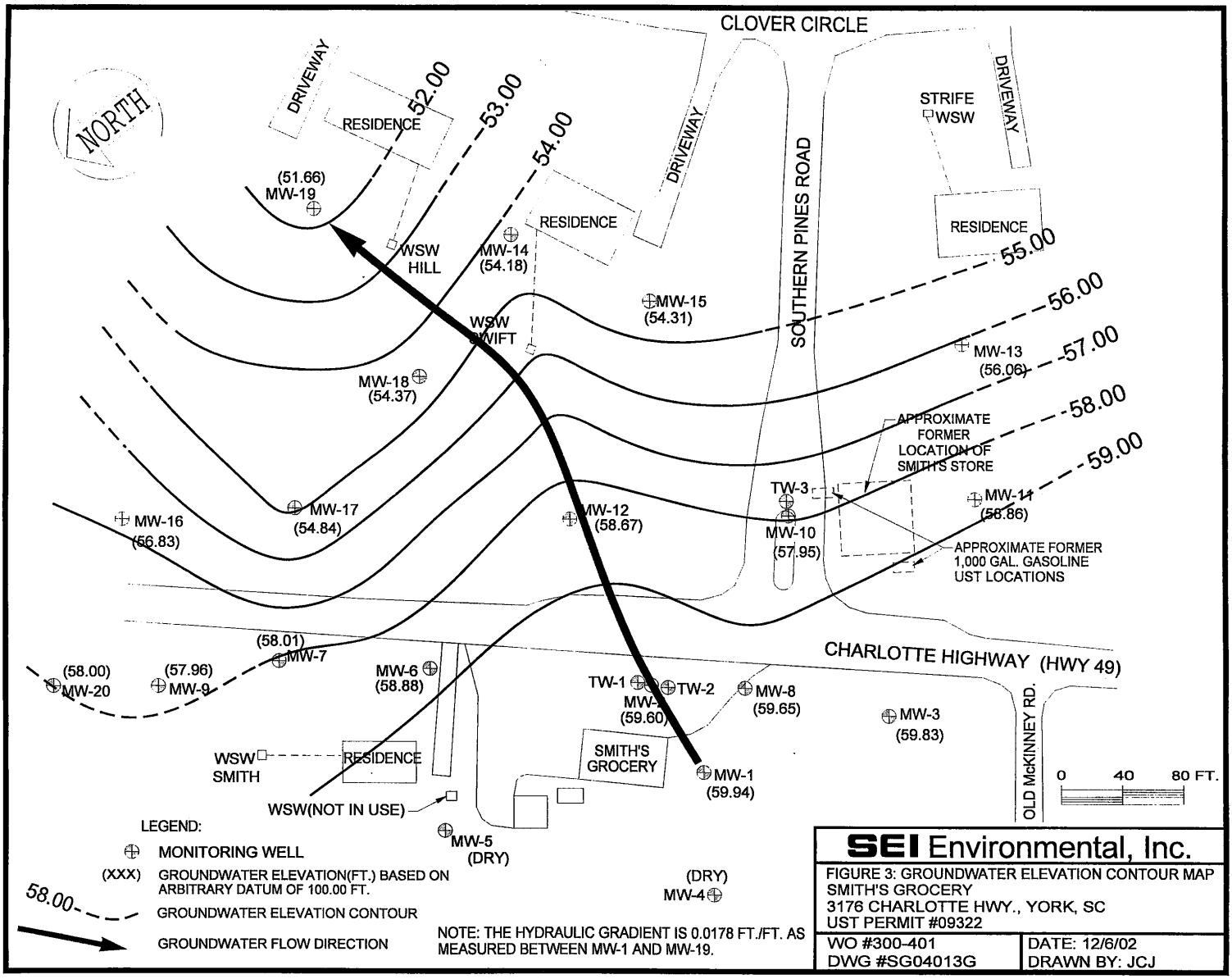
WO #300-401	DATE: 12/7/01
DWG #	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

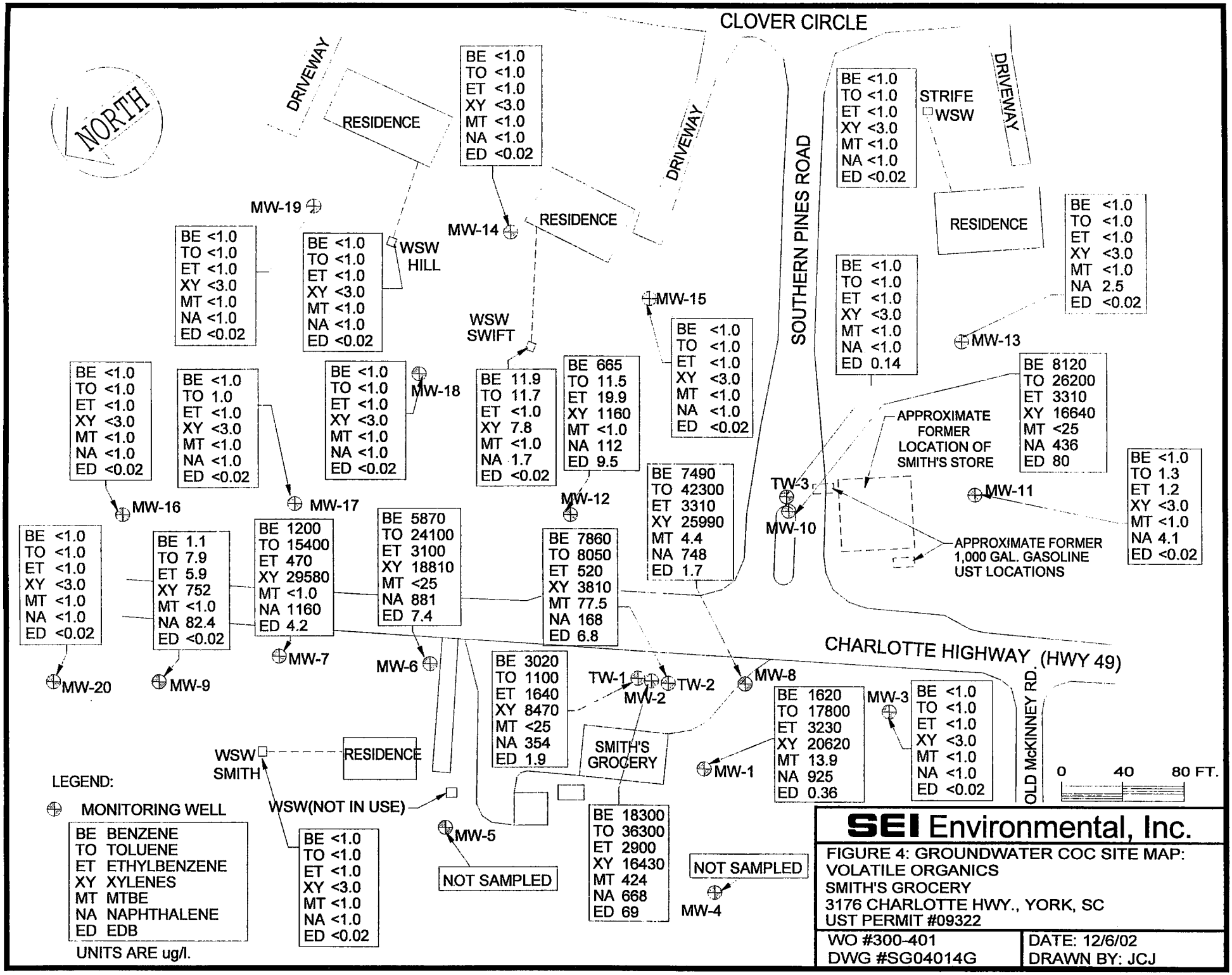
WO #300-401	DATE: 12/10/01
DWG #SG04012B	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: GROUNDWATER ELEVATION CONTOUR MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

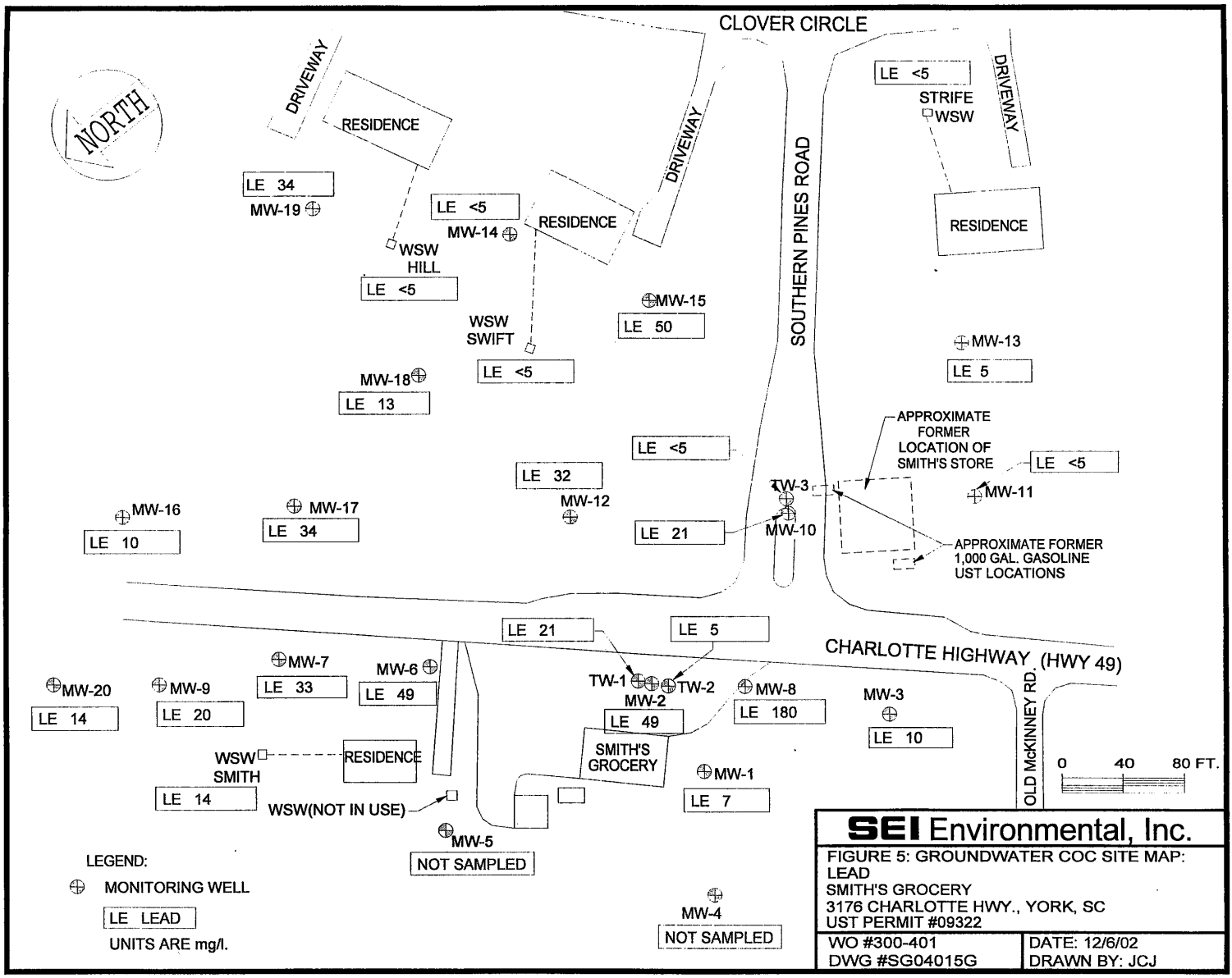
WO #300-401	DATE: 12/6/02
DWG #SG04013G	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP: VOLATILE ORGANICS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 12/6/02
DWG #SG04014G	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 5: GROUNDWATER COC SITE MAP: LEAD
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 12/6/02
DWG #SG04015G	DRAWN BY: JCJ

APPENDIX A

Groundwater Sampling Field Measurements

APPENDIX C

Disposal Manifest

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . | Manifest Document No. GK4924 | 2. Page 1 of 10/25/02

3. Generator's Name and Mailing Address
SEI ENVIRONMENTAL, INC
3021 MCNAUGHTON DR, SUITE 9
COLUMBIA, SC 29223

4. Generator's Phone ( )

5. Transporter 1 Company Name: SEI ENVRIONMENTAL, INC | 6. US EPA ID Number . . . . . | A. Transporter's Phone 803-788-2535

7. Transporter 2 Company Name | 8. US EPA ID Number . . . . . | B. Transporter's Phone

9. Designated Facility Name and Site Address
G & K TANK SERVICES
PO BOX 1384
SUMTER, SC 29151
10. US EPA ID Number . . . . . | C. Facility's Phone 800-800-6840

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER SMITH GROCERY YORK, SC	01	DR		
b. NON HAZARDOUS PETROLEUM CONTAMINANTED ABSORBANT PANTRY 336 SCOTIA, SC	01	DR		
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name | Signature | Month | Day | Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: JEFF WEYAND | Signature | Month: 10 | Day: 25 | Year: 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: S. Colley | Signature | Month: 10 | Day: 25 | Year: 02

Printed by: J.J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL - RETURN TO GENERATOR

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 1 Drum
Smith Grocery
York, SC

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to cerify the above ~~soil~~ water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. Sills

Date 10/25/02

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
AUG 07 2002
Underground Storage
Tank Program

August 5, 2002

Ms. Paula Anderson, Hydrogeologist
SCDHEC – UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Re: Quarterly Groundwater Sampling Report
Smith's Grocery
3176 Charlotte Highway
York, South Carolina
UST Permit #09322

Dear Ms. Anderson:

Attached is the Corrective Action Quarterly Groundwater Sampling Report for Smith's Grocery. Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,
SEI Environmental, Inc.

Robert G. Bolton, Jr.
Project Manager

Attachment

cc: Ms. Lois B. Smith, Smith's Grocery

SEI
Environmental, Inc.

CORRECTIVE ACTION
QUARTERLY SAMPLING REPORT

Smith's Grocery
3176 Charlotte Highway
York, South Carolina
York County
UST Permit #09322

PREPARED FOR:

Ms. Paula Anderson
SCDHEC – UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

PREPARED BY:

SEI Environmental, Inc.
3021 McNaughton Drive, Suite 9
Columbia, South Carolina 29223
(803) 788-2535

Robert G. Bolton, Jr.
Project Manager

Frederick P. Lyke, P.G. #1055

August 5, 2002

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 METHODOLOGY 1

3.0 LABORATORY ANALYTICAL RESULTS 2

4.0 REMEDIATION EFFECTIVENESS 3

5.0 CONCLUSIONS 4

6.0 REPORT LIMITATIONS 6

LIST OF TABLES

TABLE I	Groundwater Elevation Data
TABLE II	Historical Groundwater Elevation Data
TABLE III	Groundwater Analytical Results
TABLE IV	Historical Groundwater Analytical Results
TABLE V	System Effectiveness Analysis

LIST OF FIGURES

FIGURE 1	Site Location Map
FIGURE 2	Site Map
FIGURE 3	Groundwater Elevation Contour Map
FIGURES 4-6	CoC Concentrations Maps

LIST OF APPENDICES

APPENDIX A	Groundwater Sampling Field Measurements
APPENDIX B	Laboratory Analytical Results and Chain-of-Custody
APPENDIX C	Disposal Manifest

1.0 INTRODUCTION

South Carolina Department of Health and Environmental Control (SCDHEC) contracted SEI Environmental, Inc. (SEI) to conduct corrective action and quarterly groundwater sampling activities at the Smith's Grocery facility (UST Permit #09322) located at 3176 Charlotte Highway in York, South Carolina. The approximate location of the project site is shown on the United States Geological Survey (USGS), 7.5-Minute Series Topographic Map provided as Figure 1. The corrective action and sampling activities were approved by SCDHEC in correspondence dated March 26, 2001.

2.0 METHODOLOGY

2.1 Site Hydrogeology

During the July 8, 2002, gauging event, liquid phase hydrocarbons (LPH) were not detected in any monitor wells. Groundwater flow direction is toward the east with a hydraulic gradient of 0.0182 feet per foot, as measured between Monitor Wells MW-1 and MW-19. Groundwater measurements are summarized in Table I, and a groundwater elevation contour map is depicted in Figure 3.

2.2 Groundwater Sampling and Analysis

On July 8-9, 2002, SEI personnel obtained groundwater samples from Monitor MW-1 through MW-20 and TW-1 through TW-3. In addition, four drinking water wells (identified as Hill, Smith, Strife, and Swift) were also sampled on these dates. The drinking water well previously identified as Vickery has been renamed Swift since this is the name of the new owners. A new, disposable, polyethylene bailer was used for the collection of the water samples from the monitor wells. Each groundwater sample was obtained after pH values and temperature had equilibrated unless petroleum odor was emanating from the well. If petroleum odors were observed in the

monitor well, the groundwater sample was obtained after three well volumes were purged. All purge water was drummed for proper disposal at a permitted treatment facility. Field measurements are presented in Appendix A. New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The groundwater samples were placed in laboratory supplied containers, placed on ice, and delivered to TestAmerica Incorporated in Columbia, South Carolina for proper analysis. Proper preservation methods and chain-of-custody procedures were followed throughout the sampling process. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene by EPA method 8260B; ethylene dibromide (EDB) by EPA method 8011; polynuclear aromatic hydrocarbons (PAH) by EPA method 8270C; and lead by EPA method 6010B.

3.0 LABORATORY ANALYTICAL RESULTS

Groundwater analytical results for the samples collected July 8-9, 2002, detected the presence of benzene concentrations at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, TW-1, and TW-2. Toluene concentrations were detected at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, TW-1, TW-2, and the Swift water well. Ethylbenzene, xylenes, and naphthalene concentrations were detected at Monitor Wells MW-1, MW-2, MW-6 through MW-10, MW-12, TW-1, and TW-2. MTBE concentrations were detected at Monitor Well MW-2. Due to high dilution factors, MTBE concentrations were below detection limits at Monitor Wells MW-1, MW-6, MW-7, MW-8, MW-10, TW-1, and TW-2; however, MTBE concentrations may exist at these locations. EDB concentrations were detected at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, MW-14, MW-15, MW-17, MW-18, TW-1, TW-2, and TW-3. PAH constituents (other than naphthalene) were not detected at any sample locations. Lead concentrations were detected at Monitor Wells MW-1, MW-2, MW-3, MW-6 through MW-16, MW-18, MW-19, and MW-20.

At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2, benzene and naphthalene concentrations were detected greater than their respective site specific threshold levels (SSTL) computed specifically for these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2, toluene and ethylbenzene concentrations were detected greater than the SSTLs computed specifically for these wells. At Monitor Wells MW-1, MW-6, MW-8, and TW-2, xylenes concentrations were detected greater than its SSTL computed specifically for these wells. At Monitor Well MW-2, MTBE concentrations were detected greater than its computed SSTL. However, MTBE concentrations may exist greater than its respective calculated SSTLs at Monitor Wells MW-1, MW-6, MW-7, MW-8, MW-10, and TW-2 due to high dilution factors which yielded results less than their respective detection limits at these wells. At Monitor Wells MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, MW-17, and TW-2, EDB concentrations were detected greater than its SSTLs calculated for each of these wells. At Monitor Wells MW-1, MW-2, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-18, and MW-19, lead concentrations were detected greater than its SSTL calculated for each of these wells. Groundwater analytical results are presented in Table III. Historical groundwater analytical results which compare current and past results with the SSTLs are presented in Table IV. Groundwater concentrations are depicted in Figures 4 through 6. Laboratory analyses and chain-of-custody are presented in Appendix B.

4.0 REMEDIATION EFFECTIVENESS

Chemicals of concern (CoC) concentration reduction is evaluated by verifying if the CoC concentrations reduction goals have been achieved in Monitor Wells MW-1 through MW-20, TW-1 through TW-3, and four drinking water wells named Hill, Smith, Strife, and Swift (previously named Vickery). Furthermore, chemical test data from Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, MW-18, MW-19, TW-2, and TW-3 are used to evaluate the effectiveness of the bioremediation.

The evaluation of the remediation effectiveness consists in comparing the July 2002, CoC concentrations against the baseline concentrations and determining the percent of total concentration reduction. This is calculated by subtracting the current sample concentrations above SSTLs from the baseline concentrations above SSTLs and multiplying this amount by 100. This number is then divided by the baseline concentrations above SSTLs. The calculation of the total concentration reduction is presented in Table V.

According to calculations made from the July 2002, sampling event, approximately 0.00 percent of the CoC concentrations has been removed from the site.

5.0 CONCLUSIONS

- Groundwater flow at the site is in an eastern direction with a hydraulic gradient of 0.0182 feet per foot, as measured between Monitor Wells MW-1 and MW-19.
- Liquid phase hydrocarbons were not detected in any monitor wells during the current sampling activities.
- Benzene and naphthalene concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2.
- Toluene and ethylbenzene concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2.
- Xylenes concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-6, MW-8, and TW-2
- MTBE concentrations were detected greater than the calculated SSTLs at Monitor Well MW-2. MTBE concentrations may exist greater than the respective calculated SSTLs at Monitor Wells MW-1, MW-6, MW-7, MW-8, MW-10, and TW-2 due to a high dilution factor which yielded results less than detection limits at these wells.
- EDB concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, MW-17, and TW-2.

- Lead concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-18, and MW-19.
- According to calculation made from the July 2002, sampling event, approximately 0.00 percent of the CoC concentrations has been removed from the site.
- The Vickery potable water well has been renamed Swift, as the Vickery's no longer live at this location.
- SEI personnel last injected Microbac™ microbes and nutrients in the injection wells on May 7, 2002. SEI personnel will inject these microbes on a quarterly basis with the next scheduled event planned for August 2002.

6.0 REPORT LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the current UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

REFERENCES

SCDHEC, May 15, 2001, *Risk-Based Corrective Action for Petroleum Releases*, Columbia, South Carolina.

SEI Environmental, Inc., April 22, 2002, *Corrective Action Quarterly Groundwater Sampling Report – Smith's Grocery*, Columbia, South Carolina.

TABLE I
Groundwater Elevation Data
Smith's Grocery / York, South Carolina

Monitor Well Number	Date Measured	Top of Casing Elevation (feet)	Depth to Ground Water (feet)	Total Depth of Well (feet)	Groundwater Elevation (feet)
MW-1	07/08/02	91.16	30.23	35	60.93
MW-2	07/08/02	94.57	33.90	38	60.67
MW-3	07/08/02	91.91	30.97	35	60.94
MW-4	07/08/02	86.20	25.10	27	61.10
MW-5	07/08/02	89.29	28.83	30	60.46
MW-6	07/08/02	93.91	34.00	37	59.91
MW-7	07/08/02	91.68	32.86	36	58.82
MW-8	07/08/02	94.72	33.96	38	60.76
MW-9	07/08/02	90.54	31.77	36	58.77
MW-10	07/08/02	99.77	39.72	44	60.05
MW-11	07/08/02	100.46	40.49	44	59.97
MW-12	07/08/02	99.61	39.94	44	59.67
MW-13	07/08/02	100.39	43.36	47	57.03
MW-14	07/08/02	98.89	44.00	50	54.89
MW-15	07/08/02	100.18	45.11	50	55.07
MW-16	07/08/02	89.91	32.37	37	57.54
MW-17	07/08/02	94.46	37.02	40	57.44
MW-18	07/08/02	98.14	43.07	46	55.07
MW-19	07/08/02	98.27	45.77	50	52.50
MW-20	07/08/02	88.35	29.54	35	58.81
TW-1	07/08/02	94.72	33.96	61	60.76
TW-2	07/08/02	94.72	34.06	88	60.66
TW-3	07/08/02	99.21	38.98	71	60.23

NS = Not Surveyed

TABLE II
Historical Groundwater Elevation Data
Smith's Grocery / York, South Carolina

Monitor Well Number	Top of Casing Elevation	Depth to Groundwater (feet)		Groundwater Elevation (feet)	
		11/05/01	04/01/02	11/05/01	04/01/02
MW-1	91.16	29.75	29.82	61.41	61.34
MW-2	94.57	33.35	33.64	61.22	60.93
MW-3	91.91	30.44	30.73	61.47	61.18
MW-4	86.20	24.66	24.37	61.54	61.83
MW-5	89.29	28.47	27.88	60.82	61.41
MW-6	93.91	33.50	33.57	60.41	60.34
MW-7	91.68	32.52	32.08	59.16	59.60
MW-8	94.72	33.43	33.93	61.29	60.79
MW-9	90.54	31.47	30.99	59.07	59.55
MW-10	99.77	39.14	40.66	60.63	59.11
MW-11	100.46	39.90	40.27	60.56	60.19
MW-12	99.61	39.38	39.62	60.23	59.99
MW-13	100.39	42.77	43.08	57.62	57.31
MW-14	98.89	43.45	44.68	55.44	54.21
MW-15	100.18	44.58	44.15	55.60	56.03
MW-16	89.91	32.07	31.54	57.84	58.37
MW-17	94.46	36.56	36.57	57.90	57.89
MW-18	98.14	42.57	42.88	55.57	55.26
MW-19	98.27	45.21	45.19	53.06	53.08
MW-20	88.35	29.25	28.69	NS	59.66
TW-1	94.72	35.16	33.62	59.56	61.10
TW-2	94.72	33.45	33.78	NS	60.94
TW-3	99.21	38.43	38.74	NS	60.47

NS = Not Surveyed

TABLE III
Groundwater Analytical Results, dated July 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1 (µg/l)	MW-2 (µg/l)	MW-3 (µg/l)	MW-4 (µg/l)	MW-5 (µg/l)	MW-6 (µg/l)	MW-7 (µg/l)	MW-8 (µg/l)	MW-9 (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	1240	19100	<1.00	<1.00	<1.00	3320	849	6400	<2.00
Toluene	14400	33400	<1.00	<1.00	<1.00	16400	2230	45600	<2.00
Ethylbenzene	2400	2520	<1.00	<1.00	<1.00	2120	1350	3750	3.20
Xylenes	16100	14700	<1.00	<1.00	<1.00	12600	9040	22000	451
Total BTEX	34140	69720	<4.00	<4.00	<4.00	34440	13469	77750	458.2
MTBE	<100	580	<5.00	<5.00	<5.00	<50.0	<50.0	<250	<2.00
Naphthalene	542	580	<5.00	<5.00	<5.00	587	889	655	47.0
EDB	0.30	139	<0.02	<0.02	<0.02	7.19	1.10	1.47	<0.02
Benzo(a)anthracene	<5.0	<5.0	<5.0	<5.0	<11.4	<5.0	<5.0	<5.0	<5.0
Benzo(b)fluoranthene	<5.0	<5.0	<5.0	<5.0	<11.4	<5.0	<5.0	<5.0	<5.0
Benzo(k)fluoranthene	<5.0	<5.0	<5.0	<5.0	<11.4	<5.0	<5.0	<5.0	<5.0
Chrysene	<5.0	<5.0	<5.0	<5.0	<11.4	<5.0	<5.0	<5.0	<5.0
Dibenzo(a,h)anthracene	<5.0	<5.0	<5.0	<5.0	<11.4	<5.0	<5.0	<5.0	<5.0
Lead	5.0	208	27.0	<3.0	<3.0	11.0	24.0	263	30.0

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated July 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10 (µg/l)	MW-11 (µg/l)	MW-12 (µg/l)	MW-13 (µg/l)	MW-14 (µg/l)	MW-15 (µg/l)	MW-16 (µg/l)	MW-17 µg/l)	MW-18 (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	19400	<2.00	425	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Toluene	46400	<2.00	4.20	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Ethylbenzene	3280	<2.00	11.1	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Xylenes	17000	<2.00	651	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Total BTEX	86080	<8.00	1091.3	<8.00	<8.00	<8.00	<8.00	<8.00	<8.00
MTBE	<100	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Naphthalene	290	<5.00	66.2	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
EDB	345	<0.02	8.12	<0.02	0.02	0.09	<0.02	0.03	0.06
Benzo(a)anthracene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0
Benzo(b)fluoranthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0
Benzo(k)fluoranthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0
Chrysene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0
Dibenzo(a,h)anthracene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0
Lead	79.0	22.0	78.0	50.0	22.0	19.0	35.0	<3.0	26.0

NA = Not Applicable; NS = Not Sampled

TABLE III (continued)
Groundwater Analytical Results, dated July 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19 (µg/l)	MW-20 (µg/l)	TW-1 (µg/l)	TW-2 (µg/l)	TW-3 (µg/l)	Hill (µg/l)	Smith (µg/l)	Strife (µg/l)	Swift (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	<2.00	<2.00	3740	5940	<2.00	<2.00	<2.00	<2.00	<2.00
Toluene	<2.00	<2.00	3920	5500	<2.00	<2.00	<2.00	<2.00	2.00
Ethylbenzene	<2.00	<2.00	1720	330	<2.00	<2.00	<2.00	<2.00	<2.00
Xylenes	<2.00	<2.00	9180	2740	<2.00	<2.00	<2.00	<2.00	<2.00
Total BTEX	<8.00	<8.00	18560	14510	<8.00	<8.00	<8.00	<8.00	<8.00
MTBE	<2.00	<2.00	<100	<100	<2.00	<2.00	<2.00	<2.00	<2.00
Naphthalene	<5.00	<5.00	352	142	<5.00	<5.00	<5.00	<5.00	<5.00
EDB	<0.02	<0.02	1.48	7.10	0.15	<0.02	<0.02	<0.02	<0.02
Benzo(a)anthracene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(b)fluoranthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(k)fluoranthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chrysene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dibenzo(a,h)anthracene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Lead	47.0	11.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

NA = Not Applicable

TABLE IV
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1				MW-2				MW-3			
Sampling Date	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	11	**830**	**1180**	**1240**	10	**21400**	**16100**	**19100**	NA	<2.0	<2.0	<1.00
Toluene	2223	**9860**	**17500**	**14400**	2021	**32100**	**21100**	**33400**	NA	3.8	<2.0	<1.00
Ethylbenzene	1558	**1690**	**3050**	**2400**	1416	**2640**	**2500**	**2520**	NA	<2.0	<2.0	<1.00
Xylenes	10000	**10800**	**18200**	**16100**	15000	14300	13900	14700	NA	<2.0	<2.0	<1.00
Total BTEX	13792	23180	39930	34140	18447	70440	53600	69720	NA	<9.8	<8.0	<4.00
MTBE	80	**<200**	11.5	**<100**	81	**860**	**361**	**580**	NA	<2.0	<2.0	<5.00
Naphthalene	56	**<500**	**642**	**542**	51	**<500**	**516**	**580**	NA	<5.0	<5.0	<5.00
EDB	0.32	<0.02	**0.72**	0.30	10	**212**	**94.7**	**139**	NA	<0.02	<0.02	<0.02
Lead	2	**22.0**	**113**	**5.0**	30	**215**	**127**	**208**	NA	3.0	44.0	27.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-4				MW-5				MW-6			
Sampling Date	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	NA	<2.0	<2.0	<1.00	NA	<2.0	<2.0	<1.00	6	**3450**	**4650**	**3320**
Toluene	NA	<2.0	<2.0	<1.00	NA	4.7	<2.0	<1.00	1212	**16700**	**24000**	**16400**
Ethylbenzene	NA	<2.0	<2.0	<1.00	NA	5.2	6.8	<1.00	850	**2370**	**3080**	**2120**
Xylenes	NA	<2.0	<2.0	<1.00	NA	31.8	40.7	<1.00	8000	**13200**	**17000**	**12600**
Total BTEX	NA	<8.0	<8.0	<4.00	NA	<43.7	<51.5	<4.00	10068	35720	48730	34440
MTBE	NA	<2.0	<2.0	<5.00	NA	<2.0	<2.0	<5.00	48	**<200**	**<200**	**<50.0**
Naphthalene	NA	<5.0	<5.0	<5.00	NA	<5.0	6.0	<5.00	31	**<500**	**810**	**587**
EDB	NA	<0.02	<0.02	<0.02	NA	<0.02	<0.02	<0.02	4.83	**9.82**	**8.50**	**7.19**
Lead	NA	3.0	41.0	<3.0	NA	NS	25.0	<3.0	18	**191**	**154**	11.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-7				MW-8				MW-9			
Sampling Date	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	6	**1020**	**1070**	**849**	12	**6410**	**6360**	**6400**	NA	<2.0	2.9	<2.00
Toluene	1212	**8100**	**5030**	**2230**	2424	**27700**	**41800**	**45600**	NA	<2.0	33.3	<2.00
Ethylbenzene	850	**3200**	**2600**	**1350**	1700	**2220**	**3880**	**3750**	NA	<2.0	7.8	3.20
Xylenes	12123	**21200**	**17600**	9040	16000	**19300**	**24380**	**22000**	NA	532	65	451
Total BTEX	14191	33520	26300	13469	20136	55630	76420	77750	NA	<538	109	458.2
MTBE	48	<2.0	**<200**	**<50.0**	96	**<200**	**<200**	**<250**	NA	<2.0	<2.0	<2.00
Naphthalene	31	**915**	**930**	**889**	62	**<500**	**910**	**655**	NA	51.4	114	47.0
EDB	0.66	**3.35**	**2.46**	**1.10**	0.48	**2.41**	**1.04**	**1.47**	NA	<0.02	<0.02	<0.02
Lead	18	**55.0**	**173**	**24.0**	4	**252**	**76.0**	**263**	NA	50.0	6.0	30.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10				MW-11				MW-12			
Sampling Date	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	9	**7800**	**8550**	**19400**	5	<2.0	<2.0	<2.00	7	<2.0	**389**	**425**
Toluene	1819	**25400**	**26600**	**46400**	5	<2.0	<2.0	<2.00	5	<2.0	**8.6**	4.20
Ethylbenzene	1274	**2400**	**3130**	**3280**	5	<2.0	<2.0	<2.00	68	<2.0	16	11.1
Xylenes	18185	14400	15370	17000	10	<2.0	<2.0	<2.00	730	<2.0	573	651
Total BTEX	21287	50000	53650	86080	25	<8.0	<8.0	<8.00	810	<8.0	986.6	1091.3
MTBE	43	<20.0	**<200**	**<100**	5	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00
Naphthalene	46	**420**	**580**	**290**	5	<5.0	<5.0	<5.00	36	<5.0	**53.4**	**66.2**
EDB	9	**156**	**128**	**345**	0.02	<0.02	<0.02	<0.02	7	3.91	**7.18**	**8.12**
Lead	21	6.0	**44.0**	**79.0**	5	**7.0**	**15.0**	**22.0**	7	7.0	**65.0**	**78.0**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-13				MW-14				MW-15			
Sampling Date	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00	NA	<2.0	<2.0	<2.00
Toluene	5	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00	NA	<2.0	<2.0	<2.00
Ethylbenzene	5	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00	NA	<2.0	<2.0	<2.00
Xylenes	10	<2.0	<2.0	<2.00	10	<2.0	<2.0	<2.00	NA	<2.0	<2.0	<2.00
Total BTEX	25	<8.0	<8.0	<8.00	25	<8.0	<8.0	<8.00	NA	<8.0	<8.0	<8.00
MTBE	5	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00	NA	<2.0	<2.0	<2.00
Naphthalene	5	<5.0	<5.0	<5.00	5	<5.0	<5.0	<5.00	NA	<5.0	<5.0	<5.00
EDB	0.02	<0.02	<0.02	<0.02	0.51	0.06	<0.02	0.02	NA	<0.02	0.07	0.09
Lead	5	**83.0**	**27.0**	**50.0**	5	**35.0**	**38.0**	**22.0**	NA	20.0	58.0	19.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-16				MW-17				MW-18			
Sampling Date	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	NA	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00
Toluene	NA	12.0	<2.0	<2.00	5	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00
Ethylbenzene	NA	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00
Xylenes	NA	11.5	<2.0	<2.00	10	<2.0	<2.0	<2.00	10	<2.0	<2.0	<2.00
Total BTEX	NA	<27.5	<8.0	<8.00	25	<8.0	<8.0	<8.00	25	<8.0	<8.0	<8.00
MTBE	NA	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00
Naphthalene	NA	<5.0	<5.0	<5.00	5	<5.0	<5.0	<5.00	5	<5.0	<5.0	<5.00
EDB	NA	<0.02	<0.02	<0.02	0.02	<0.02	**0.06**	**0.03**	0.12	0.06	0.08	0.06
Lead	NA	<3.0	6.0	35.0	15	<3.0	**20.0**	<3.0	15	5.0	**28.0**	**26.0**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19				MW-20				TW-1			
Sampling Date	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	<2.0	<2.0	<2.00	NA	<2.0	<2.0	<2.00	NA	4800	4640	3740
Toluene	5	<2.0	<2.0	<2.00	NA	<2.0	<2.0	<2.00	NA	10100	7200	3920
Ethylbenzene	5	<2.0	<2.0	<2.00	NA	<2.0	<2.0	<2.00	NA	2200	2380	1720
Xylenes	10	<2.0	<2.0	<2.00	NA	<2.0	<2.0	<2.00	NA	11600	13100	9180
Total BTEX	25	<8.0	<8.0	<8.00	NA	<8.0	<8.0	<8.00	NA	28700	27320	18560
MTBE	5	<2.0	<2.0	<2.00	NA	<2.0	<2.0	<2.00	NA	<200	<100	<100
Naphthalene	5	<5.0	<5.0	<5.00	NA	<5.0	<5.0	<5.00	NA	<500	445	352
EDB	0.02	<0.02	<0.02	<0.02	NA	<0.02	<0.02	<0.02	NA	1.85	1.36	1.48
Lead	15	**17.0**	<3.0	**47.0**	NA	63.0	14.0	11.0	NA	<3.0	<3.0	<3.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	TW-2				TW-3				Hill			
Sampling Date	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	**5710**	**5650**	**5940**	5	<2.0	<2.0	<2.00	2	<2.0	<2.0	<2.00
Toluene	5	**4900**	**4210**	**5500**	5	<2.0	<2.0	<2.00	2	<2.0	<2.0	<2.00
Ethylbenzene	5	**260**	**285**	**330**	5	<2.0	<2.0	<2.00	2	<2.0	<2.0	<2.00
Xylenes	180	**2170**	**2530**	**2740**	10	<2.0	<2.0	<2.00	2	<2.0	<2.0	<2.00
Total BTEX	195	13040	12675	14510	25	<8.0	<8.0	<8.00	8	<8.0	<8.0	<8.00
MTBE	5	**78.6**	**<100**	**<100**	5	<2.0	<2.0	<2.00	5	<2.0	<2.0	<2.00
Naphthalene	18	**99.0**	**270**	**142**	5	<5.0	<5.0	<5.00	5	<5.0	<5.0	<5.00
EDB	0.05	**11.2**	**6.02**	**7.10**	0.23	0.18	0.16	0.15	5	<0.02	0.02	<0.02
Lead	2	**18.0**	<3.0	<3.0	2	<3.0	<3.0	<3.0	5	<3.0	<3.0	<3.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable; NS = Not Sampled

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	Smith				Strife				Swift (previously Vickery)			
Sampling Date	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)	SSTL (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	07/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	NA	NA	None
Benzene	5	<2.0	<2.0	<2.00	2	<2.0	<2.0	<2.00	5	NS	NS	<2.00
Toluene	5	<2.0	<2.0	<2.00	2	<2.0	<2.0	<2.00	2	NS	NS	2.00
Ethylbenzene	5	<2.0	<2.0	<2.00	2	<2.0	<2.0	<2.00	2	NS	NS	<2.00
Xylenes	15	<2.0	<2.0	<2.00	2	<2.0	<2.0	<2.00	26	NS	NS	<2.00
Total BTEX	30	<8.0	<8.0	<8.00	8	<8.0	<8.0	<8.00	35	NA	NA	<8.00
MTBE	5	<2.0	<2.0	<2.00	2	<2.0	<2.0	<2.00	2	NS	NS	<2.00
Naphthalene	5	<5.0	<5.0	<5.00	5	<5.0	<5.0	<5.00	5	NS	NS	<5.00
EDB	5	<0.02	<0.02	0.15	5	<0.02	<0.02	0.15	5	NS	NS	0.15
Lead	5	<3.0	<3.0	<3.0	5	<3.0	<3.0	<3.0	5	NS	NS	<3.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable; NS = Not Sampled

TABLE V
System Effectiveness Analysis
Smith's Grocery / York, South Carolina

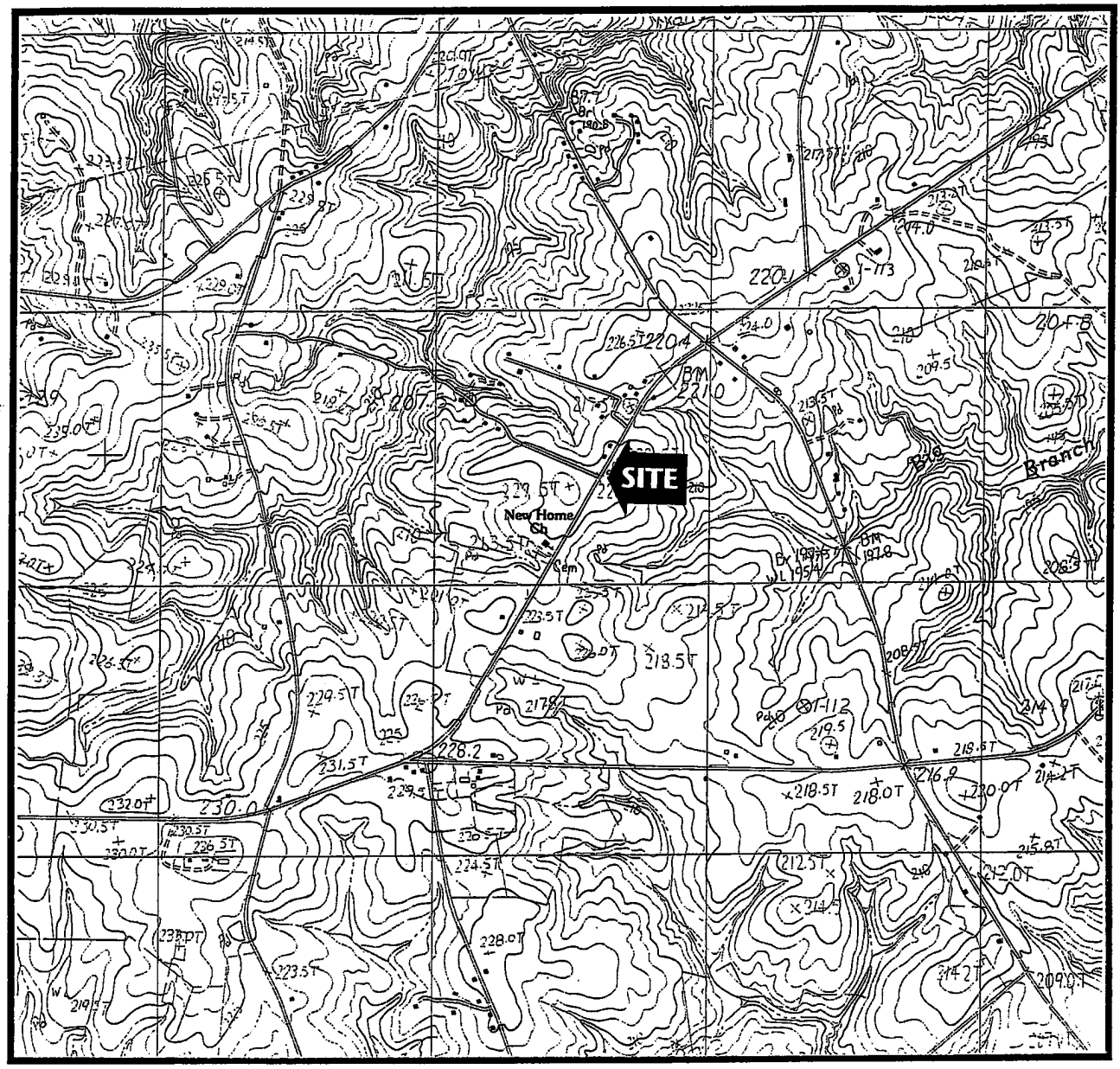
Monitor Well Number	Date of Sample	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	MTBE (µg/L)	Lead (µg/L)	EDB (µg/L)	Total CoC (µg/L)
MW-1	07/08/02	**1240**	**14400**	**2400**	**16100**	**542**	**100**	**5**	0.30	34,787.3
MW-2	07/08/02	**19100**	**33400**	**2520**	14700	**580**	**580**	**208**	**139**	71,227
MW-6	07/08/02	**3320**	**16400**	**2120**	**12600**	**587**	**50**	11	**7.19**	35,095.19
MW-7	07/08/02	**849**	**2230**	**1350**	9040	**889**	**50**	**24**	**1.10**	14,433.1
MW-8	07/08/02	**6400**	**45600**	**3750**	**22000**	**655**	**250**	**263**	**1.47**	78,919.47
MW-10	07/09/02	**19400**	**46400**	**3280**	17000	**290**	**100**	**79**	**345**	86,894
MW-11	07/09/02	2	2	2	2	5	2	**22**	0.02	37.02
MW-12	07/09/02	**425**	4.2	11.1	651	**66.2**	2	**78**	**8.12**	1,245.62
MW-13	07/09/02	2	2	2	2	5	2	**50**	0.02	65.02
MW-14	07/09/02	2	2	2	2	5	2	**22**	0.02	37.02
MW-15	07/09/02	2	2	2	2	5	2	19	0.09	34.09
MW-17	07/09/02	2	2	2	2	5	2	3	**0.03**	18.03
MW-18	07/09/02	2	2	2	2	5	2	**26**	0.06	41.06
MW-19	07/09/02	2	2	2	2	5	2	**47**	0.02	62.02
TW-2	07/08/02	**5940**	**5500**	**330**	**2740**	**142**	**100**	3	**7.10**	14,762.10
TW-3	07/09/02	2	2	2	2	5	2	3	0.15	18.15
Sample Concentration	NA	56,690	163,950.2	15,777.1	94,847	3,791.2	1,248	863	509.69	337,676.19
Baseline Concentration	NA	47,644	158,164	19,824	84,035	4,820	1,694	1,716	322.43	318,219.43
Total SSTL Concentration	NA	120	10,975	7,772	80,343	391	490	199	53.33	100,343.33
Sample Concentration above SSTL on 07/2002	NA	56,570	152,975.2	8,005.1	14,504	3,400.2	758	664	456.36	237,332.86

Bold concentrations represent those greater than the respective SSTL.

(Baseline Conc. Above SSTL – Sample Conc. Above SSTL on 07/02) (100) = (217876.1-237332.86) (100) = 0.00% complete
Baseline Conc. Above SSTL 217876.1

7.5 MINUTE SERIES(TOPOGRAPHIC)

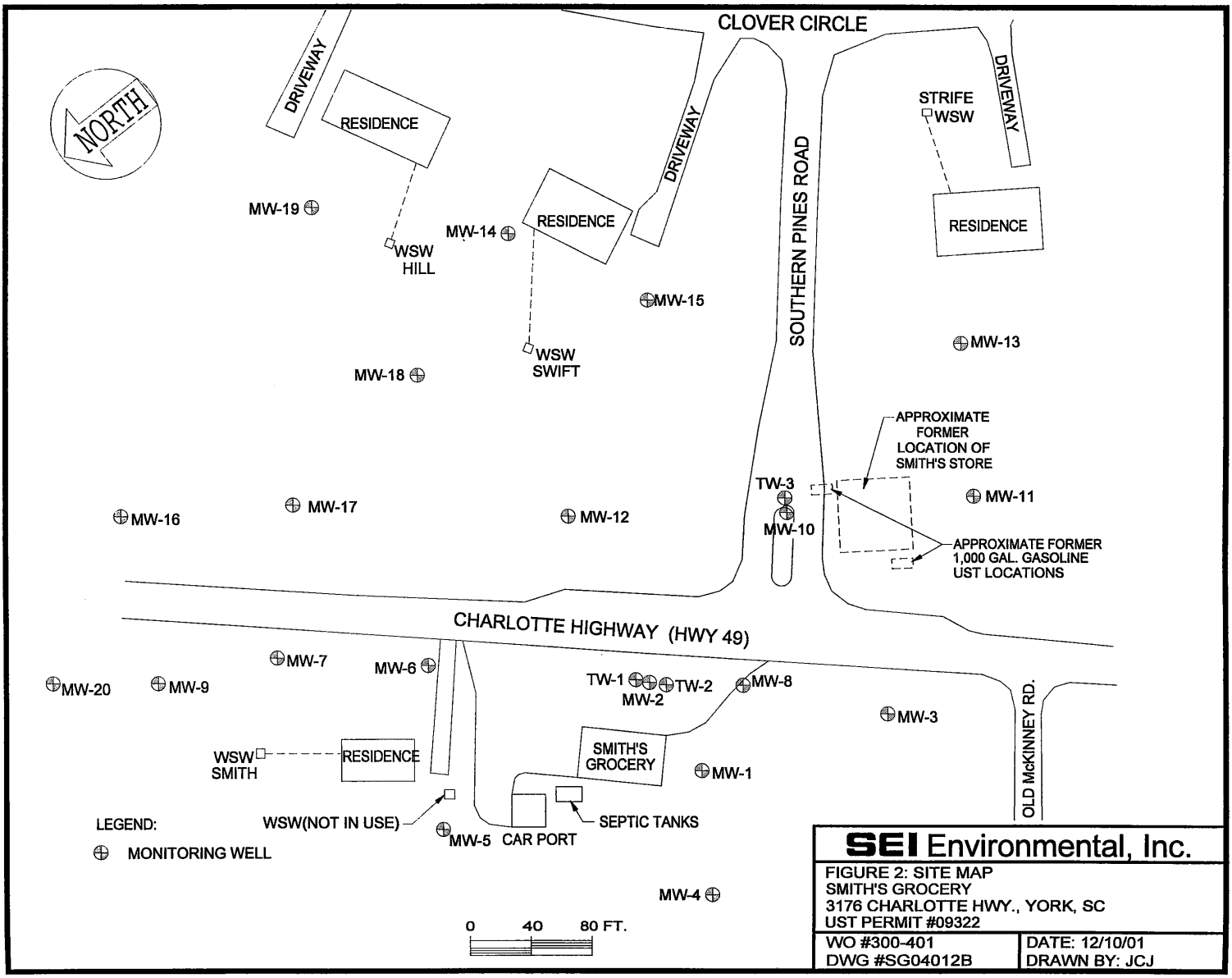
CLOVER QUADRANGLE



SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

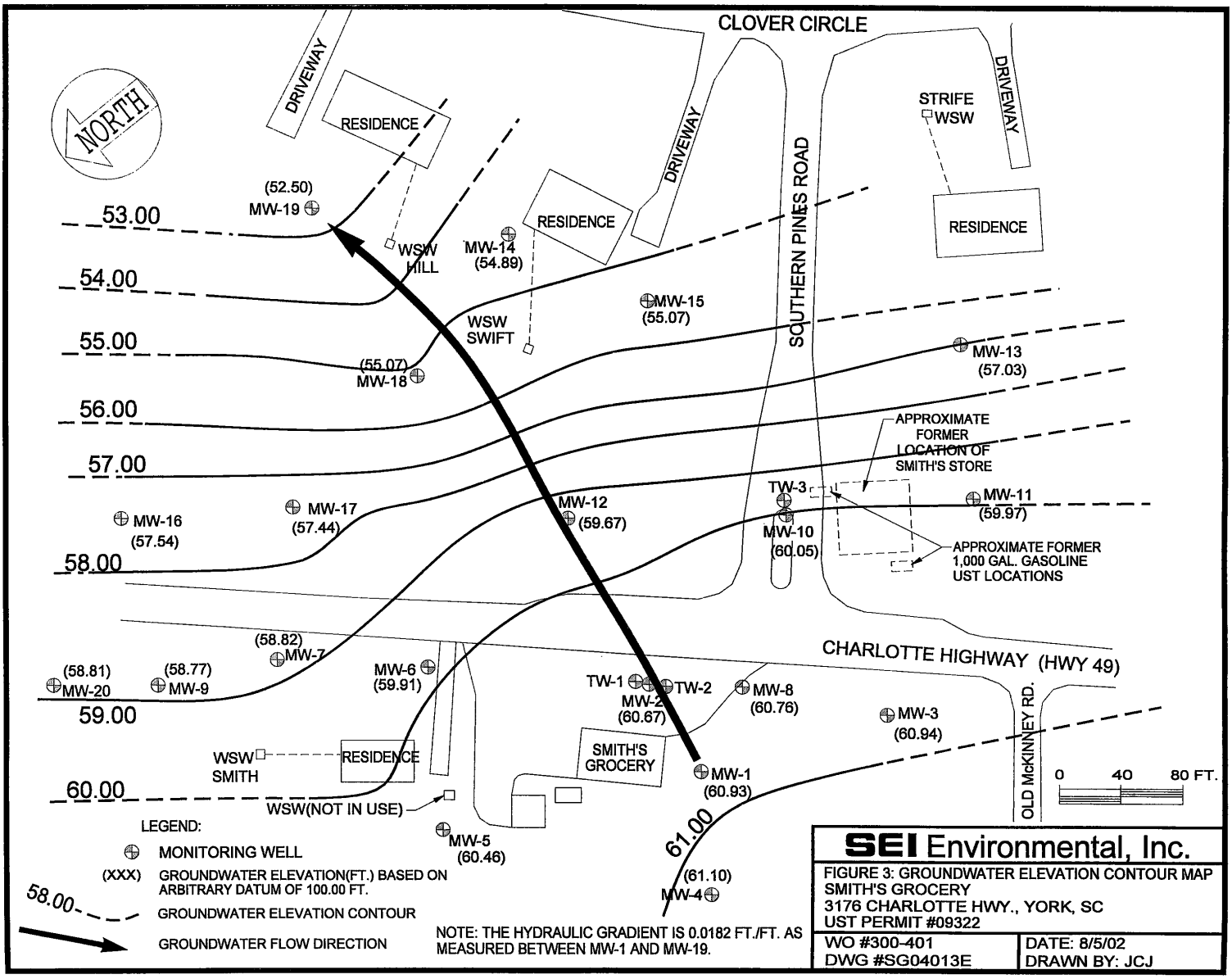
WO #300-401	DATE: 12/7/01
DWG #.	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

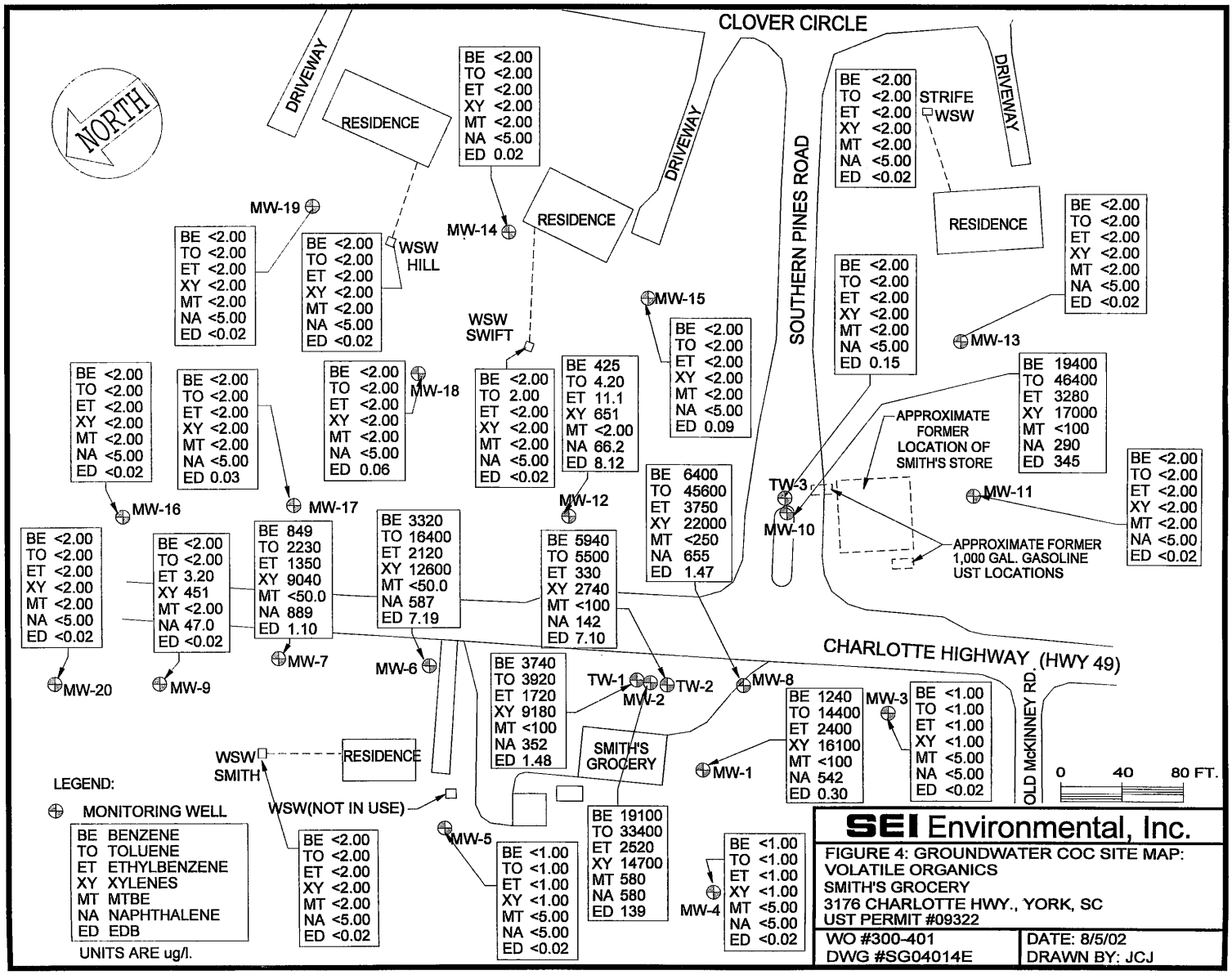
WO #300-401	DATE: 12/10/01
DWG #SG04012B	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: GROUNDWATER ELEVATION CONTOUR MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

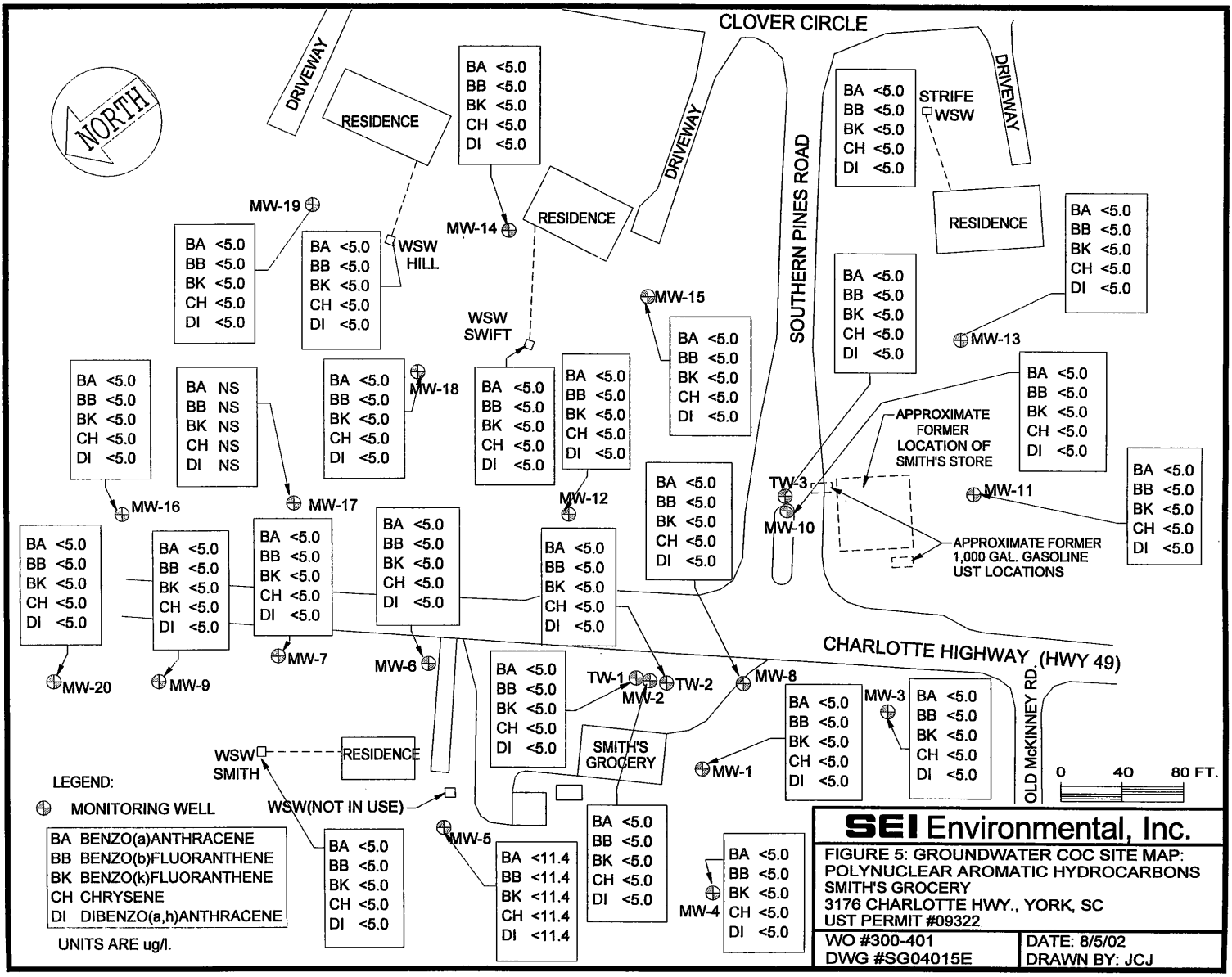
WO #300-401	DATE: 8/5/02
DWG #SG04013E	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP:
VOLATILE ORGANICS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 8/5/02
DWG #SG04014E	DRAWN BY: JCJ



LEGEND:

⊕ MONITORING WELL

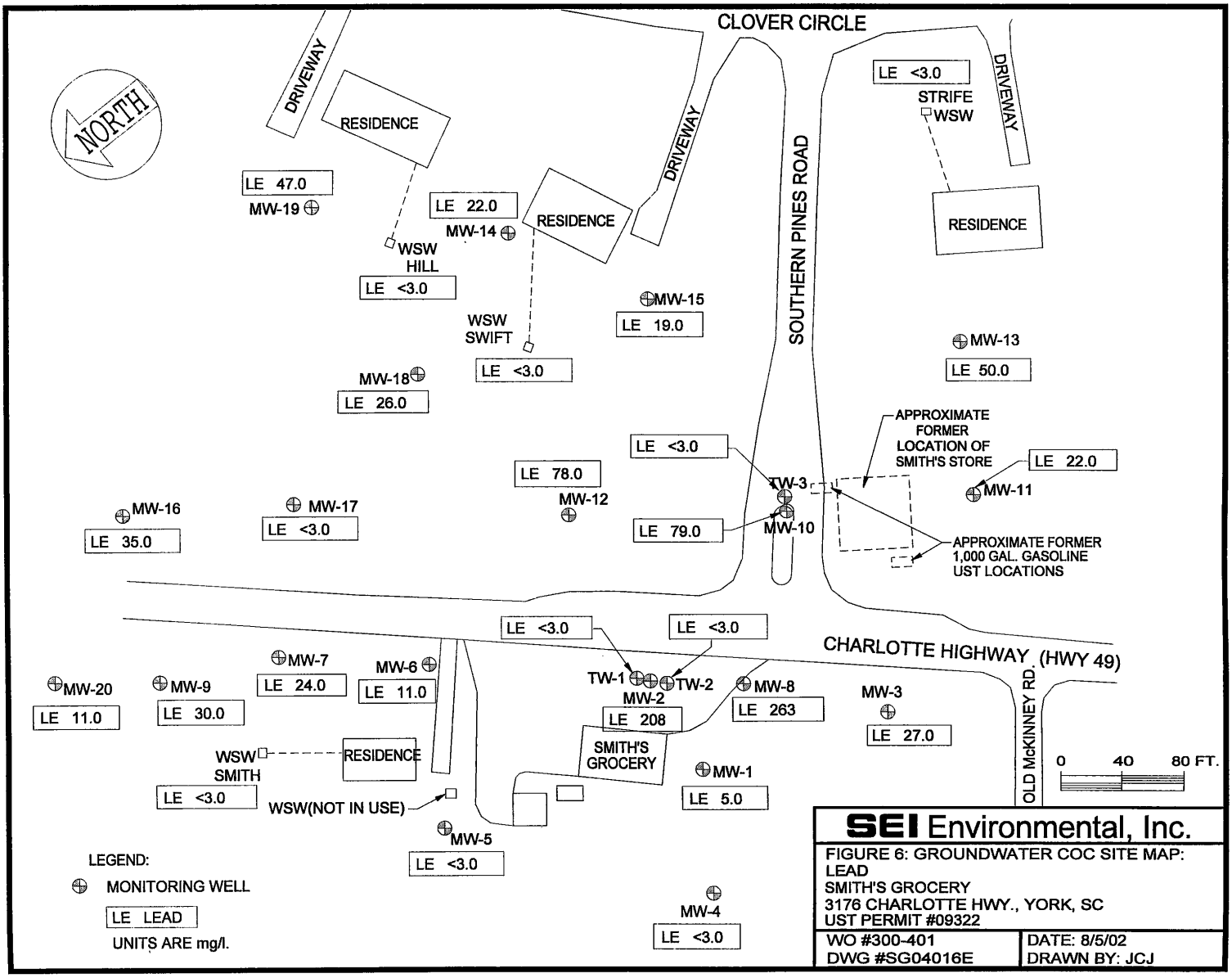
BA BENZO(a)ANTHRACENE
BB BENZO(b)FLUORANTHENE
BK BENZO(k)FLUORANTHENE
CH CHRYSENE
DI DIBENZO(a,h)ANTHRACENE

UNITS ARE ug/l.

SEI Environmental, Inc.

FIGURE 5: GROUNDWATER COC SITE MAP: POLYNUCLEAR AROMATIC HYDROCARBONS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 8/5/02
DWG #SG04015E	DRAWN BY: JCJ


CLOVER CIRCLE
NORTH
DRIVEWAY
RESIDENCE
DRIVEWAY
DRIVEWAY
SOUTHERN PINES ROAD
LE <3.0
STRIFE
WSW
RESIDENCE
LE 47.0
MW-19
LE 22.0
MW-14
RESIDENCE
WSW
HILL
LE <3.0
MW-15
LE 19.0
WSW
SWIFT
LE <3.0
MW-13
LE 50.0
MW-18
LE 26.0
APPROXIMATE
FORMER
LOCATION OF
SMITH'S STORE
LE <3.0
LE 22.0
LE 78.0
TW-3
MW-11
MW-12
MW-16
LE 35.0
MW-17
LE <3.0
LE 79.0
MW-10
APPROXIMATE FORMER
1,000 GAL. GASOLINE
UST LOCATIONS
LE <3.0
LE <3.0
CHARLOTTE HIGHWAY (HWY 49)
MW-7
LE 24.0
MW-6
LE 11.0
TW-1
TW-2
MW-2
MW-8
LE 263
MW-3
LE 27.0
MW-20
LE 11.0
MW-9
LE 30.0
LE 208
SMITH'S
GROCERY
OLD McKINNEY RD.
WSW
SMITH
RESIDENCE
LE <3.0
MW-1
LE 5.0
0
40
80 FT.
WSW(NOT IN USE)
MW-5
LE <3.0
LEGEND:
MONITORING WELL
LE LEAD
UNITS ARE mg/l.
MW-4
LE <3.0
SEI Environmental, Inc.
FIGURE 6: GROUNDWATER COC SITE MAP:
LEAD
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322
WO #300-401
DWG #SG04016E
DATE: 8/5/02
DRAWN BY: JCJ

APPENDIX A

Groundwater Sampling Field Measurements

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
. . . . .	GK4671	07-09-02

GENERATOR

3. Generator's Name and Mailing Address
SEI ENVIRONMENTAL, INC
3021 MCNAUGHTON DR, SUITE 9
COLUMBIA, SC 29223

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
SEI ENVRIONMENTAL, INC	. . . . .	803-788-2535
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
	. . . . .	
9. Designated Facility Name and Site Address G & K TANK SERVICES PO BOX 1384 SUMTER, SC 29151	10. US EPA ID Number	C. Facility's Phone 800-800-6840

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER MORROW GROCERY PAULINE, SC	01	DR		
b. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER ABERNATHY SPARTANBURG, SC	01	DR		
c.				
d. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER SMITH'S GROCERY YORK, SC	01	DR		

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JEFF WEYAND	Jeff W	07	09	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
S. Collins	S. Collins	07	09	02

ORIGINAL - RETURN TO GENERATOR

G & K
TANK SERVICES, INC.

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 1 Drum
Smith's Grocery
York, SC

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to cerify the above ~~soil~~ water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. Sills Date 07/09/02

SEI Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
JAN 2 5
Underground Storage Tank Program

January 22, 2002

Ms. Paula Anderson, Hydrogeologist
SCDHEC - UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Re: Quarterly Groundwater Sampling Report
Smith's Grocery
3176 Charlotte Highway
York, South Carolina
UST Permit #09322

Dear Ms. Anderson:

Attached is the Corrective Action Quarterly Groundwater Sampling Report for Smith's Grocery. Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,
SEI Environmental, Inc.

Robert G. Bolton, Jr.
Project Manager

Attachment

cc: Ms. Lois B. Smith, Smith's Grocery

SEI Environmental, Inc.

CORRECTIVE ACTION
QUARTERLY SAMPLING REPORT

Smith's Grocery
3176 Charlotte Highway
York, South Carolina
York County
UST Permit #09322

PREPARED FOR:

Ms. Paula Anderson
SCDHEC - UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

PREPARED BY:

SEI Environmental, Inc.
3021 McNaughton Drive, Suite 9
Columbia, South Carolina 29223
(803) 788-2535

Robert G. Bolton, Jr.
Project Manager

Frederick P. Lyke, P.G. #1055

January 22, 2002

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 METHODOLOGY 1

3.0 LABORATORY ANALYTICAL RESULTS 2

4.0 REMEDIATION EFFECTIVENESS 4

5.0 CONCLUSIONS 5

6.0 REPORT LIMITATIONS 6

LIST OF TABLES

TABLE I	Groundwater Elevation Data
TABLE II	Historical Groundwater Elevation Data
TABLE III	Groundwater Analytical Results
TABLE IV	Historical Groundwater Analytical Results
TABLE V	System Effectiveness Analysis

LIST OF FIGURES

FIGURE 1	Site Location Map
FIGURE 2	Site Map
FIGURE 3	Groundwater Elevation Contour Map
FIGURES 4-7	CoC Concentrations Maps

LIST OF APPENDICES

APPENDIX A	Groundwater Sampling Field Measurements
APPENDIX B	Laboratory Analytical Results and Chain-of-Custody
APPENDIX C	Disposal Manifest

1.0 INTRODUCTION

South Carolina Department of Health and Environmental Control (SCDHEC) contracted SEI Environmental, Inc. (SEI) to conduct corrective action and quarterly groundwater sampling activities at the Smith's Grocery facility (UST Permit #09322) located at 3176 Charlotte Highway in York, South Carolina. The approximate location of the project site is shown on the United States Geological Survey (USGS), 7.5-Minute Series Topographic Map provided as Figure 1. The corrective action and sampling activities were approved by SCDHEC in correspondence dated March 26, 2001.

2.0 METHODOLOGY

2.1 Site Hydrogeology

During the January 7, 2002, gauging event, liquid phase hydrocarbons (LPH) were not detected in any monitor wells. Groundwater flow direction is toward the east with a hydraulic gradient of 0.0180 feet per foot as measured between Monitor Wells MW-1 and MW-19. Groundwater measurements are summarized in Table I, and a groundwater elevation contour map is depicted in Figure 3.

2.2 Groundwater Sampling and Analysis

On January 7-8, 2002, SEI personnel obtained groundwater samples from Monitor MW-1 through MW-20, TW-1 through TW-3. In addition, three drinking water wells (identified as Hill, Smith, and Strife) were also sampled on these dates. The drinking water well (identified as Vickery) could not be sampled as the electricity had been turned off to the pump. A new, disposable, polyethylene bailer was used for the collection of the water samples from the monitor wells. Each groundwater sample was obtained after pH values and temperature had equilibrated unless petroleum odor was emanating from the well. If petroleum odors were observed in the

monitor well, the groundwater sample was obtained after three well volumes were purged. All purge water was drummed for proper disposal at a permitted treatment facility. Field measurements are presented in Appendix A. New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The groundwater samples were placed in laboratory supplied containers, placed on ice, and shipped via FedEx to TestAmerica Incorporated in Nashville, Tennessee for proper analysis. Proper preservation methods and chain-of-custody procedures were followed throughout the sampling process. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene by EPA method 8260B; ethylene dibromide (EDB) by EPA method 8011; polynuclear aromatic hydrocarbons (PAH) by EPA method 8270C; and lead by EPA method 6010B. In addition, the samples were analyzed for ferrous iron by EPA method 3500D; methane by EPA method RSK175M; nitrate by EPA method 353.2; and sulfate by EPA method 9056.

3.0 LABORATORY ANALYTICAL RESULTS

Groundwater analytical results for the samples collected January 7-8, 2002, detected the presence of benzene concentrations at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, TW-1, and TW-2. Toluene concentrations were detected at Monitor Wells MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, MW-8, MW-10, MW-16, TW-1, and TW-2. Ethylbenzene concentrations were detected at Monitor Wells MW-1, MW-2, MW-5, MW-6, MW-7, MW-8, MW-10, TW-1, and TW-2. Xylenes concentrations were detected at Monitor Wells MW-1, MW-2, MW-5 through MW-10, MW-16, TW-1, and TW-2. MTBE concentrations were detected at Monitor Wells MW-2 and TW-2. Due to high dilution factors, MTBE concentrations were below detection limits at Monitor Wells MW-1, MW-6, MW-8, MW-10, and TW-1; however, MTBE concentrations may exist at these locations. Naphthalene concentrations were detected at Monitor Wells MW-7, MW-9, MW-10, and TW-2. Due to high dilution factors, naphthalene concentrations were below detection limits at Monitor Wells

MW-1, MW-2, MW-6, MW-8, and TW-1; however, naphthalene concentrations may exist at these locations. EDB concentrations were detected at Monitor Wells MW--2, MW-6, MW-7, MW-8, MW-10, MW-12, MW-14, MW-18, TW-1, TW-2, and TW-3. PAH constituents (other than naphthalene) were not detected at any sample locations. Lead concentrations were detected at Monitor Wells MW-1 through MW-4, MW-6 through MW-15, MW-18, MW-19, MW-20, and TW-2. Ferrous iron concentrations were detected at Monitor Wells MW-1, MW-2, MW-3, MW-6 through MW-9, MW-14, MW-18, MW-19, TW-1, and TW-3. Nitrate concentrations were detected at Monitor Wells MW-3, MW-4, MW-11 through MW-16, MW-18, MW-19, MW-20, and TW-3. Also, nitrate concentrations were detected at the drinking water well identified as Smith. Sulfate concentrations were detected at Monitor Wells MW-1, MW-2, MW-6, MW-8, MW-10, MW-12, MW-15, MW-18, TW-1, TW-2, and TW-3.

At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2, benzene, toluene, and ethylbenzene concentrations were detected greater than their respective site specific threshold levels (SSTL) computed specifically for these wells. At Monitor Wells MW-1, MW-6, MW-7, MW-8, and TW-2, xylenes concentrations were detected greater than its SSTL computed specifically for these wells. At MW-2 and TW-2, MTBE concentrations were detected greater than its computed SSTL at these wells. However, MTBE concentrations may exist greater than its SSTL at Monitor Wells MW-1, MW-6, and MW-8 due to high dilution factors which yielded results less than their respective detection limits at these wells. At Monitor Wells MW-7, MW-10, and TW-2, naphthalene concentrations were detected greater than its SSTL computed for each of these wells. However, naphthalene concentrations may exist greater than its SSTL at Monitor Wells MW-1, MW-2, MW-6, and MW-8 due to high dilution factors which yielded results less than their respective detection limits at these wells. At Monitor Wells MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2, EDB concentrations were detected greater than its SSTLs calculated for each of these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-11, MW-13, MW-14, MW-19, and TW-2, lead concentrations were detected greater than its SSTL calculated for each of these wells. Groundwater analytical results are presented in Table

III. Historical groundwater analytical results which compare current and past results with the SSTLs are presented in Table IV. Groundwater concentrations are depicted in Figures 4 through 7. Laboratory analyses and chain-of-custody are presented in Appendix B.

4.0 REMEDIATION EFFECTIVENESS

Chemicals of concern (CoC) concentration reduction is evaluated by verifying if the CoC concentrations reduction goals have been achieved in Monitor Wells MW-1 through MW-20, TW-1 through TW-3, and four drinking water wells named Hill, Smith, Strife, and Vickery. Furthermore, chemical test data from Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, MW-18, MW-19, TW-2, and TW-3 are used to evaluate the effectiveness of the bioremediation.

The evaluation of the remediation effectiveness consists in comparing the January 2002, CoC concentrations against the baseline concentrations and determining the percent of total concentration reduction. This is calculated by subtracting the current sample concentrations above SSTLs from the baseline concentrations above SSTLs and multiplying this amount by 100. This number is then divided by the baseline concentrations above SSTLs. The calculation of the total concentration reduction is presented in Table V.

According to calculations made from the January 2002, sampling event, approximately 13.87 percent of the CoC concentrations has been removed from the site.

5.0 CONCLUSIONS

- Groundwater flow at the site is in an eastern direction with a hydraulic gradient of 0.0180 feet per foot as measured between Monitor Wells MW-1 and MW-19.
- Liquid phase hydrocarbons were not detected in any monitor wells during the current sampling activities.
- Benzene, toluene, and ethylbenzene concentrations were detected greater than their respective calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2.
- Xylenes concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-6, MW-7, MW-8, and TW-2.
- MTBE concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-2 and TW-2. MTBE concentrations may exist greater than the SSTL at Monitor Wells MW-1, MW-6, and MW-8 due to a high dilution factor which yielded results less than detection limits at these wells.
- Naphthalene concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-7, MW-10, and TW-2. Naphthalene concentrations may exist greater than the SSTL at Monitor Wells MW-1, MW-2, MW-6, and MW-8 due to a high dilution factor which yielded results less than detection limits at these wells.
- EDB concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2.
- Lead concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-11, MW-13, MW-14, MW-19, and TW-2.
- According to calculation made from the January 2002, sampling event, approximately 13.87 percent of the CoC concentrations have been removed from the site.

6.0 REPORT LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the current UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

REFERENCES

SCDHEC, May 15, 2001, *Risk-Based Corrective Action for Petroleum Releases*, Columbia, South Carolina.

SEI Environmental, Inc., November 30, 2001, *Corrective Action Quarterly Groundwater Sampling Report – Smith's Grocery*, Columbia, South Carolina.

SEI Environmental, Inc., December 14, 2001, *Corrective Action Quarterly Groundwater Sampling Report – Smith's Grocery*, Columbia, South Carolina.

Table I
Groundwater Elevation Data
Smith's Grocery / York South Carolina

Monitor Well Number	Date Measured	Top of Casing Elevation (feet)	Depth to Ground Water (feet)	Total Depth of Well (feet)	Groundwater Elevation (feet)
MW-1	01/07/02	91.16	30.24	35	60.92
MW-2	01/07/02	94.57	33.97	38	60.60
MW-3	01/07/02	91.91	31.07	35	60.84
MW-4	01/07/02	86.20	25.21	27	60.99
MW-5	01/07/02	89.29	28.97	30	60.32
MW-6	01/07/02	93.91	34.11	37	59.80
MW-7	01/07/02	91.68	33.09	36	58.59
MW-8	01/07/02	94.72	34.06	38	60.66
MW-9	01/07/02	90.54	32.06	36	58.48
MW-10	01/07/02	99.77	39.79	44	59.98
MW-11	01/07/02	100.46	40.52	44	59.94
MW-12	01/07/02	99.61	39.99	44	59.62
MW-13	01/07/02	100.39	42.32	47	58.07
MW-14	01/07/02	98.89	43.89	50	55.00
MW-15	01/07/02	100.18	45.02	50	55.16
MW-16	01/07/02	89.91	32.59	37	57.32
MW-17	01/07/02	94.46	37.07	40	57.39
MW-18	01/07/02	98.14	43.04	46	55.10
MW-19	01/07/02	98.27	45.74	50	52.53
MW-20	01/07/02	NS	29.84	35	Not Applicable
TW-1	01/07/02	94.72	33.91	61	60.81
TW-2	01/07/02	NS	34.16	88	Not Applicable
TW-3	01/07/02	NS	39.42	71	Not Applicable

NS = Not Surveyed

Table II
Historical Groundwater Elevation Data
Smith's Grocery / York South Carolina

Monitor Well Number	Top of Casing Elevation	Depth to Groundwater (feet)		Groundwater Elevation (feet)	
		07/11/01	11/05/01	07/11/01	11/05/01
MW-1	91.16	28.33	29.75	62.83	61.41
MW-2	94.57	31.98	33.35	62.59	61.22
MW-3	91.91	29.00	30.44	62.91	61.47
MW-4	86.20	23.20	24.66	63.00	61.54
MW-5	89.29	27.08	28.47	62.21	60.82
MW-6	93.91	32.22	33.50	61.69	60.41
MW-7	91.68	31.14	32.52	60.54	59.16
MW-8	94.72	32.03	33.43	62.69	61.29
MW-9	90.54	30.04	31.47	60.50	59.07
MW-10	99.77	37.78	39.14	61.99	60.63
MW-11	100.46	38.42	39.90	62.04	60.56
MW-12	99.61	38.11	39.38	61.50	60.23
MW-13	100.39	41.53	42.77	58.86	57.62
MW-14	98.89	42.57	43.45	56.32	55.44
MW-15	100.18	43.67	44.58	56.51	55.60
MW-16	89.91	30.78	32.07	59.13	57.84
MW-17	94.46	35.41	36.56	59.05	57.90
MW-18	98.14	41.75	42.57	56.39	55.57
MW-19	98.27	44.01	45.21	54.26	53.06
MW-20	NS	27.81	29.25	NS	NS
TW-1	94.72	32.00	35.16	62.72	59.56
TW-2	NS	32.40	33.45	NS	NS
TW-3	NS	37.07	38.43	NS	NS

NS = Not Surveyed

TABLE III
Groundwater Analytical Results, dated January 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1 (µg/l)	MW-2 (µg/l)	MW-3 (µg/l)	MW-4 (µg/l)	MW-5 (µg/l)	MW-6 (µg/l)	MW-7 (µg/l)	MW-8 (µg/l)	MW-9 (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	830	21400	<2.0	<2.0	<2.0	3450	1020	6410	<2.0
Toluene	9860	32100	3.8	<2.0	4.7	16700	8100	27700	<2.0
Ethylbenzene	1690	2640	<2.0	<2.0	5.2	2370	3200	2220	<2.0
Xylenes	10800	14300	<2.0	<2.0	31.8	13200	21200	19300	532
Total BTEX	23180	70440	<9.8	<8.0	<43.7	35720	33520	55630	<538
MTBE	<200	860	<2.0	<2.0	<2.0	<200	<2.0	<200	<2.0
Naphthalene	<500	<500	<5.0	<5.0	<5.0	<500	915	<500	51.4
EDB	<0.02	212	<0.02	<0.02	<0.02	9.82	3.35	2.41	<0.02
Benzo(a)anthracene	<5.00	<5.00	<5.00	<5.00	NS	<5.00	<5.00	<5.00	<5.00
Benzo(b)fluoranthene	<5.00	<5.00	<5.00	<5.00	NS	<5.00	<5.00	<5.00	<5.00
Benzo(k)fluoranthene	<5.00	<5.00	<5.00	<5.00	NS	<5.00	<5.00	<5.00	<5.00
Chrysene	<5.00	<5.00	<5.00	<5.00	NS	<5.00	<5.00	<5.00	<5.00
Dibenzo(a,h)anthracene	<5.00	<5.00	<5.00	<5.00	NS	<5.00	<5.00	<5.00	<5.00
Methane	<26.0	<26.0	110	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0

NA = Not Applicable; NS = Not Sampled as the well didn't recharge.

TABLE III (continued)
Groundwater Analytical Results, dated January 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1 (mg/l)	MW-2 (mg/l)	MW-3 (mg/l)	MW-4 (mg/l)	MW-5 (mg/l)	MW-6 (mg/l)	MW-7 (mg/l)	MW-8 (mg/l)	MW-9 (mg/l)
Lead	0.0220	0.215	0.0420	0.0030	NS	0.191	0.0550	0.252	0.0500
Ferrous Iron	5.440	0.295	0.141	<0.100	NS	0.108	0.478	0.369	0.633
Nitrate	<0.100	<0.100	0.950	1.84	NS	<0.100	<0.100	<0.100	<0.100
Sulfate	1.50	1.64	<1.00	<1.00	NS	1.49	<1.00	1.43	<1.00

NA = Not Applicable; NS = Not Sampled as the well didn't recharge.

TABLE III (continued)
Groundwater Analytical Results, dated January 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10 (µg/l)	MW-11 (µg/l)	MW-12 (µg/l)	MW-13 (µg/l)	MW-14 (µg/l)	MW-15 (µg/l)	MW-16 (µg/l)	MW-17 µg/l)	MW-18 (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	7800	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	25400	<2.0	<2.0	<2.0	<2.0	<2.0	12.0	<2.0	<2.0
Ethylbenzene	2400	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes	14400	<2.0	<2.0	<2.0	<2.0	<2.0	11.5	<2.0	<2.0
Total BTEX	50000	<8.0	<8.0	<8.0	<8.0	<8.0	<27.5	<8.0	<8.0
MTBE	<20.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Naphthalene	420	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
EDB	156	<0.02	3.91	<0.02	0.06	<0.02	<0.02	<0.02	0.06
Benzo(a)anthracene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(b)fluoranthene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(k)fluoranthene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chrysene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Dibenzo(a,h)anthracene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methane	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated January 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10 (mg/l)	MW-11 (mg/l)	MW-12 (mg/l)	MW-13 (mg/l)	MW-14 (mg/l)	MW-15 (mg/l)	MW-16 (mg/l)	MW-17 (mg/l)	MW-18 (mg/l)
Lead	0.0060	0.0070	0.0070	0.0830	0.0350	0.0200	<0.0030	<0.0030	0.0050
Ferrous Iron	<0.100	<0.100	<0.100	<0.100	0.441	<0.100	<0.100	<0.100	0.101
Nitrate	<0.100	4.04	0.240	1.40	3.88	0.950	0.330	<0.100	2.10
Sulfate	1.54	<1.00	1.22	<1.00	<1.00	3.25	<1.00	<1.00	1.09

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated January 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19 (µg/l)	MW-20 (µg/l)	TW-1 (µg/l)	TW-2 (µg/l)	TW-3 (µg/l)	Hill (µg/l)	Smith (µg/l)	Strife (µg/l)	Vickery (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	NA
Benzene	<2.0	<2.0	4800	5710	<2.0	<2.0	<2.0	<2.0	NS
Toluene	<2.0	<2.0	10100	4900	<2.0	<2.0	<2.0	<2.0	NS
Ethylbenzene	<2.0	<2.0	2200	260	<2.0	<2.0	<2.0	<2.0	NS
Xylenes	<2.0	<2.0	11600	2170	<2.0	<2.0	<2.0	<2.0	NS
Total BTEX	<8.0	<8.0	28700	13040	<8.0	<8.0	<8.0	<8.0	NA
MTBE	<2.0	<2.0	<200	78.6	<2.0	<2.0	<2.0	<2.0	NS
Naphthalene	<5.0	<5.0	<500	99.0	<5.0	<5.0	<5.0	<5.0	NS
EDB	<0.02	<0.02	1.85	11.2	0.18	<0.02	<0.02	<0.02	NS
Benzo(a)anthracene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	NS
Benzo(b)fluoranthene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	NS
Benzo(k)fluoranthene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	NS
Chrysene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	NS
Dibenzo(a,h)anthracene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	NS
Methane	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	NS

NA = Not Applicable; NS = Not Sampled as there was no power for the pump.

TABLE III (continued)
Groundwater Analytical Results, dated January 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19 (mg/l)	MW-20 (mg/l)	TW-1 (mg/l)	TW-2 (mg/l)	TW-3 (mg/l)	Hill (mg/l)	Smith (mg/l)	Strife (mg/l)	Vickery (mg/l)
Lead	0.0170	0.0630	<0.0030	0.0180	<0.0030	<0.0030	<0.0030	<0.0030	NS
Ferrous Iron	0.168	<0.100	1.130	<0.100	1.200	<0.100	<0.100	<0.100	NS
Nitrate	3.25	0.710	<0.100	<0.100	1.55	<0.100	2.46	<0.100	NS
Sulfate	<1.00	<1.00	2.86	17.5	1.82	<1.00	<1.00	<1.00	NS

NA = Not Applicable; NS = Not Sampled as there was no power for the pump.

TABLE IV
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1				MW-2				MW-3			
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	11	**830**	**899**	**830**	10	**33000**	**26500**	**21400**	NA	<1.0	<2.0	<2.0
Toluene	2223	**13200**	**9340**	**9860**	2021	**50600**	**39000**	**32100**	NA	<1.0	<2.0	3.8
Ethylbenzene	1558	**2300**	**2110**	**1690**	1416	**2260**	**2960**	**2640**	NA	<1.0	<2.0	<2.0
Xylenes	10000	**15200**	**12800**	**10800**	15000	12800	15000	14300	NA	<1.0	<2.0	<2.0
Total BTEX	13792	31530	25149	23180	18447	98660	83460	70440	NA	<4.0	<8.0	<9.8
MTBE	80	**1220**	<50.0	**<200**	81	<5.0	**1290**	**860**	NA	<5.0	<2.0	<2.0
Naphthalene	56	**590**	**581**	**<500**	51	<5.0	**714**	**<500**	NA	<5.0	<5.0	<5.0
EDB	0.32	**325**	0.14	<0.02	10	<1.0	**203**	**212**	NA	<1.0	<0.02	<0.02
Lead	2	**17.0**	**73.0**	**22.0**	30	**789**	**665**	**215**	NA	5.00	28.0	3.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-4				MW-5				MW-6			
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	NA	<1.0	<2.0	<2.0	NA	<1.0	<2.0	<2.0	6	**2840**	**2940**	**3450**
Toluene	NA	<1.0	<2.0	<2.0	NA	<1.0	<2.0	4.7	1212	**13500**	**16300**	**16700**
Ethylbenzene	NA	<1.0	<2.0	<2.0	NA	<1.0	<2.0	5.2	850	**1840**	**2150**	**2370**
Xylenes	NA	<1.0	<2.0	<2.0	NA	<1.0	<2.0	31.8	8000	**8440**	**11400**	**13200**
Total BTEX	NA	<4.0	<8.0	<8.0	NA	<4.0	<8.0	<43.7	10068	26620	32790	35720
MTBE	NA	<5.0	<2.0	<2.0	NA	<5.0	<2.0	<2.0	48	**<1000**	**<50.0**	**<200**
Naphthalene	NA	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	31	**<1000**	**506**	**<500**
EDB	NA	<1.0	<0.02	<0.02	NA	<1.0	<0.02	<0.02	4.83	**<200**	**6.96**	**9.82**
Lead	NA	5.00	11.0	3.0	NA	6.00	39.0	NS	18	11.0	**169**	**191**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable; NS = Not Sampled as the well didn't recharge.

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-7				MW-8				MW-9			
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	6	980	**1020**	**1020**	12	12000	**8420**	**6410**	NA	34.0	<2.0	<2.0
Toluene	1212	370	**4610**	**8100**	2424	78000	**50000**	**27700**	NA	19.0	<2.0	<2.0
Ethylbenzene	850	900	**2400**	**3200**	1700	6400	**4020**	**2220**	NA	23.0	2.6	<2.0
Xylenes	12123	4700	**15700**	**21200**	16000	31400	**22600**	**19300**	NA	175	447	532
Total BTEX	14191	6950	23730	33520	20136	127800	85040	55630	NA	251	<453.6	<538
MTBE	48	<100	**<50.0**	<2.0	96	4.7	**<500**	**<200**	NA	56.0	<2.0	<2.0
Naphthalene	31	360	**796**	**915**	62	910	**700**	**<500**	NA	76.0	39.3	51.4
EDB	0.66	1.14	**1.14**	**3.35**	0.48	0.86	**0.86**	**2.41**	NA	<0.02	<0.02	<0.02
Lead	18	**38.0**	**348**	**55.0**	4	**13.0**	**125**	**252**	NA	11.0	124	50.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10				MW-11				MW-12			
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	9	**6450**	**7430**	**7800**	5	<1.0	<2.0	<2.0	7	**242**	**150**	<2.0
Toluene	1819	**20400**	**18700**	**25400**	5	<1.0	3.3	<2.0	5	**14.8**	**7.5**	<2.0
Ethylbenzene	1274	**2660**	**2040**	**2400**	5	<1.0	<2.0	<2.0	68	27.6	13.6	<2.0
Xylenes	18185	15600	10700	14400	10	<1.0	<2.0	<2.0	730	327	209	<2.0
Total BTEX	21287	**45110**	**38870**	50000	25	<4.0	<9.3	<8.0	810	611.4	380.1	<8.0
MTBE	43	**<100**	**<200**	<20.0	5	<1.0	<2.0	<2.0	5	<1.0	<2.0	<2.0
Naphthalene	46	**<250**	**<500**	**420**	5	<2.5	<5.0	<5.0	36	**38.8**	30.8	<5.0
EDB	9	**<100**	**114**	**156**	0.02	<1.0	<0.02	<0.02	7	**12.7**	4.83	3.91
Lead	21	**74.0**	**89.0**	6.0	5	**18.0**	**68.0**	**7.0**	7	**11.0**	**52.0**	7.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-13				MW-14				MW-15			
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	<1.0	<2.0	<2.0	5	<1.0	<2.0	<2.0	NA	<1.0	<2.0	<2.0
Toluene	5	<1.0	<2.0	<2.0	5	<1.0	<2.0	<2.0	NA	<1.0	<2.0	<2.0
Ethylbenzene	5	<1.0	<2.0	<2.0	5	<1.0	<2.0	<2.0	NA	<1.0	<2.0	<2.0
Xylenes	10	<1.0	<2.0	<2.0	10	<1.0	<2.0	<2.0	NA	<1.0	<2.0	<2.0
Total BTEX	25	<4.0	<8.0	<8.0	25	<4.0	<8.0	<8.0	NA	<4.0	<8.0	<8.0
MTBE	5	<1.0	<2.0	<2.0	5	<1.0	<2.0	<2.0	NA	<1.0	<2.0	<2.0
Naphthalene	5	<2.5	<5.0	<5.0	5	<2.5	<5.0	<5.0	NA	<2.5	<5.0	<5.0
EDB	0.02	<1.0	<0.02	<0.02	0.51	**2.7**	0.11	0.06	NA	<1.0	0.09	<0.02
Lead	5	**28.0**	**56.0**	**83.0**	5	**6.0**	**18.0**	**35.0**	NA	25.0	44.0	20.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-16				MW-17				MW-18			
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	NA	<1.0	<2.0	<2.0	5	<1.0	<2.0	<2.0	5	<1.0	<2.0	<2.0
Toluene	NA	<1.0	<2.0	12.0	5	<1.0	<2.0	<2.0	5	<1.0	<2.0	<2.0
Ethylbenzene	NA	<1.0	<2.0	<2.0	5	<1.0	<2.0	<2.0	5	<1.0	<2.0	<2.0
Xylenes	NA	<1.0	<2.0	11.5	10	<1.0	<2.0	<2.0	10	<1.0	<2.0	<2.0
Total BTEX	NA	<4.0	<8.0	<27.5	25	<4.0	<8.0	<8.0	25	<4.0	<8.0	<8.0
MTBE	NA	<1.0	<2.0	<2.0	5	<1.0	<2.0	<2.0	5	<1.0	<2.0	<2.0
Naphthalene	NA	<2.5	<5.0	<5.0	5	<2.5	<5.0	<5.0	5	<2.5	<5.0	<5.0
EDB	NA	<1.0	<0.02	<0.02	0.02	<1.0	**0.08**	<0.02	0.12	<1.0	0.09	0.06
Lead	NA	26.0	22.0	<3.0	15	5.0	**143**	<3.0	15	11.0	**81.0**	5.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19				MW-20				TW-1			
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	<1.0	<2.0	<2.0	NA	<1.0	<2.0	<2.0	NA	<1.0	4380	4800
Toluene	5	<1.0	<2.0	<2.0	NA	<1.0	<2.0	<2.0	NA	<1.0	3010	10100
Ethylbenzene	5	<1.0	<2.0	<2.0	NA	<1.0	<2.0	<2.0	NA	<1.0	210	2200
Xylenes	10	<1.0	<2.0	<2.0	NA	<1.0	<2.0	<2.0	NA	<1.0	1790	11600
Total BTEX	25	<4.0	<8.0	<8.0	NA	<4.0	<8.0	<8.0	NA	<4.0	9960	28700
MTBE	5	<1.0	<2.0	<2.0	NA	<1.0	<2.0	<2.0	NA	<1.0	52.3	<200
Naphthalene	5	<2.5	<5.0	<5.0	NA	<2.5	<5.0	<5.0	NA	<2.5	195	<500
EDB	0.02	<1.0	<0.02	<0.02	NA	<1.0	<0.02	<0.02	NA	<1.0	5.47	1.85
Lead	15	**31.0**	**45.0**	**17.0**	NA	29.0	66.0	63.0	NA	<3.0	<3.0	<3.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	TW-2				TW-3				Hill			
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	**3610**	**4950**	**5710**	5	<1.0	<2.0	<2.0	2	NS	<1.0	<2.0
Toluene	5	**1660**	**3010**	**4900**	5	<1.0	<2.0	<2.0	2	NS	<1.0	<2.0
Ethylbenzene	5	**50.1**	**210**	**260**	5	<1.0	<2.0	<2.0	2	NS	<1.0	<2.0
Xylenes	180	**465**	**1790**	**2170**	10	<1.0	<2.0	<2.0	2	NS	<1.0	<2.0
Total BTEX	195	5785.1	9960	13040	25	<4.0	<8.0	<8.0	8	NS	<4.0	<8.0
MTBE	5	**50.8**	**52.3**	**78.6**	5	<1.0	<2.0	<2.0	5	NS	<1.0	<2.0
Naphthalene	18	**68.2**	**195**	**99.0**	5	<2.5	<5.0	<5.0	5	NS	<2.5	<5.0
EDB	0.05	**6.3**	**5.47**	**11.2**	0.23	<1.0	0.19	0.18	5	NS	<0.02	<0.02
Lead	2	**6.0**	**4.0**	**18.0**	2	<3.0	<3.0	<3.0	5	NS	<3.0	<3.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable; NS = Not Sampled

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	Smith				Strife				Vickery			
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	NA
Benzene	5	NS	<1.0	<2.0	2	NS	<2.0	<2.0	5	NS	<1.0	NS
Toluene	5	NS	<1.0	<2.0	2	NS	<2.0	<2.0	2	NS	<1.0	NS
Ethylbenzene	5	NS	<1.0	<2.0	2	NS	<2.0	<2.0	2	NS	<1.0	NS
Xylenes	15	NS	<1.0	<2.0	2	NS	<2.0	<2.0	26	NS	<1.0	NS
Total BTEX	30	NS	<4.0	<8.0	8	NS	<8.0	<8.0	35	NS	<4.0	NA
MTBE	5	NS	<5.0	<2.0	2	NS	<2.0	<2.0	2	NS	<1.0	NS
Naphthalene	5	NS	<5.0	<5.0	5	NS	<5.0	<5.0	5	NS	<2.5	NS
EDB	5	NS	<0.02	<0.02	5	NS	1.17	<0.02	5	NS	<0.02	NS
Lead	5	NS	<3.0	<3.0	5	NS	<3.0	<3.0	5	NS	**33.0**	NS

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable; NS = Not Sampled

Table V
System Effectiveness Analysis
Smith's Grocery / York, South Carolina

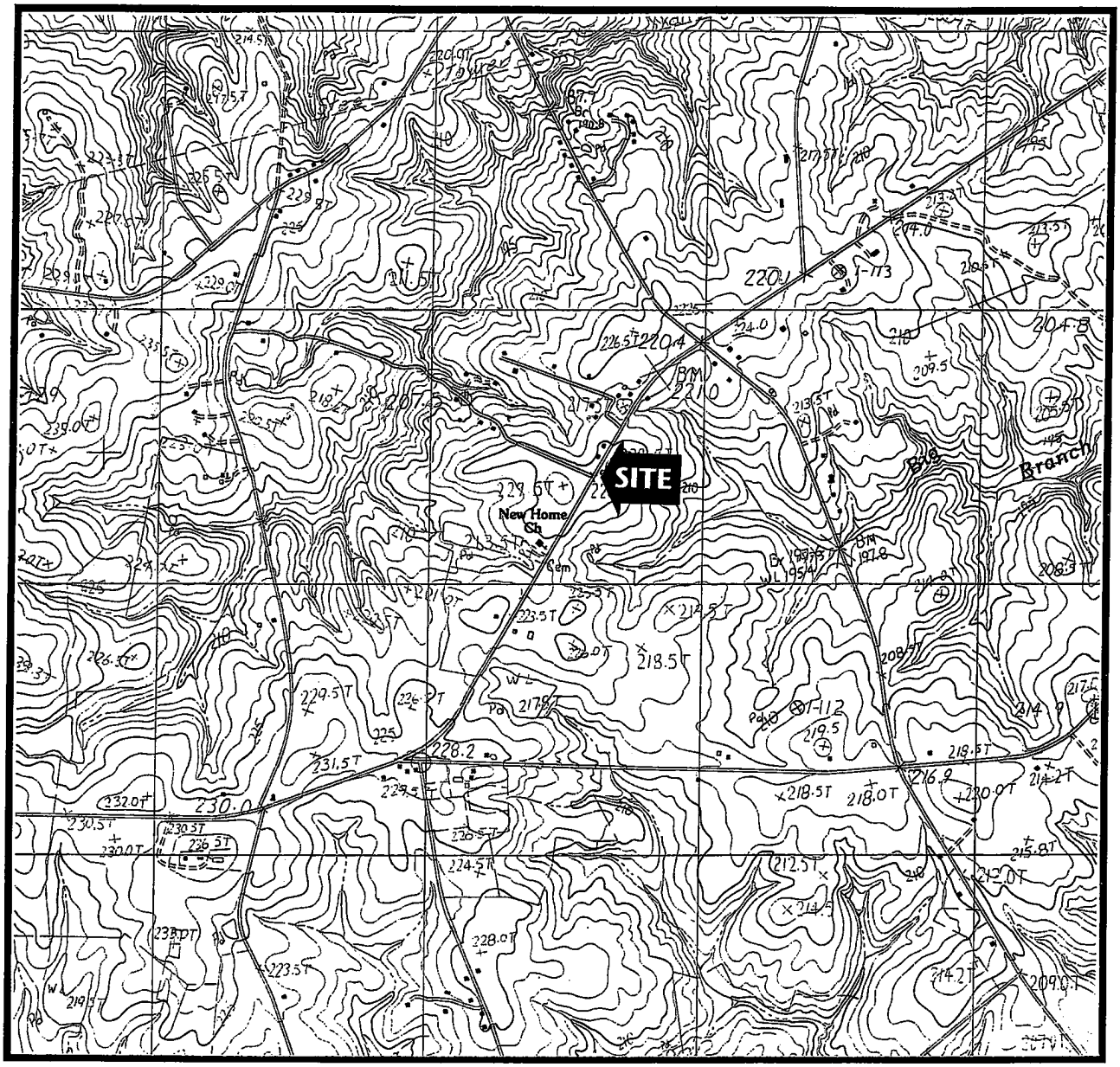
Monitor Well Number	Date of Sample	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	MTBE (µg/L)	Lead (µg/L)	EDB (µg/L)	Total CoC (µg/L)
MW-1	01/07/02	**830**	**9860**	**1690**	**10800**	**500**	**200**	**22.0**	0.02	23902.02
MW-2	01/07/02	**21400**	**32100**	**2640**	**14300**	**500**	**860**	**215**	**212**	72227
MW-6	01/07/02	**3450**	**16700**	**2370**	13200	**500**	**200**	**191**	**9.82**	36620.82
MW-7	01/08/02	**1020**	**8100**	**3200**	**21200**	**915**	2.0	**55.0**	**3.35**	34495.35
MW-8	01/07/02	**6410**	**27700**	**2220**	**19300**	**500**	**200**	**252**	**2.41**	56584.41
MW-10	01/08/02	**7800**	**25400**	**2400**	14400	**420**	20.0	6.0	**156**	50602
MW-11	01/07/02	2.0	2.0	2.0	2.0	5.0	2.0	**7.0**	0.02	22.02
MW-12	01/08/02	2.0	2.0	2.0	2.0	5.0	2.0	7.0	3.91	25.91
MW-13	01/07/02	2.0	2.0	2.0	2.0	5.0	2.0	**83.0**	0.02	98.02
MW-14	01/08/02	2.0	2.0	2.0	2.0	5.0	2.0	**35.0**	0.06	50.06
MW-15	01/08/02	2.0	2.0	2.0	2.0	5.0	2.0	**20.0**	0.02	35.02
MW-17	01/07/02	2.0	2.0	2.0	2.0	5.0	2.0	3.0	0.02	18.02
MW-18	01/08/02	2.0	2.0	2.0	2.0	5.0	2.0	5.0	0.06	20.06
MW-19	01/08/02	2.0	2.0	2.0	2.0	5.0	2.0	**17.0**	0.02	32.02
TW-2	01/07/02	**5710**	**4900**	**260**	**2170**	**99.0**	**78.6**	**18.0**	**11.2**	13246.8
TW-3	01/08/02	2.0	2.0	2.0	2.0	5.0	2.0	**3.0**	0.18	18.18
Sample Concentration	NA	46638	124778	14798	95388	3479	1578.6	939	399.11	287997.71
Baseline Concentration	NA	47,644	158,164	19,824	84,035	4,820	1,694	1,716	322.43	318,219.43
Total SSTL Concentration	NA	120	10,975	7,772	80,343	391	490	199	53.33	100,343.33
Sample Concentration above SSTL on 01/02	NA	46518	113803	7026	15045	3088	1088.6	740	345.78	187654.38

Bold concentrations represent those greater than the respective SSTL.

(Baseline Conc. Above SSTL – Sample Conc. Above SSTL on 01/02) (100) = (217876.1-187654.38)(100) = 13.87% complete
Baseline Conc. Above SSTL 217876.1

7.5 MINUTE SERIES(TOPOGRAPHIC)

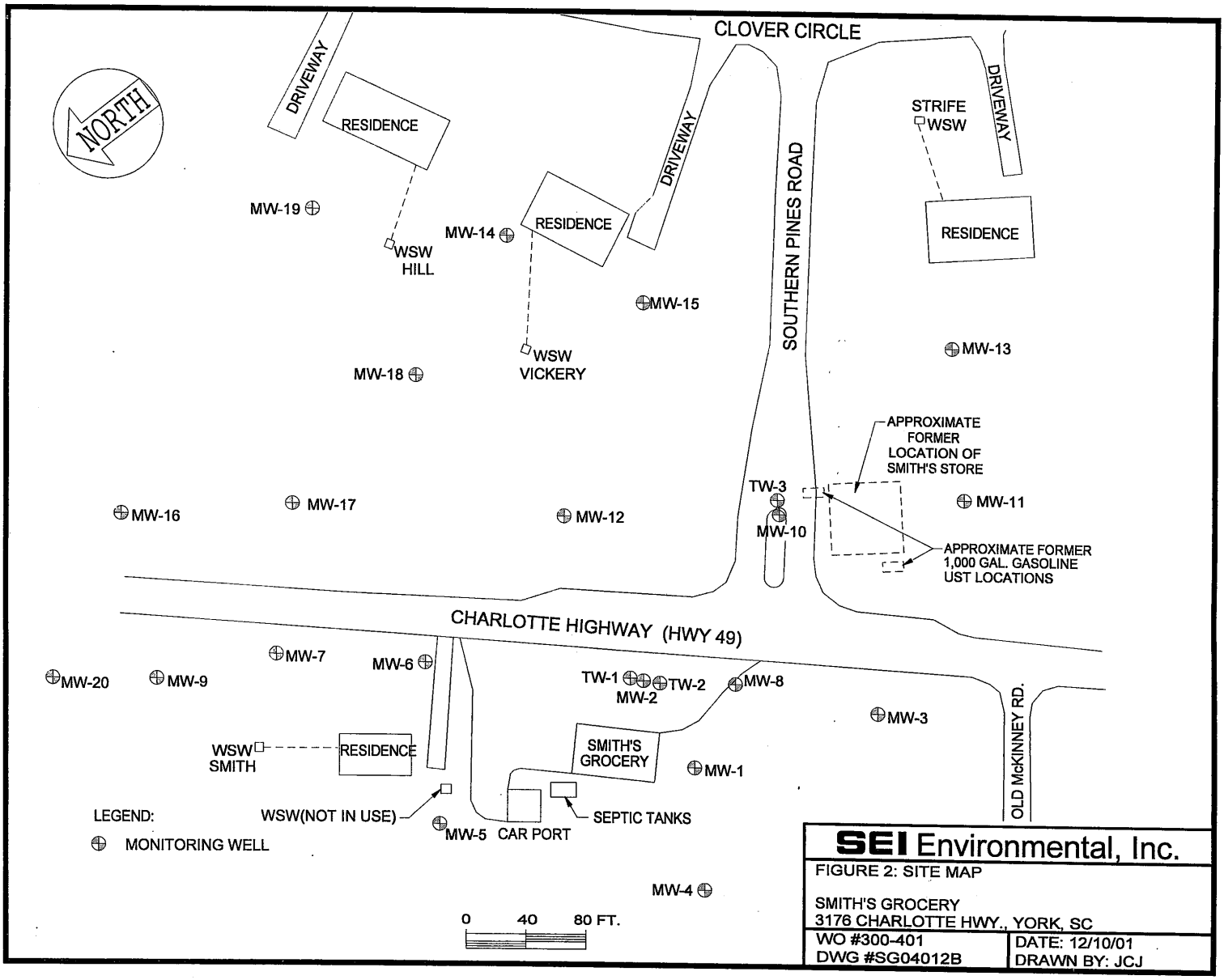
CLOVER QUADRANGLE



SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

WO #300-401	DATE: 12/7/01
DWG #	DRAWN BY: JCJ

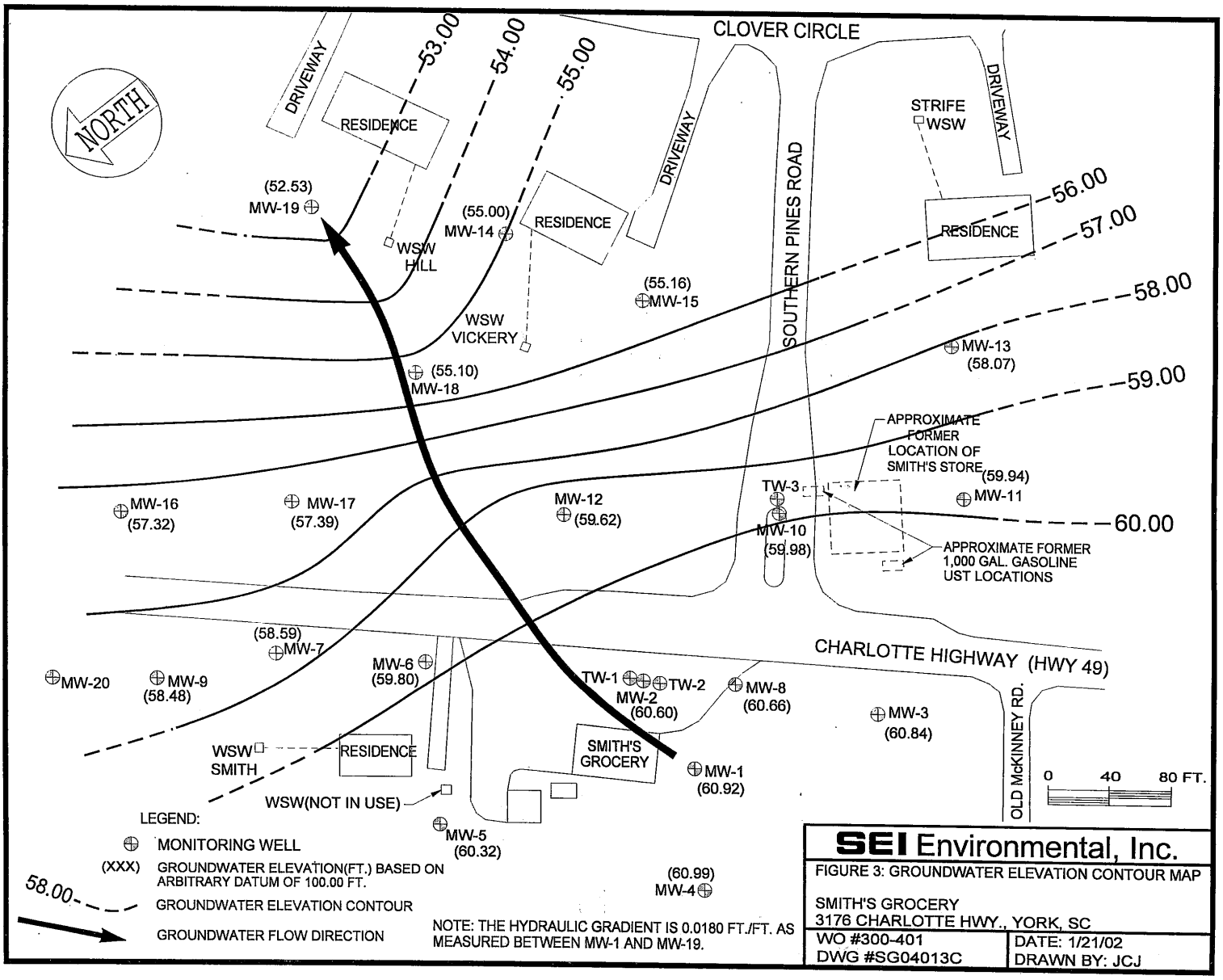


SEI Environmental, Inc.

FIGURE 2: SITE MAP

SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC

WO #300-401	DATE: 12/10/01
DWG #SG04012B	DRAWN BY: JCJ

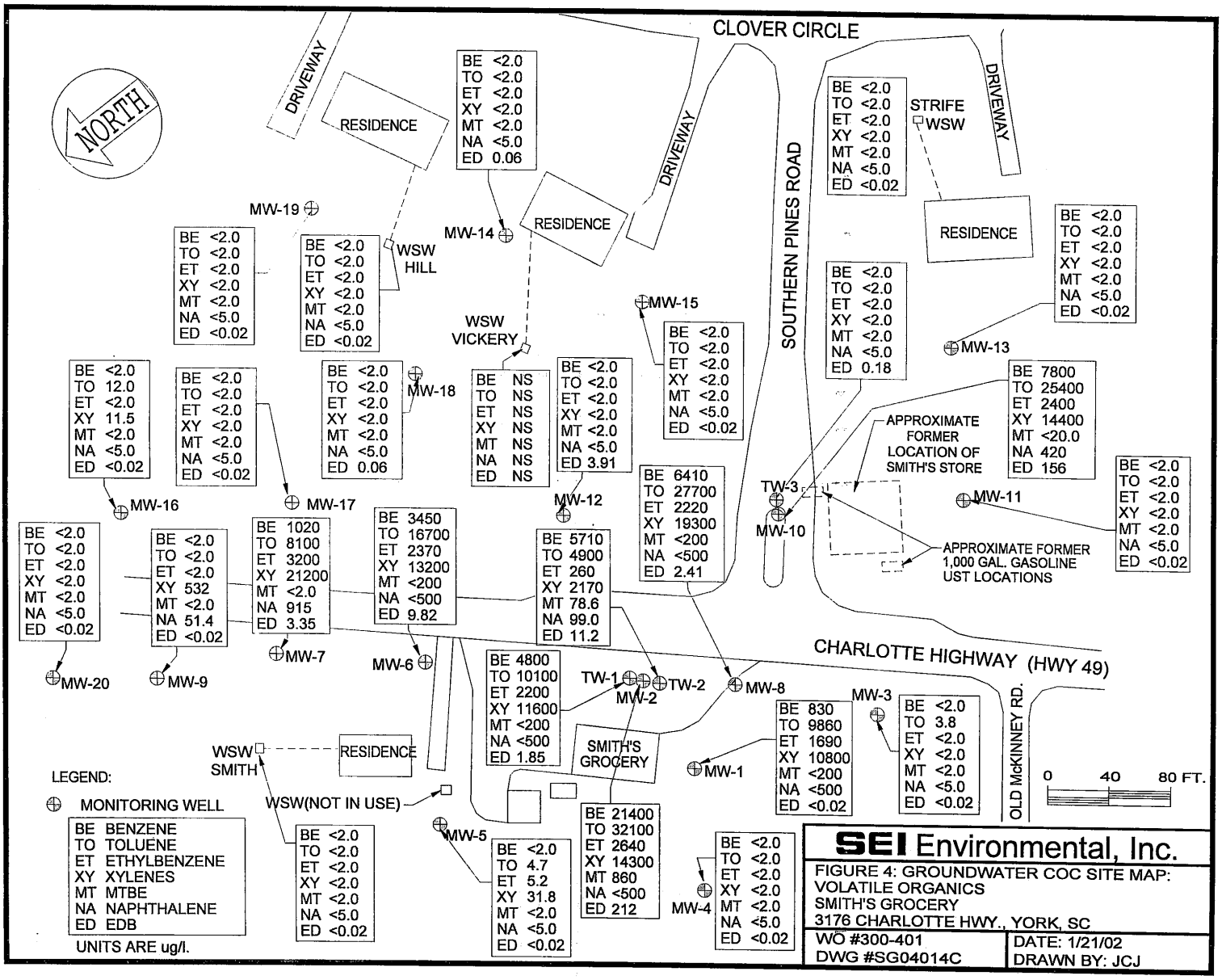


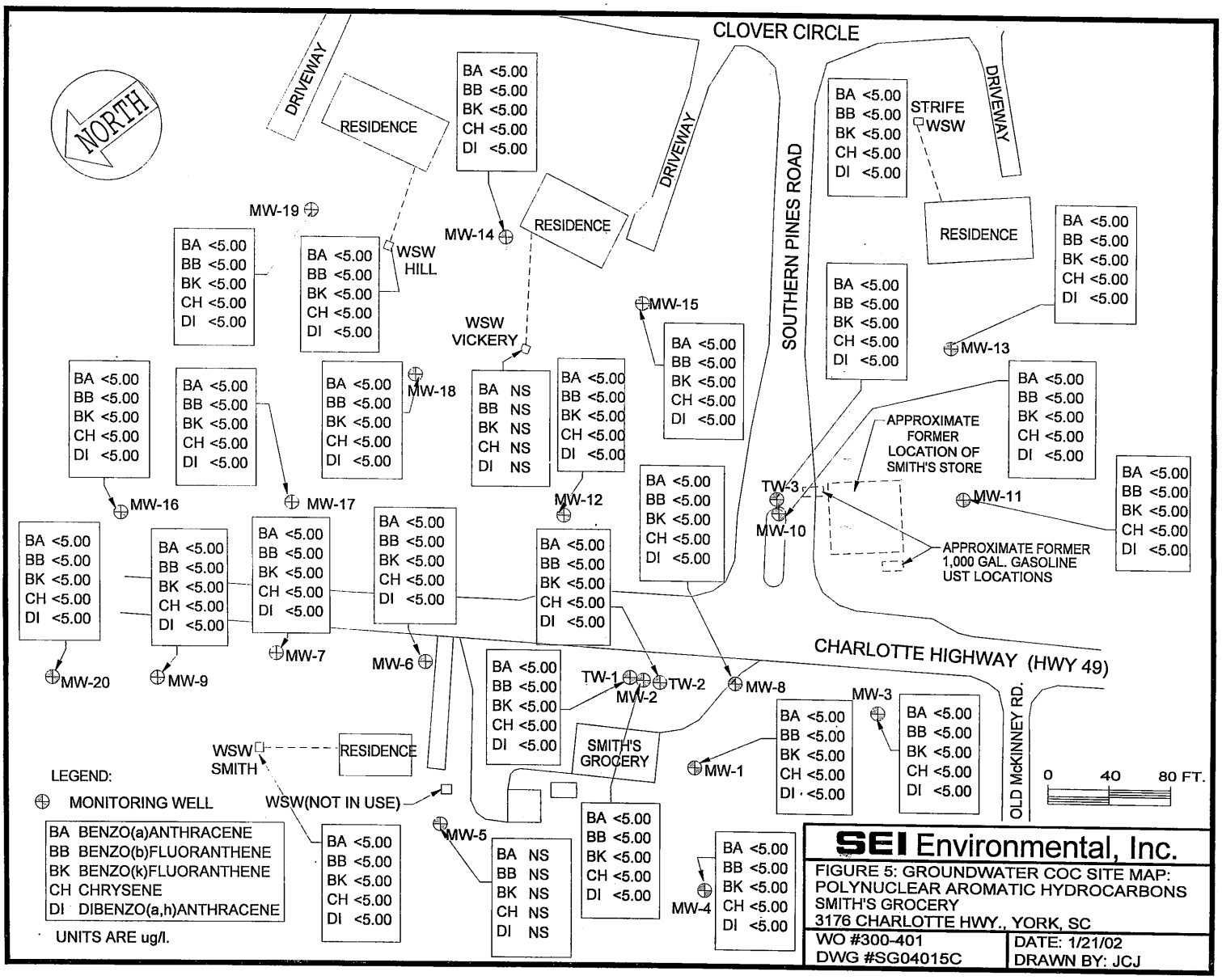
SEI Environmental, Inc.

FIGURE 3: GROUNDWATER ELEVATION CONTOUR MAP

SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC

WO #300-401	DATE: 1/21/02
DWG #SG04013C	DRAWN BY: JCJ

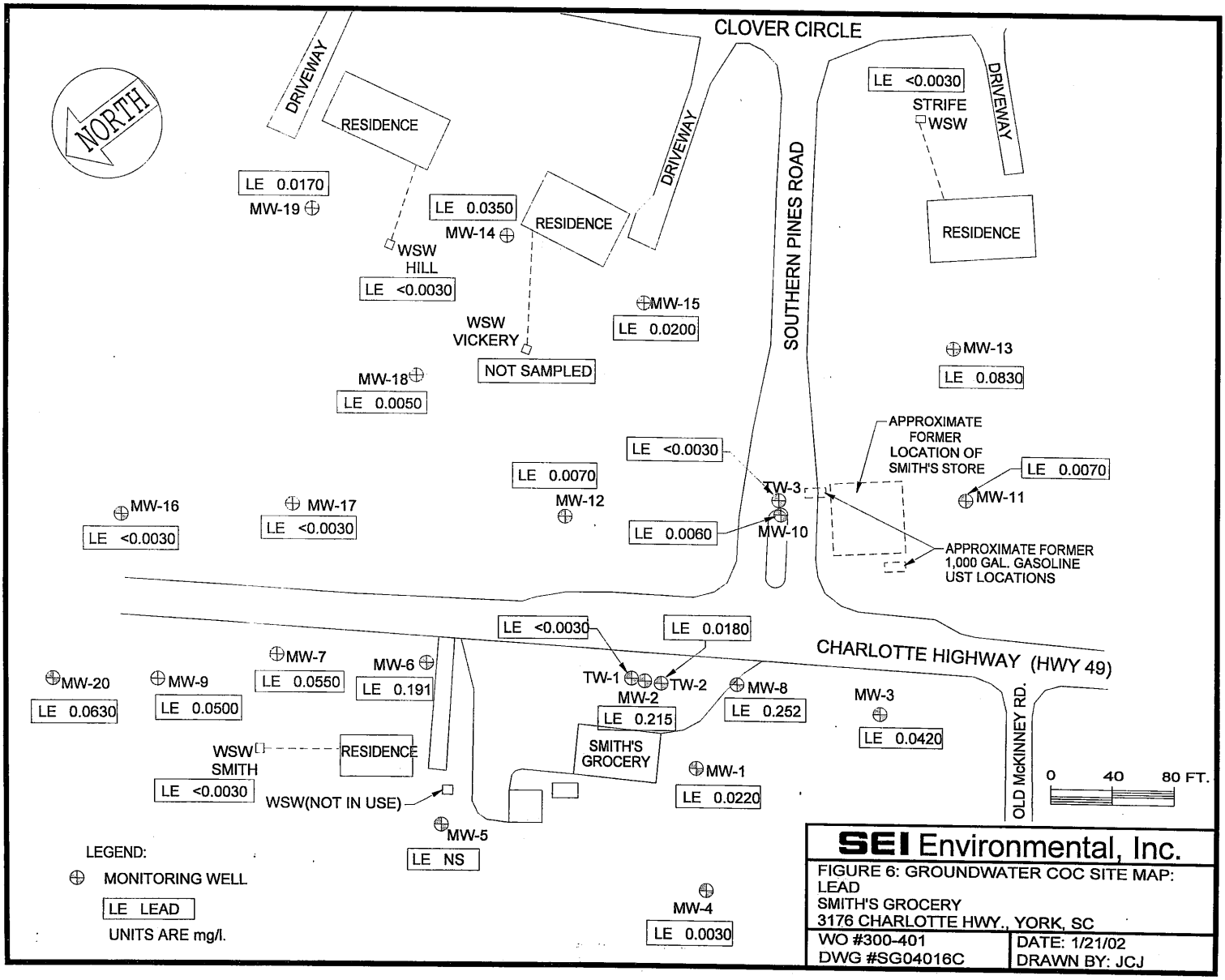

NORTH
CLOVER CIRCLE
DRIVEWAY
RESIDENCE
DRIVEWAY
SOUTHERN PINES ROAD
STRIFE
WSW
DRIVEWAY
RESIDENCE
MW-19
MW-14
RESIDENCE
WSW HILL
WSW VICKERY
MW-15
MW-13
MW-18
MW-16
MW-17
MW-12
APPROXIMATE FORMER LOCATION OF SMITH'S STORE
TW-3
MW-10
MW-11
APPROXIMATE FORMER 1,000 GAL. GASOLINE UST LOCATIONS
CHARLOTTE HIGHWAY (HWY 49)
MW-20
MW-9
MW-7
MW-6
TW-1
MW-2
TW-2
MW-8
MW-3
OLD McKINNEY RD.
WSW SMITH
RESIDENCE
SMITH'S GROCERY
MW-1
MW-5
MW-4
WSW(NOT IN USE)
0 40 80 FT.
LEGEND:
MONITORING WELL
BE BENZENE
TO TOLUENE
ET ETHYLBENZENE
XY XYLENES
MT MTBE
NA NAPHTHALENE
ED EDB
UNITS ARE ug/l.
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED 0.06
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED <0.02
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED <0.02
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED <0.02
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED 0.18
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED <0.02
BE 7800 TO 25400 ET 2400 XY 14400 MT <20.0 NA 420 ED 156
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED <0.02
BE <2.0 TO 12.0 ET <2.0 XY 11.5 MT <2.0 NA <5.0 ED <0.02
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED <0.02
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED 0.06
BE NS TO NS ET NS XY NS MT NS NA NS ED NS
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED 3.91
BE 6410 TO 27700 ET 2220 XY 19300 MT <200 NA <500 ED 2.41
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED <0.02
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED <0.02
BE <2.0 TO <2.0 ET <2.0 XY 532 MT <2.0 NA 51.4 ED <0.02
BE 1020 TO 8100 ET 3200 XY 21200 MT <2.0 NA 915 ED 3.35
BE 3450 TO 16700 ET 2370 XY 13200 MT <200 NA <500 ED 9.82
BE 5710 TO 4900 ET 260 XY 2170 MT 78.6 NA 99.0 ED 11.2
BE 4800 TO 10100 ET 2200 XY 11600 MT <200 NA <500 ED 1.85
BE 830 TO 9860 ET 1690 XY 10800 MT <200 NA <500 ED <0.02
BE <2.0 TO 3.8 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED <0.02
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED <0.02
BE <2.0 TO 4.7 ET 5.2 XY 31.8 MT <2.0 NA <5.0 ED <0.02
BE 21400 TO 32100 ET 2640 XY 14300 MT 860 NA <500 ED 212
BE <2.0 TO <2.0 ET <2.0 XY <2.0 MT <2.0 NA <5.0 ED <0.02
SEI Environmental, Inc.
FIGURE 4: GROUNDWATER COC SITE MAP:
VOLATILE ORGANICS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
WO #300-401
DWG #SG04014C
DATE: 1/21/02
DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 5: GROUNDWATER COC SITE MAP:
POLYNUCLEAR AROMATIC HYDROCARBONS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC

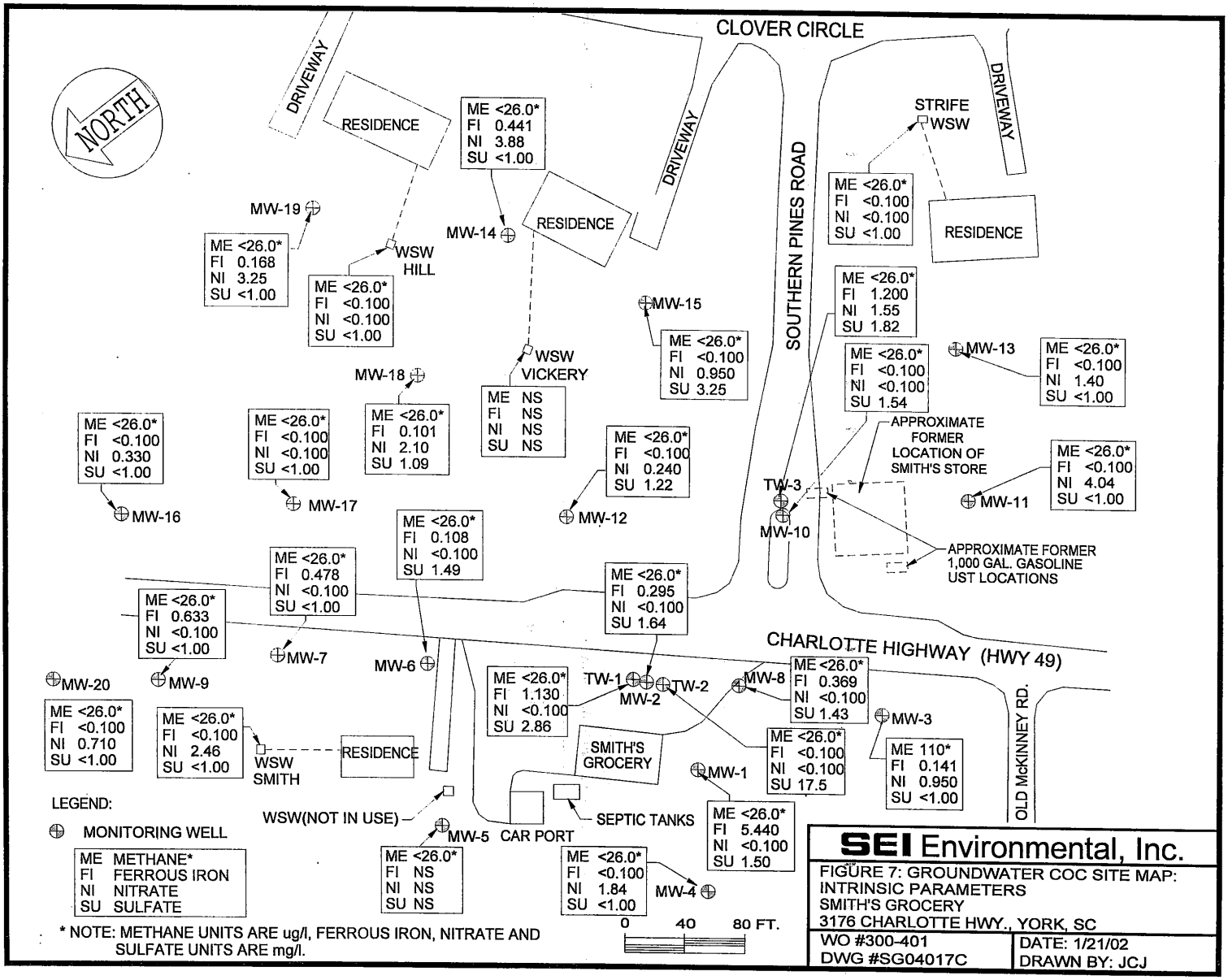
WO #300-401	DATE: 1/21/02
DWG #SG04015C	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 6: GROUNDWATER COC SITE MAP: LEAD
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC

WO #300-401	DATE: 1/21/02
DWG #SG04016C	DRAWN BY: JCJ


NORTH
CLOVER CIRCLE
DRIVEWAY
RESIDENCE
ME <26.0*
FI 0.441
NI 3.88
SU <1.00
DRIVEWAY
STRIFE
WSW
DRIVEWAY
SOUTHERN PINES ROAD
ME <26.0*
FI <0.100
NI <0.100
SU <1.00
RESIDENCE
MW-19
MW-14
RESIDENCE
ME <26.0*
FI 0.168
NI 3.25
SU <1.00
WSW
HILL
ME <26.0*
FI <0.100
NI <0.100
SU <1.00
MW-15
ME <26.0*
FI 1.200
NI 1.55
SU 1.82
WSW
VICKERY
ME <26.0*
FI <0.100
NI 0.950
SU 3.25
MW-13
ME <26.0*
FI <0.100
NI 1.40
SU <1.00
MW-18
ME <26.0*
FI <0.100
NI <0.100
SU 1.54
ME NS
FI NS
NI NS
SU NS
ME <26.0*
FI 0.101
NI 2.10
SU 1.09
APPROXIMATE
FORMER
LOCATION OF
SMITH'S STORE
ME <26.0*
FI <0.100
NI 0.330
SU <1.00
ME <26.0*
FI <0.100
NI <0.100
SU <1.00
ME <26.0*
FI <0.100
NI 0.240
SU 1.22
TW-3
ME <26.0*
FI <0.100
NI 4.04
SU <1.00
MW-16
MW-17
MW-12
MW-11
MW-10
ME <26.0*
FI 0.108
NI <0.100
SU 1.49
APPROXIMATE FORMER
1,000 GAL. GASOLINE
UST LOCATIONS
ME <26.0*
FI 0.478
NI <0.100
SU <1.00
ME <26.0*
FI 0.295
NI <0.100
SU 1.64
ME <26.0*
FI 0.633
NI <0.100
SU <1.00
CHARLOTTE HIGHWAY (HWY 49)
MW-7
MW-6
MW-20
MW-9
ME <26.0*
FI 1.130
NI <0.100
SU 2.86
TW-1
MW-2
TW-2
MW-8
ME <26.0*
FI 0.369
NI <0.100
SU 1.43
MW-3
ME <26.0*
FI <0.100
NI 0.710
SU <1.00
ME <26.0*
FI <0.100
NI 2.46
SU <1.00
WSW
SMITH
RESIDENCE
SMITH'S
GROCERY
ME <26.0*
FI <0.100
NI <0.100
SU 17.5
ME 110*
FI 0.141
NI 0.950
SU <1.00
OLD McKINNEY RD.
MW-1
LEGEND:
MONITORING WELL
ME METHANE*
FI FERROUS IRON
NI NITRATE
SU SULFATE
WSW(NOT IN USE)
MW-5
CAR PORT
SEPTIC TANKS
ME <26.0*
FI 5.440
NI <0.100
SU 1.50
ME <26.0*
FI NS
NI NS
SU NS
ME <26.0*
FI <0.100
NI 1.84
SU <1.00
MW-4
0
40
80 FT.
* NOTE: METHANE UNITS ARE ug/l, FERROUS IRON, NITRATE AND
SULFATE UNITS ARE mg/l.
SEI Environmental, Inc.
FIGURE 7: GROUNDWATER COC SITE MAP:
INTRINSIC PARAMETERS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
WO #300-401
DWG #SG04017C
DATE: 1/21/02
DRAWN BY: JCJ

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. . . . . | Manifest Document No. GK4246 | 2. Page 1 of | 01-08-02

3. Generator's Name and Mailing Address
SEI ENVIRONMENTAL, INC
3021 MCNAUGHTON DR, SUITE 9
COLOMBIA, SC 29223

4. Generator's Phone ( )

5. Transporter 1 Company Name: SEI ENVRIONMENTAL, INC | 6. US EPA ID Number . . . . . | A. Transporter's Phone: 803-788-2535

7. Transporter 2 Company Name | 8. US EPA ID Number . . . . . | B. Transporter's Phone

9. Designated Facility Name and Site Address
G & K TANK SERVICES
PO BOX 1384
SUMTER, SC 29151
| 10. US EPA ID Number . . . . . | C. Facility's Phone: 800-800-6840

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER SMITH'S GROCERY YORK, SC	02	DR		
b. NON HAZARDOUS PETROLEUM CONTAMINANTED SOIL SMITH'S GROCERY YORK, SC	03	DR		
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name | Signature | Month | Day | Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Henry D. Surles | Signature: Henry D. Surles | Month: 01 | Day: 08 | Year: 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: S. Colley | Signature: S. Colley | Month: 01 | Day: 08 | Year: 02

GENERATOR — TRANSPORTER — FACILITY

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL - RETURN TO GENERATOR

12-BLC-M5

G & K
TANK SERVICES, INC.
Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 2 Drums
Smith's Grocery
York, SC

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to cerify the above ~~soil~~ water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. [illegible]

Date 01/08/02

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
APR 9 2002
Underground Storage
Tank Program

April 22, 2002

Ms. Paula Anderson, Hydrogeologist
SCDHEC - UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Re: Quarterly Groundwater Sampling Report
Smith's Grocery
3176 Charlotte Highway
York, South Carolina
UST Permit #09322

Dear Ms. Anderson:

Attached is the Corrective Action Quarterly Groundwater Sampling Report for Smith's Grocery. Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,
SEI Environmental, Inc.

Robert G. Bolton, Jr.
Project Manager

Attachment

cc: Ms. Lois B. Smith, Smith's Grocery

SEI
Environmental, Inc.

CORRECTIVE ACTION
QUARTERLY SAMPLING REPORT

Smith's Grocery
3176 Charlotte Highway
York, South Carolina
York County
UST Permit #09322

PREPARED FOR:

Ms. Paula Anderson
SCDHEC - UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

PREPARED BY:

SEI Environmental, Inc.
3021 McNaughton Drive, Suite 9
Columbia, South Carolina 29223
(803) 788-2535

Robert G. Bolton, Jr.
Project Manager

Frederick P. Lyke, P.G. #1055

April 22, 2002

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 METHODOLOGY 1

3.0 LABORATORY ANALYTICAL RESULTS 2

4.0 REMEDIATION EFFECTIVENESS 4

5.0 CONCLUSIONS 4

6.0 REPORT LIMITATIONS 6

LIST OF TABLES

TABLE I	Groundwater Elevation Data
TABLE II	Historical Groundwater Elevation Data
TABLE III	Groundwater Analytical Results
TABLE IV	Historical Groundwater Analytical Results
TABLE V	System Effectiveness Analysis

LIST OF FIGURES

FIGURE 1	Site Location Map
FIGURE 2	Site Map
FIGURE 3	Groundwater Elevation Contour Map
FIGURES 4-7	CoC Concentrations Maps

LIST OF APPENDICES

APPENDIX A	Groundwater Sampling Field Measurements
APPENDIX B	Laboratory Analytical Results and Chain-of-Custody
APPENDIX C	Disposal Manifest

1.0 INTRODUCTION

South Carolina Department of Health and Environmental Control (SCDHEC) contracted SEI Environmental, Inc. (SEI) to conduct corrective action and quarterly groundwater sampling activities at the Smith's Grocery facility (UST Permit #09322) located at 3176 Charlotte Highway in York, South Carolina. The approximate location of the project site is shown on the United States Geological Survey (USGS), 7.5-Minute Series Topographic Map provided as Figure 1. The corrective action and sampling activities were approved by SCDHEC in correspondence dated March 26, 2001.

2.0 METHODOLOGY

2.1 Site Hydrogeology

During the April 1, 2002, gauging event, liquid phase hydrocarbons (LPH) were not detected in any monitor wells. Groundwater flow direction is toward the east with a hydraulic gradient of 0.0201 feet per foot, as measured between Monitor Wells MW-2 and MW-19. Groundwater measurements are summarized in Table I, and a groundwater elevation contour map is depicted in Figure 3.

2.2 Groundwater Sampling and Analysis

On April 1, 2002, SEI personnel obtained groundwater samples from Monitor MW-1 through MW-20, TW-1 through TW-3. In addition, three drinking water wells (identified as Hill, Smith, and Strife) were also sampled on these dates. The drinking water well (identified as Vickery) could not be sampled as the electricity had been turned off to the pump. A new, disposable, polyethylene bailer was used for the collection of the water samples from the monitor wells. Each groundwater sample was obtained after pH values and temperature had equilibrated unless petroleum odor was emanating from the well. If petroleum odors were observed in the monitor

well, the groundwater sample was obtained after three well volumes were purged. All purge water was drummed for proper disposal at a permitted treatment facility. Field measurements are presented in Appendix A. New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The groundwater samples were placed in laboratory supplied containers, placed on ice, and shipped via FedEx to TestAmerica Incorporated in Nashville, Tennessee for proper analysis. Proper preservation methods and chain-of-custody procedures were followed throughout the sampling process. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene by EPA method 8260B; ethylene dibromide (EDB) by EPA method 8011; polynuclear aromatic hydrocarbons (PAH) by EPA method 8270C; and lead by EPA method 6010B. In addition, the samples were analyzed for ferrous iron by EPA method 3500D; methane by EPA method RSK175M; nitrate by EPA method 353.2; and sulfate by EPA method 9056.

3.0 LABORATORY ANALYTICAL RESULTS

Groundwater analytical results for the samples collected April 1, 2002, detected the presence of benzene concentrations at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-9, MW-10, MW-12, TW-1, and TW-2. Toluene concentrations were detected at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-9, MW-10, MW-12, TW-1, and TW-2. Ethylbenzene, xylenes, and naphthalene concentrations were detected at Monitor Wells MW-1, MW-2, MW-5 through MW-10, MW-12, TW-1, and TW-2. MTBE concentrations were detected at Monitor Wells MW-1 and MW-2. Due to high dilution factors, MTBE concentrations were below detection limits at Monitor Wells MW-6, MW-7, MW-8, MW-10, TW-1, and TW-2; however, MTBE concentrations may exist at these locations. EDB concentrations were detected at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, MW-15, MW-17, MW-18, TW-1, TW-2, and TW-3. In addition, EDB concentrations were detected at the potable water well identified as Hill. PAH constituents (other than naphthalene) were not detected at any sample locations. Lead concentrations were detected at

Monitor Wells MW-1 through MW-18 and MW-20. Ferrous iron concentrations were detected at all sample locations except MW-4, MW-11, TW-2, and the three potable water wells that were sampled. Nitrate concentrations were detected at all sample locations except MW-1, MW-2, MW-6 through MW-10, MW-12, MW-17, TW-1, and TW-2. Sulfate concentrations were detected at Monitor Wells MW-2, MW-6, MW-8, MW-12, MW-14, MW-20, TW-1, TW-2, and TW-3.

At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2, benzene and toluene concentrations were detected greater than their respective site specific threshold levels (SSTL) computed specifically for these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2, ethylbenzene concentrations were detected greater than the SSTLs computed specifically for these wells. At Monitor Wells MW-1, MW-6, MW-7, MW-8, and TW-2, xylenes concentrations were detected greater than its SSTL computed specifically for these wells. At Monitor Well MW-2, MTBE concentrations were detected greater than its computed SSTL. However, MTBE concentrations may exist greater than its SSTL at Monitor Wells MW-6, MW-7, MW-8, MW-10, and TW-2 due to high dilution factors which yielded results less than their respective detection limits at these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2, naphthalene concentrations were detected greater than its SSTL computed for each of these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, MW-17, and TW-2, EDB concentrations were detected greater than its SSTLs calculated for each of these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-17, and MW-18, lead concentrations were detected greater than its SSTL calculated for each of these wells. Groundwater analytical results are presented in Table III. Historical groundwater analytical results which compare current and past results with the SSTLs are presented in Table IV. Groundwater concentrations are depicted in Figures 4 through 7. Laboratory analyses and chain-of-custody are presented in Appendix B.

4.0 REMEDIATION EFFECTIVENESS

Chemicals of concern (CoC) concentration reduction is evaluated by verifying if the CoC concentrations reduction goals have been achieved in Monitor Wells MW-1 through MW-20, TW-1 through TW-3, and four drinking water wells named Hill, Smith, Strife, and Vickery. Furthermore, chemical test data from Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, MW-18, MW-19, TW-2, and TW-3 are used to evaluate the effectiveness of the bioremediation.

The evaluation of the remediation effectiveness consists in comparing the April 2002, CoC concentrations against the baseline concentrations and determining the percent of total concentration reduction. This is calculated by subtracting the current sample concentrations above SSTLs from the baseline concentrations above SSTLs and multiplying this amount by 100. This number is then divided by the baseline concentrations above SSTLs. The calculation of the total concentration reduction is presented in Table V.

According to calculations made from the April 2002, sampling event, approximately 0.00 percent of the CoC concentrations has been removed from the site.

5.0 CONCLUSIONS

- Groundwater flow at the site is in an eastern direction with a hydraulic gradient of 0.0201 feet per foot, as measured between Monitor Wells MW-2 and MW-19.
- Liquid phase hydrocarbons were not detected in any monitor wells during the current sampling activities.
- Benzene and toluene concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2.

- Ethylbenzene concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2.
- Xylenes concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-6, MW-7, MW-8, and TW-2
- MTBE concentrations were detected greater than the calculated SSTLs at Monitor Well MW-2. MTBE concentrations may exist greater than the SSTL at Monitor Wells MW-6, MW-7, MW-8, MW-10, and TW-2 due to a high dilution factor which yielded results less than detection limits at these wells.
- Naphthalene concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2.
- EDB concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, MW-17, and TW-2.
- Lead concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-17, and MW-18.
- According to calculation made from the April 2002, sampling event, approximately 0.00 percent of the CoC concentrations has been removed from the site.
- Due to the presence of EDB concentrations in the Hill's potable water well, the GAC filters on the Hill's and Strife's potable water wells were replaced April 17, 2002. The filter was not changed on the Vickery's potable water well as this well has not been in use since the Vickery's moved in December 2001.
- SEI personnel last injected Microbac™ microbes and nutrients in the injection wells on February 19, 2002. SEI personnel will inject these microbes on a quarterly basis with the next scheduled event planned for May 2002.

6.0 REPORT LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the current UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

REFERENCES

SCDHEC, May 15, 2001, *Risk-Based Corrective Action for Petroleum Releases*, Columbia, South Carolina.

SEI Environmental, Inc., January 22, 2002, *Corrective Action Quarterly Groundwater Sampling Report – Smith's Grocery*, Columbia, South Carolina.

TABLE I
Groundwater Elevation Data
Smith's Grocery / York, South Carolina

Monitor Well Number	Date Measured	Top of Casing Elevation (feet)	Depth to Ground Water (feet)	Total Depth of Well (feet)	Groundwater Elevation (feet)
MW-1	04/01/02	91.16	29.82	35	61.34
MW-2	04/01/02	94.57	33.64	38	60.93
MW-3	04/01/02	91.91	30.73	35	61.18
MW-4	04/01/02	86.20	24.37	27	61.83
MW-5	04/01/02	89.29	27.88	30	61.41
MW-6	04/01/02	93.91	33.57	37	60.34
MW-7	04/01/02	91.68	32.08	36	59.60
MW-8	04/01/02	94.72	33.93	38	60.79
MW-9	04/01/02	90.54	30.99	36	59.55
MW-10	04/01/02	99.77	40.66	44	59.11
MW-11	04/01/02	100.46	40.27	44	60.19
MW-12	04/01/02	99.61	39.62	44	59.99
MW-13	04/01/02	100.39	43.08	47	57.31
MW-14	04/01/02	98.89	44.68	50	54.21
MW-15	04/01/02	100.18	44.15	50	56.03
MW-16	04/01/02	89.91	31.54	37	58.37
MW-17	04/01/02	94.46	36.57	40	57.89
MW-18	04/01/02	98.14	42.88	46	55.26
MW-19	04/01/02	98.27	45.19	50	53.08
MW-20	04/01/02	88.35	28.69	35	59.66
TW-1	04/01/02	94.72	33.62	61	61.10
TW-2	04/01/02	94.72	33.78	88	60.94
TW-3	04/01/02	99.21	38.74	71	60.47

NS = Not Surveyed

TABLE II
Historical Groundwater Elevation Data
Smith's Grocery / York, South Carolina

Monitor Well Number	Top of Casing Elevation	Depth to Groundwater (feet)		Groundwater Elevation (feet)	
		11/05/01	04/01/02	11/05/01	04/01/02
MW-1	91.16	29.75	29.82	61.41	61.34
MW-2	94.57	33.35	33.64	61.22	60.93
MW-3	91.91	30.44	30.73	61.47	61.18
MW-4	86.20	24.66	24.37	61.54	61.83
MW-5	89.29	28.47	27.88	60.82	61.41
MW-6	93.91	33.50	33.57	60.41	60.34
MW-7	91.68	32.52	32.08	59.16	59.60
MW-8	94.72	33.43	33.93	61.29	60.79
MW-9	90.54	31.47	30.99	59.07	59.55
MW-10	99.77	39.14	40.66	60.63	59.11
MW-11	100.46	39.90	40.27	60.56	60.19
MW-12	99.61	39.38	39.62	60.23	59.99
MW-13	100.39	42.77	43.08	57.62	57.31
MW-14	98.89	43.45	44.68	55.44	54.21
MW-15	100.18	44.58	44.15	55.60	56.03
MW-16	89.91	32.07	31.54	57.84	58.37
MW-17	94.46	36.56	36.57	57.90	57.89
MW-18	98.14	42.57	42.88	55.57	55.26
MW-19	98.27	45.21	45.19	53.06	53.08
MW-20	88.35	29.25	28.69	NS	59.66
TW-1	94.72	35.16	33.62	59.56	61.10
TW-2	94.72	33.45	33.78	NS	60.94
TW-3	99.21	38.43	38.74	NS	60.47

NS = Not Surveyed

TABLE III
Groundwater Analytical Results, dated April 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1 (µg/l)	MW-2 (µg/l)	MW-3 (µg/l)	MW-4 (µg/l)	MW-5 (µg/l)	MW-6 (µg/l)	MW-7 (µg/l)	MW-8 (µg/l)	MW-9 (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	1180	16100	<2.0	<2.0	<2.0	4650	1070	6360	2.9
Toluene	17500	21100	<2.0	<2.0	<2.0	24000	5030	41800	33.3
Ethylbenzene	3050	2500	<2.0	<2.0	6.8	3080	2600	3880	7.8
Xylenes	18200	13900	<2.0	<2.0	40.7	17000	17600	24380	65
Total BTEX	39930	53600	<8.0	<8.0	<51.5	48730	26300	76420	109
MTBE	11.5	361	<2.0	<2.0	<2.0	<200	<200	<200	<2.0
Naphthalene	642	516	<5.0	<5.0	6.0	810	930	910	114
EDB	0.72	94.7	<0.02	<0.02	<0.02	8.50	2.46	1.04	<0.02
Benzo(a)anthracene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(b)fluoranthene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(k)fluoranthene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chrysene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Dibenzo(a,h)anthracene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methane	<26.0	<26.0	84.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated April 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1 (mg/l)	MW-2 (mg/l)	MW-3 (mg/l)	MW-4 (mg/l)	MW-5 (mg/l)	MW-6 (mg/l)	MW-7 (mg/l)	MW-8 (mg/l)	MW-9 (mg/l)
Lead	0.113	0.127	0.0440	0.0410	0.0250	0.154	0.173	0.0760	0.0060
Ferrous Iron	4.230	0.148	33.400	<0.100	2.630	0.244	0.243	12.7	1.71
Nitrate	<0.100	<0.100	0.600	1.70	0.460	<0.100	<0.100	<0.100	<0.100
Sulfate	<1.00	1.49	<1.00	<1.00	<1.00	1.11	<1.00	1.68	<1.00

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated April 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10 (µg/l)	MW-11 (µg/l)	MW-12 (µg/l)	MW-13 (µg/l)	MW-14 (µg/l)	MW-15 (µg/l)	MW-16 (µg/l)	MW-17 µg/l)	MW-18 (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	8550	<2.0	389	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	26600	<2.0	8.6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	3130	<2.0	16	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes	15370	<2.0	573	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total BTEX	53650	<8.0	986.6	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
MTBE	<200	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Naphthalene	580	<5.0	53.4	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
EDB	128	<0.02	7.18	<0.02	<0.02	0.07	<0.02	0.06	0.08
Benzo(a)anthracene	<5.00	<5.00	<5.00	<5.00	<10.0	<7.14	<5.00	<5.00	<5.00
Benzo(b)fluoranthene	<5.00	<5.00	<5.00	<5.00	<10.0	<7.14	<5.00	<5.00	<5.00
Benzo(k)fluoranthene	<5.00	<5.00	<5.00	<5.00	<10.0	<7.14	<5.00	<5.00	<5.00
Chrysene	<5.00	<5.00	<5.00	<5.00	<10.0	<7.14	<5.00	<5.00	<5.00
Dibenzo(a,h)anthracene	<5.00	<5.00	<5.00	<5.00	<10.0	<7.14	<5.00	<5.00	<5.00
Methane	<26.0	<26.0	152	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated April 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10 (mg/l)	MW-11 (mg/l)	MW-12 (mg/l)	MW-13 (mg/l)	MW-14 (mg/l)	MW-15 (mg/l)	MW-16 (mg/l)	MW-17 (mg/l)	MW-18 (mg/l)
Lead	0.0440	0.0150	0.0650	0.0270	0.0380	0.0580	0.0060	0.0200	0.0280
Ferrous Iron	0.116	<0.100	46.7	0.196	0.203	0.116	0.253	4.230	0.124
Nitrate	<0.100	3.37	<0.100	1.14	0.980	3.07	0.350	<0.100	1.75
Sulfate	<1.00	<1.00	2.10	<1.00	2.40	<1.00	<0.100	<1.00	<1.00

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated April 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19 (µg/l)	MW-20 (µg/l)	TW-1 (µg/l)	TW-2 (µg/l)	TW-3 (µg/l)	Hill (µg/l)	Smith (µg/l)	Strife (µg/l)	Vickery (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	NA
Benzene	<2.0	<2.0	4640	5650	<2.0	<2.0	<2.0	<2.0	NS
Toluene	<2.0	<2.0	7200	4210	<2.0	<2.0	<2.0	<2.0	NS
Ethylbenzene	<2.0	<2.0	2380	285	<2.0	<2.0	<2.0	<2.0	NS
Xylenes	<2.0	<2.0	13100	2530	<2.0	<2.0	<2.0	<2.0	NS
Total BTEX	<8.0	<8.0	27320	12675	<8.0	<8.0	<8.0	<8.0	NA
MTBE	<2.0	<2.0	<100	<100	<2.0	<2.0	<2.0	<2.0	NS
Naphthalene	<5.0	<5.0	445	270	<5.0	<5.0	<5.0	<5.0	NS
EDB	<0.02	<0.02	1.36	6.02	0.16	0.02	<0.02	<0.02	NS
Benzo(a)anthracene	<5.00	<5.00	NS	<5.00	<5.00	<5.00	<5.00	<5.00	NS
Benzo(b)fluoranthene	<5.00	<5.00	NS	<5.00	<5.00	<5.00	<5.00	<5.00	NS
Benzo(k)fluoranthene	<5.00	<5.00	NS	<5.00	<5.00	<5.00	<5.00	<5.00	NS
Chrysene	<5.00	<5.00	NS	<5.00	<5.00	<5.00	<5.00	<5.00	NS
Dibenzo(a,h)anthracene	<5.00	<5.00	NS	<5.00	<5.00	<5.00	<5.00	<5.00	NS
Methane	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	NS

NA = Not Applicable; NS = Not Sampled

TABLE III (continued)
Groundwater Analytical Results, dated April 2002
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19 (mg/l)	MW-20 (mg/l)	TW-1 (mg/l)	TW-2 (mg/l)	TW-3 (mg/l)	Hill (mg/l)	Smith (mg/l)	Strife (mg/l)	Vickery (mg/l)
Lead	<0.0030	0.0140	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	NS
Ferrous Iron	0.105	0.171	3.710	<0.100	2.140	<0.100	<0.100	<0.100	NS
Nitrate	2.88	0.510	<0.100	<0.100	1.03	0.670	2.04	0.620	NS
Sulfate	<1.00	1.86	1.87	12.0	1.21	<1.00	<1.00	<1.00	NS

NA = Not Applicable; NS = Not Sampled

TABLE IV
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1				MW-2				MW-3			
Sampling Date	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	11	**899**	**830**	**1180**	10	**26500**	**21400**	**16100**	NA	<2.0	<2.0	<2.0
Toluene	2223	**9340**	**9860**	**17500**	2021	**39000**	**32100**	**21100**	NA	<2.0	3.8	<2.0
Ethylbenzene	1558	**2110**	**1690**	**3050**	1416	**2960**	**2640**	**2500**	NA	<2.0	<2.0	<2.0
Xylenes	10000	**12800**	**10800**	**18200**	15000	15000	14300	13900	NA	<2.0	<2.0	<2.0
Total BTEX	13792	25149	23180	39930	18447	83460	70440	53600	NA	<8.0	<9.8	<8.0
MTBE	80	<50.0	**<200**	11.5	81	**1290**	**860**	**361**	NA	<2.0	<2.0	<2.0
Naphthalene	56	**581**	**<500**	**642**	51	**714**	**<500**	**516**	NA	<5.0	<5.0	<5.0
EDB	0.32	0.14	<0.02	**0.72**	10	**203**	**212**	**94.7**	NA	<0.02	<0.02	<0.02
Lead	2	**73.0**	**22.0**	**113**	30	**665**	**215**	**127**	NA	28.0	3.0	44.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-4				MW-5				MW-6			
Sampling Date	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	NA	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0	6	**2940**	**3450**	**4650**
Toluene	NA	<2.0	<2.0	<2.0	NA	<2.0	4.7	<2.0	1212	**16300**	**16700**	**24000**
Ethylbenzene	NA	<2.0	<2.0	<2.0	NA	<2.0	5.2	6.8	850	**2150**	**2370**	**3080**
Xylenes	NA	<2.0	<2.0	<2.0	NA	<2.0	31.8	40.7	8000	**11400**	**13200**	**17000**
Total BTEX	NA	<8.0	<8.0	<8.0	NA	<8.0	<43.7	<51.5	10068	32790	35720	48730
MTBE	NA	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0	48	**<50.0**	**<200**	**<200**
Naphthalene	NA	<5.0	<5.0	<5.0	NA	<5.0	<5.0	6.0	31	**506**	**<500**	**810**
EDB	NA	<0.02	<0.02	<0.02	NA	<0.02	<0.02	<0.02	4.83	**6.96**	**9.82**	**8.50**
Lead	NA	11.0	3.0	41.0	NA	39.0	NS	25.0	18	**169**	**191**	**154**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable; NS = Not Sampled as the well didn't recharge.

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-7				MW-8				MW-9			
Sampling Date	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	6	**1020**	**1020**	**1070**	12	**8420**	**6410**	**6360**	NA	<2.0	<2.0	2.9
Toluene	1212	**4610**	**8100**	**5030**	2424	**50000**	**27700**	**41800**	NA	<2.0	<2.0	33.3
Ethylbenzene	850	**2400**	**3200**	**2600**	1700	**4020**	**2220**	**3880**	NA	2.6	<2.0	7.8
Xylenes	12123	**15700**	**21200**	**17600**	16000	**22600**	**19300**	**24380**	NA	447	532	65
Total BTEX	14191	23730	33520	26300	20136	85040	55630	76420	NA	<453.6	<538	109
MTBE	48	**<50.0**	<2.0	**<200**	96	**<500**	**<200**	**<200**	NA	<2.0	<2.0	<2.0
Naphthalene	31	**796**	**915**	**930**	62	**700**	**<500**	**910**	NA	39.3	51.4	114
EDB	0.66	**1.14**	**3.35**	**2.46**	0.48	**0.86**	**2.41**	**1.04**	NA	<0.02	<0.02	<0.02
Lead	18	**348**	**55.0**	**173**	4	**125**	**252**	**76.0**	NA	124	50.0	6.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10				MW-11				MW-12			
Sampling Date	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	9	**7430**	**7800**	**8550**	5	<2.0	<2.0	<2.0	7	**150**	<2.0	**389**
Toluene	1819	**18700**	**25400**	**26600**	5	3.3	<2.0	<2.0	5	**7.5**	<2.0	**8.6**
Ethylbenzene	1274	**2040**	**2400**	**3130**	5	<2.0	<2.0	<2.0	68	13.6	<2.0	16
Xylenes	18185	10700	14400	15370	10	<2.0	<2.0	<2.0	730	209	<2.0	573
Total BTEX	21287	**38870**	50000	53650	25	<9.3	<8.0	<8.0	810	380.1	<8.0	986.6
MTBE	43	**<200**	<20.0	**<200**	5	<2.0	<2.0	<2.0	5	<2.0	<2.0	<2.0
Naphthalene	46	**<500**	**420**	**580**	5	<5.0	<5.0	<5.0	36	30.8	<5.0	**53.4**
EDB	9	**114**	**156**	**128**	0.02	<0.02	<0.02	<0.02	7	4.83	3.91	**7.18**
Lead	21	**89.0**	6.0	**44.0**	5	**68.0**	**7.0**	**15.0**	7	**52.0**	7.0	**65.0**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-13				MW-14				MW-15			
Sampling Date	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	<2.0	<2.0	<2.0	5	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0
Toluene	5	<2.0	<2.0	<2.0	5	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0
Ethylbenzene	5	<2.0	<2.0	<2.0	5	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0
Xylenes	10	<2.0	<2.0	<2.0	10	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0
Total BTEX	25	<8.0	<8.0	<8.0	25	<8.0	<8.0	<8.0	NA	<8.0	<8.0	<8.0
MTBE	5	<2.0	<2.0	<2.0	5	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0
Naphthalene	5	<5.0	<5.0	<5.0	5	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0
EDB	0.02	<0.02	<0.02	<0.02	0.51	0.11	0.06	<0.02	NA	0.09	<0.02	0.07
Lead	5	**56.0**	**83.0**	**27.0**	5	**18.0**	**35.0**	**38.0**	NA	44.0	20.0	58.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-16				MW-17				MW-18			
Sampling Date	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	NA	<2.0	<2.0	<2.0	5	<2.0	<2.0	<2.0	5	<2.0	<2.0	<2.0
Toluene	NA	<2.0	12.0	<2.0	5	<2.0	<2.0	<2.0	5	<2.0	<2.0	<2.0
Ethylbenzene	NA	<2.0	<2.0	<2.0	5	<2.0	<2.0	<2.0	5	<2.0	<2.0	<2.0
Xylenes	NA	<2.0	11.5	<2.0	10	<2.0	<2.0	<2.0	10	<2.0	<2.0	<2.0
Total BTEX	NA	<8.0	<27.5	<8.0	25	<8.0	<8.0	<8.0	25	<8.0	<8.0	<8.0
MTBE	NA	<2.0	<2.0	<2.0	5	<2.0	<2.0	<2.0	5	<2.0	<2.0	<2.0
Naphthalene	NA	<5.0	<5.0	<5.0	5	<5.0	<5.0	<5.0	5	<5.0	<5.0	<5.0
EDB	NA	<0.02	<0.02	<0.02	0.02	**0.08**	<0.02	**0.06**	0.12	0.09	0.06	0.08
Lead	NA	22.0	<3.0	6.0	15	**143**	<3.0	**20.0**	15	**81.0**	5.0	**28.0**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19				MW-20				TW-1			
Sampling Date	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0	NA	4380	4800	4640
Toluene	5	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0	NA	3010	10100	7200
Ethylbenzene	5	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0	NA	210	2200	2380
Xylenes	10	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0	NA	1790	11600	13100
Total BTEX	25	<8.0	<8.0	<8.0	NA	<8.0	<8.0	<8.0	NA	9960	28700	27320
MTBE	5	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0	NA	52.3	<200	<100
Naphthalene	5	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	NA	195	<500	445
EDB	0.02	<0.02	<0.02	<0.02	NA	<0.02	<0.02	<0.02	NA	5.47	1.85	1.36
Lead	15	**45.0**	**17.0**	<3.0	NA	66.0	63.0	14.0	NA	<3.0	<3.0	<3.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	TW-2				TW-3				Hill			
Sampling Date	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	None	None
Benzene	5	**4950**	**5710**	**5650**	5	<2.0	<2.0	<2.0	2	<1.0	<2.0	<2.0
Toluene	5	**3010**	**4900**	**4210**	5	<2.0	<2.0	<2.0	2	<1.0	<2.0	<2.0
Ethylbenzene	5	**210**	**260**	**285**	5	<2.0	<2.0	<2.0	2	<1.0	<2.0	<2.0
Xylenes	180	**1790**	**2170**	**2530**	10	<2.0	<2.0	<2.0	2	<1.0	<2.0	<2.0
Total BTEX	195	9960	13040	12675	25	<8.0	<8.0	<8.0	8	<4.0	<8.0	<8.0
MTBE	5	**52.3**	**78.6**	**<100**	5	<2.0	<2.0	<2.0	5	<1.0	<2.0	<2.0
Naphthalene	18	**195**	**99.0**	**270**	5	<5.0	<5.0	<5.0	5	<2.5	<5.0	<5.0
EDB	0.05	**5.47**	**11.2**	**6.02**	0.23	0.19	0.18	0.16	5	<0.02	<0.02	0.02
Lead	2	**4.0**	**18.0**	<3.0	2	<3.0	<3.0	<3.0	5	<3.0	<3.0	<3.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable; NS = Not Sampled

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	Smith				Strife				Vickery			
Sampling Date	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)	SSTL (µg/l)	11/2001 (µg/l)	01/2002 (µg/l)	04/2002 (µg/l)
Free Product Thickness	NA	None	None	None	NA	None	None	None	NA	None	NA	NA
Benzene	5	<1.0	<2.0	<2.0	2	<2.0	<2.0	<2.0	5	<1.0	NS	NS
Toluene	5	<1.0	<2.0	<2.0	2	<2.0	<2.0	<2.0	2	<1.0	NS	NS
Ethylbenzene	5	<1.0	<2.0	<2.0	2	<2.0	<2.0	<2.0	2	<1.0	NS	NS
Xylenes	15	<1.0	<2.0	<2.0	2	<2.0	<2.0	<2.0	26	<1.0	NS	NS
Total BTEX	30	<4.0	<8.0	<8.0	8	<8.0	<8.0	<8.0	35	<4.0	NA	NA
MTBE	5	<5.0	<2.0	<2.0	2	<2.0	<2.0	<2.0	2	<1.0	NS	NS
Naphthalene	5	<5.0	<5.0	<5.0	5	<5.0	<5.0	<5.0	5	<2.5	NS	NS
EDB	5	<0.02	<0.02	<0.02	5	1.17	<0.02	<0.02	5	<0.02	NS	NS
Lead	5	<3.0	<3.0	<3.0	5	<3.0	<3.0	<3.0	5	**33.0**	NS	NS

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable; NS = Not Sampled

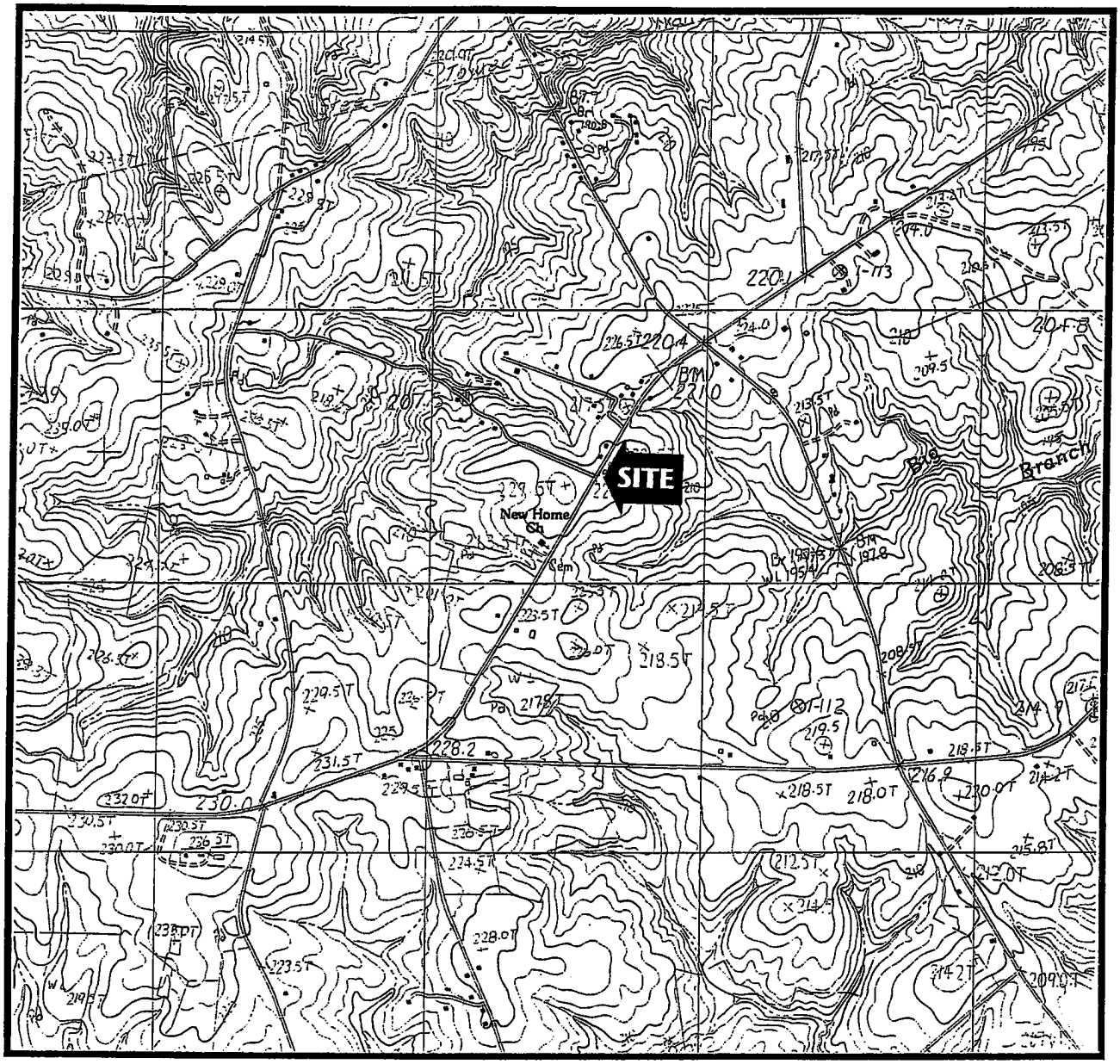
TABLE V
System Effectiveness Analysis
Smith's Grocery / York, South Carolina

Monitor Well Number	Date of Sample	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	MTBE (µg/L)	Lead (µg/L)	EDB (µg/L)	Total CoC (µg/L)
MW-1	04/01/02	**1180**	**17500**	**3050**	**18200**	**642**	11.5	**113**	**0.72**	40697.22
MW-2	04/01/02	**16100**	**21100**	**2500**	13900	**516**	**361**	**127**	**94.7**	54698.7
MW-6	04/01/02	**4650**	**24000**	**3080**	**17000**	**810**	**200**	**154**	**8.50**	49902.5
MW-7	04/01/02	**1070**	**5030**	**2600**	**17600**	**930**	**200**	**173**	**2.46**	27605.46
MW-8	04/01/02	**6360**	**41800**	**3880**	**24380**	**910**	**200**	**76**	**1.04**	77607.04
MW-10	04/01/02	**8550**	**26600**	**3130**	15370	**580**	**200**	**44**	**128**	54602
MW-11	04/01/02	2	2	2	2	5	2	**15**	0.02	30.02
MW-12	04/01/02	**389**	**8.6**	16	573	**53.4**	2	**65**	**7.18**	1114.18
MW-13	04/01/02	2	2	2	2	5	2	**27**	0.02	42.02
MW-14	04/01/02	2	2	2	2	5	2	**38**	0.02	53.02
MW-15	04/01/02	2	2	2	2	5	2	**58**	0.07	73.07
MW-17	04/01/02	2	2	2	2	5	2	**20**	0.06	35.06
MW-18	04/01/02	2	2	2	2	5	2	**28**	0.08	43.08
MW-19	04/01/02	2	2	2	2	5	2	**3**	0.02	18.02
TW-2	04/01/02	**5650**	**4210**	**285**	**2530**	**270**	**100**	3	**6.02**	13054.02
TW-3	04/01/02	2	2	2	2	5	2	3	0.16	18.16
Sample Concentration	NA	43,965	140,264.6	18,557	109,569	4,751.4	1,290.5	947	249.07	319,593.57
Baseline Concentration	NA	47,644	158,164	19,824	84,035	4,820	1,694	1,716	322.43	318,219.43
Total SSTL Concentration	NA	120	10,975	7,772	80,343	391	490	199	53.33	100,343.33
Sample Concentration above SSTL on 04/02	NA	43,845	129,289.6	10,785	29,226	4,117.4	800.5	748	195.74	219,250.24

Bold concentrations represent those greater than the respective SSTL.

(Baseline Conc. Above SSTL – Sample Conc. Above SSTL on 01/02) (100) = (217876.1-219250.24)(100) = 0.00% complete
Baseline Conc. Above SSTL 217876.1

7.5 MINUTE SERIES(TOPOGRAPHIC) CLOVER QUADRANGLE



SCALE 1:24000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

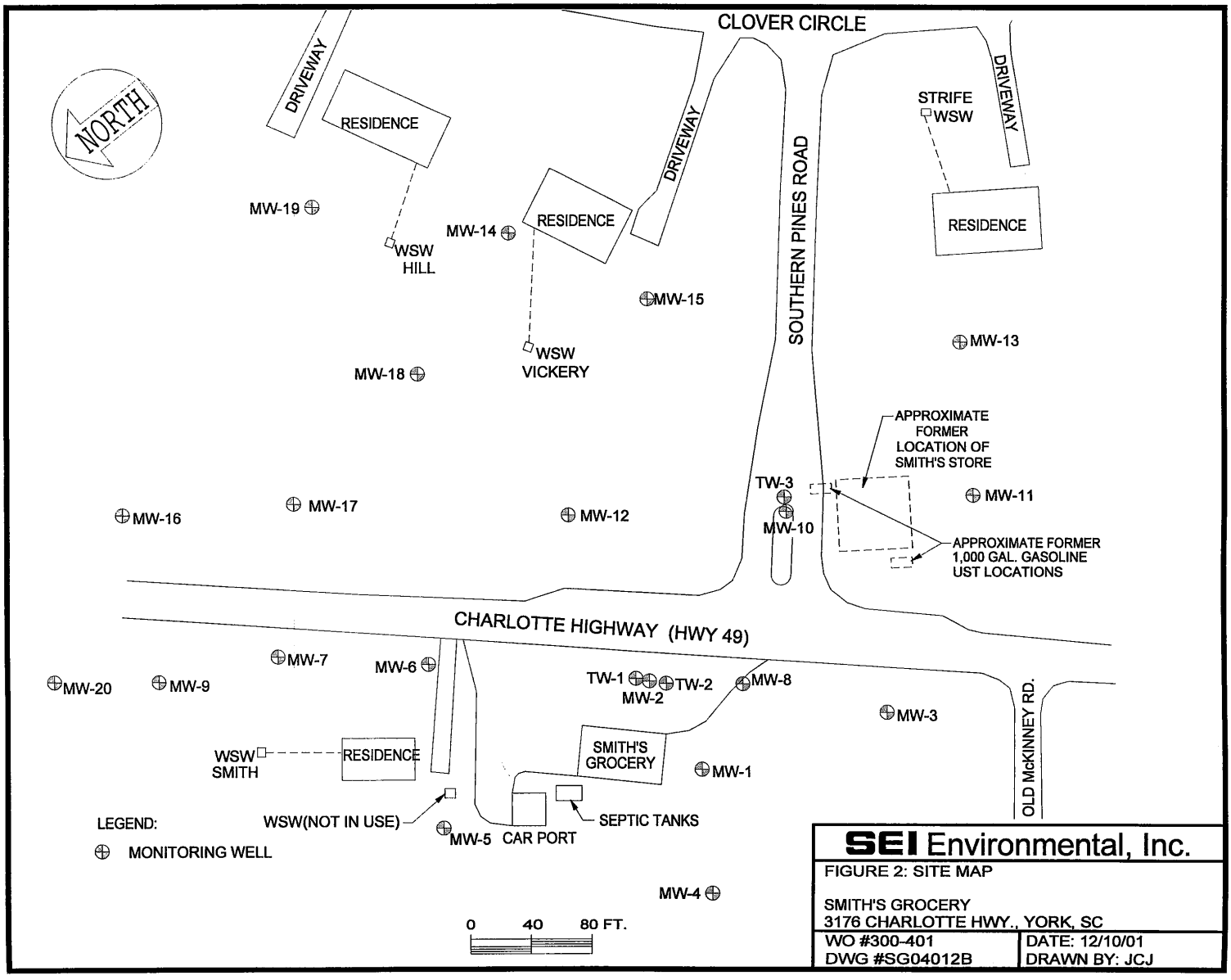
1 .5 0 1 KILOMETER

NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

WO #300-401	DATE: 12/7/01
DWG #	DRAWN BY: JCJ

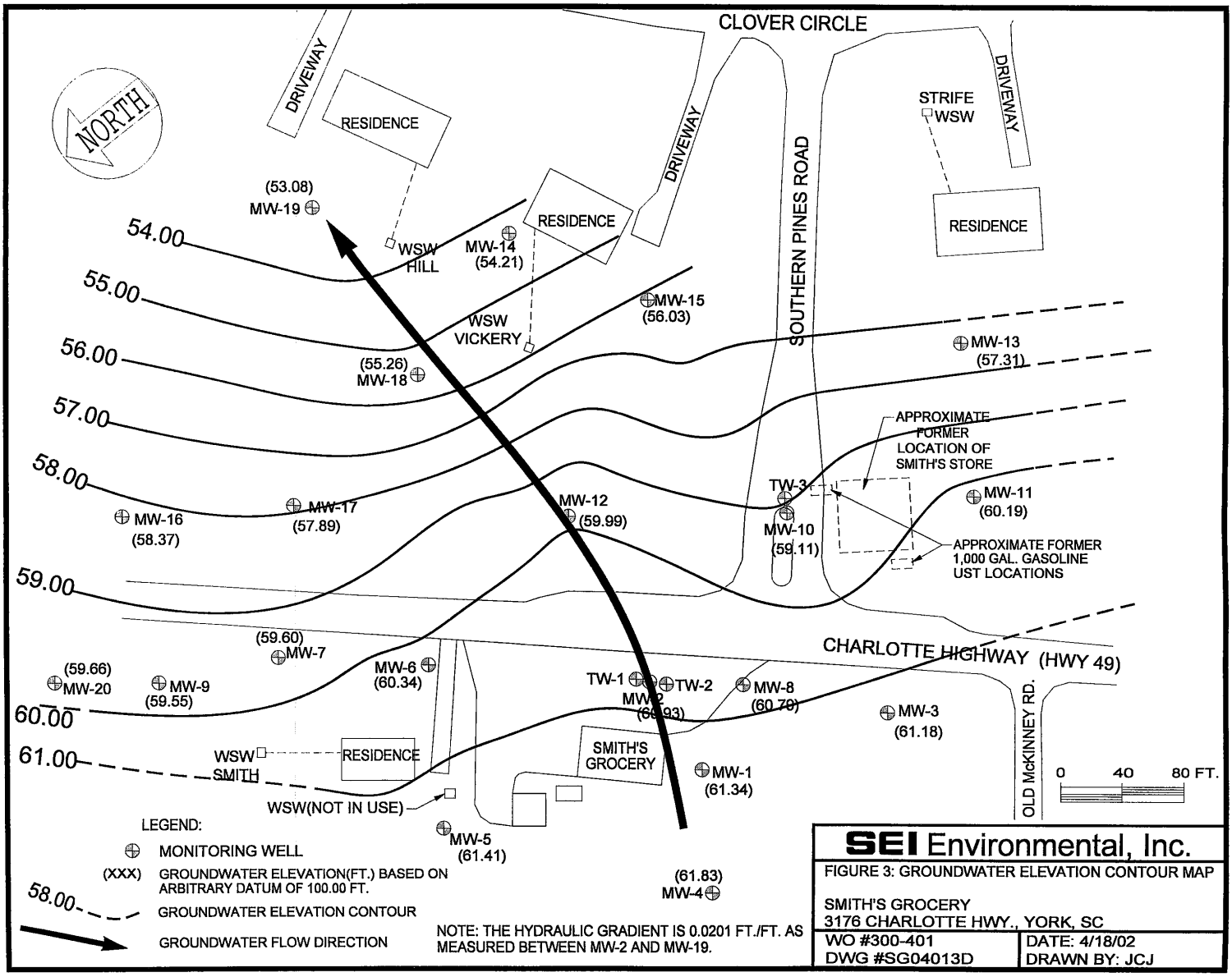


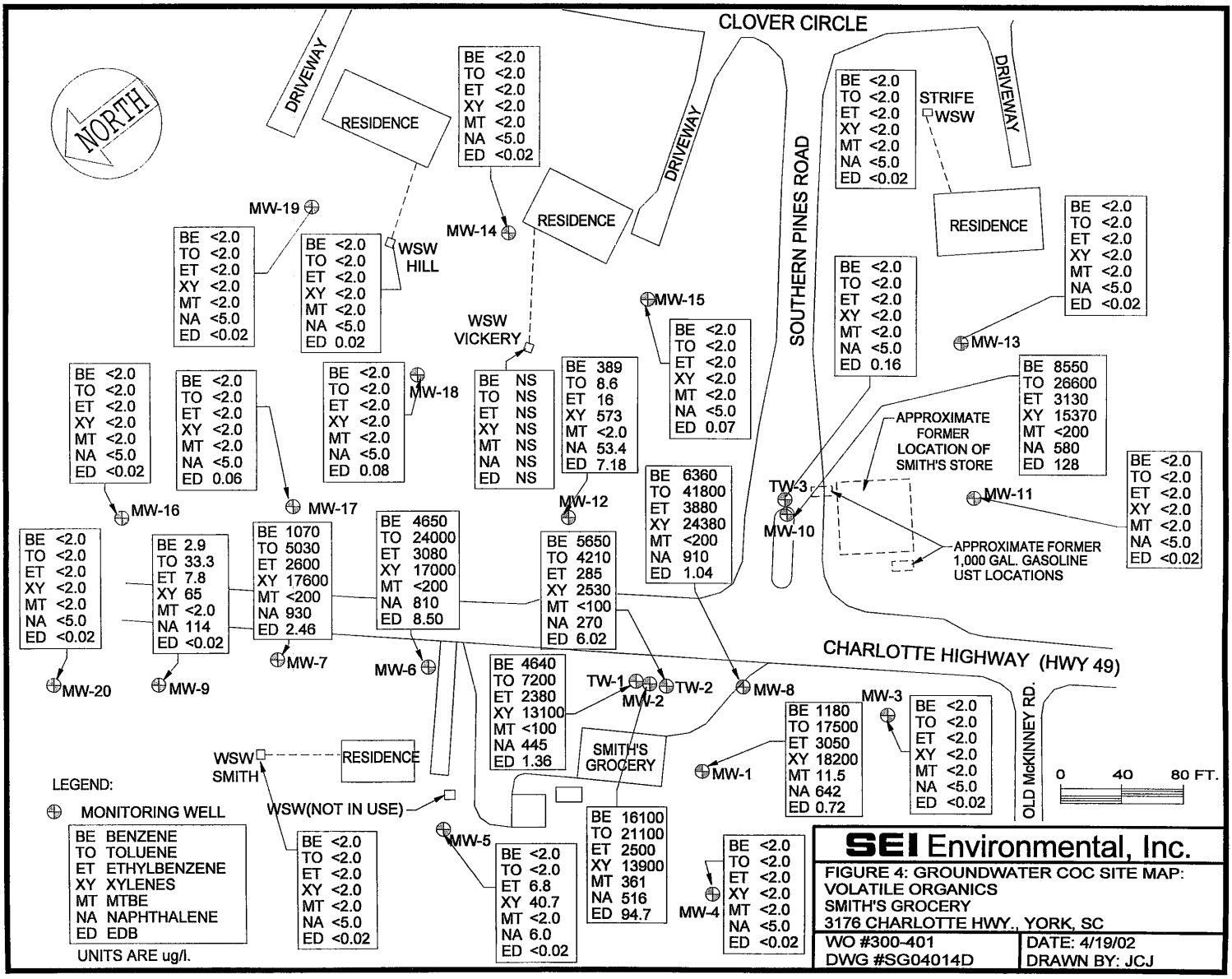
SEI Environmental, Inc.

FIGURE 2: SITE MAP

SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC

WO #300-401	DATE: 12/10/01
DWG #SG04012B	DRAWN BY: JCJ

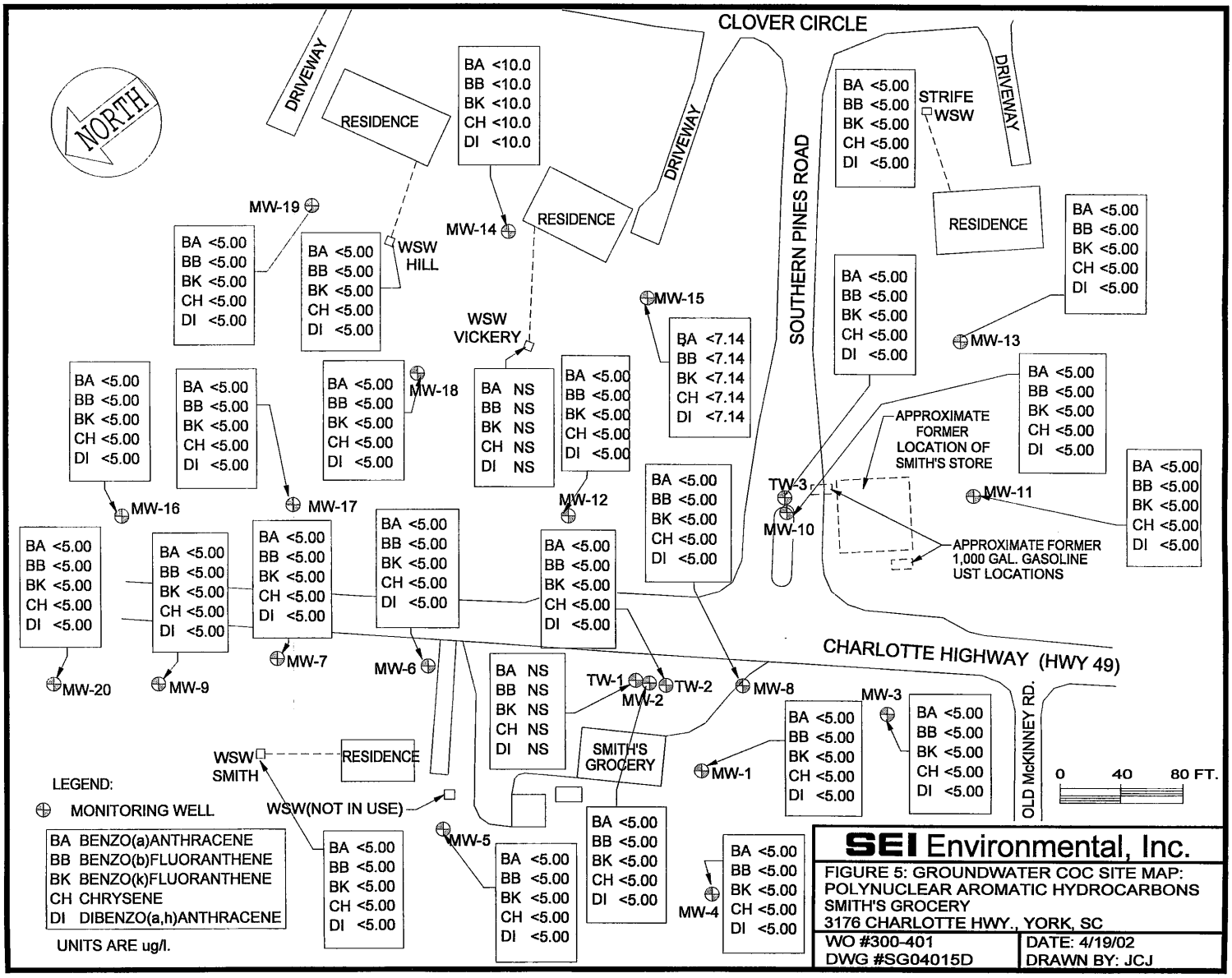

CLOVER CIRCLE
NORTH
DRIVEWAY
RESIDENCE
DRIVEWAY
STRIFE
WSW
DRIVEWAY
SOUTHERN PINES ROAD
RESIDENCE
(53.08)
MW-19
54.00
WSW
HILL
MW-14
(54.21)
55.00
WSW
VICKERY
MW-15
(56.03)
MW-13
(57.31)
56.00
(55.26)
MW-18
57.00
APPROXIMATE
FORMER
LOCATION OF
SMITH'S STORE
58.00
MW-16
(58.37)
MW-17
(57.89)
MW-12
(59.99)
TW-3
MW-10
(59.11)
MW-11
(60.19)
APPROXIMATE FORMER
1,000 GAL. GASOLINE
UST LOCATIONS
59.00
(59.60)
MW-7
CHARLOTTE HIGHWAY (HWY 49)
(59.66)
MW-20
MW-9
(59.55)
MW-6
(60.34)
TW-1
TW-2
MW-8
(60.70)
60.00
MW-3
(61.18)
61.00
WSW
SMITH
RESIDENCE
SMITH'S
GROCERY
MW-1
(61.34)
OLD McKINNEY RD.
0
40
80 FT.
WSW(NOT IN USE)
MW-5
(61.41)
(61.83)
MW-4
LEGEND:
MONITORING WELL
(XXX) GROUNDWATER ELEVATION(FT.) BASED ON ARBITRARY DATUM OF 100.00 FT.
58.00 GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
NOTE: THE HYDRAULIC GRADIENT IS 0.0201 FT./FT. AS MEASURED BETWEEN MW-2 AND MW-19.
SEI Environmental, Inc.
FIGURE 3: GROUNDWATER ELEVATION CONTOUR MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
WO #300-401
DWG #SG04013D
DATE: 4/18/02
DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP:
VOLATILE ORGANICS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC

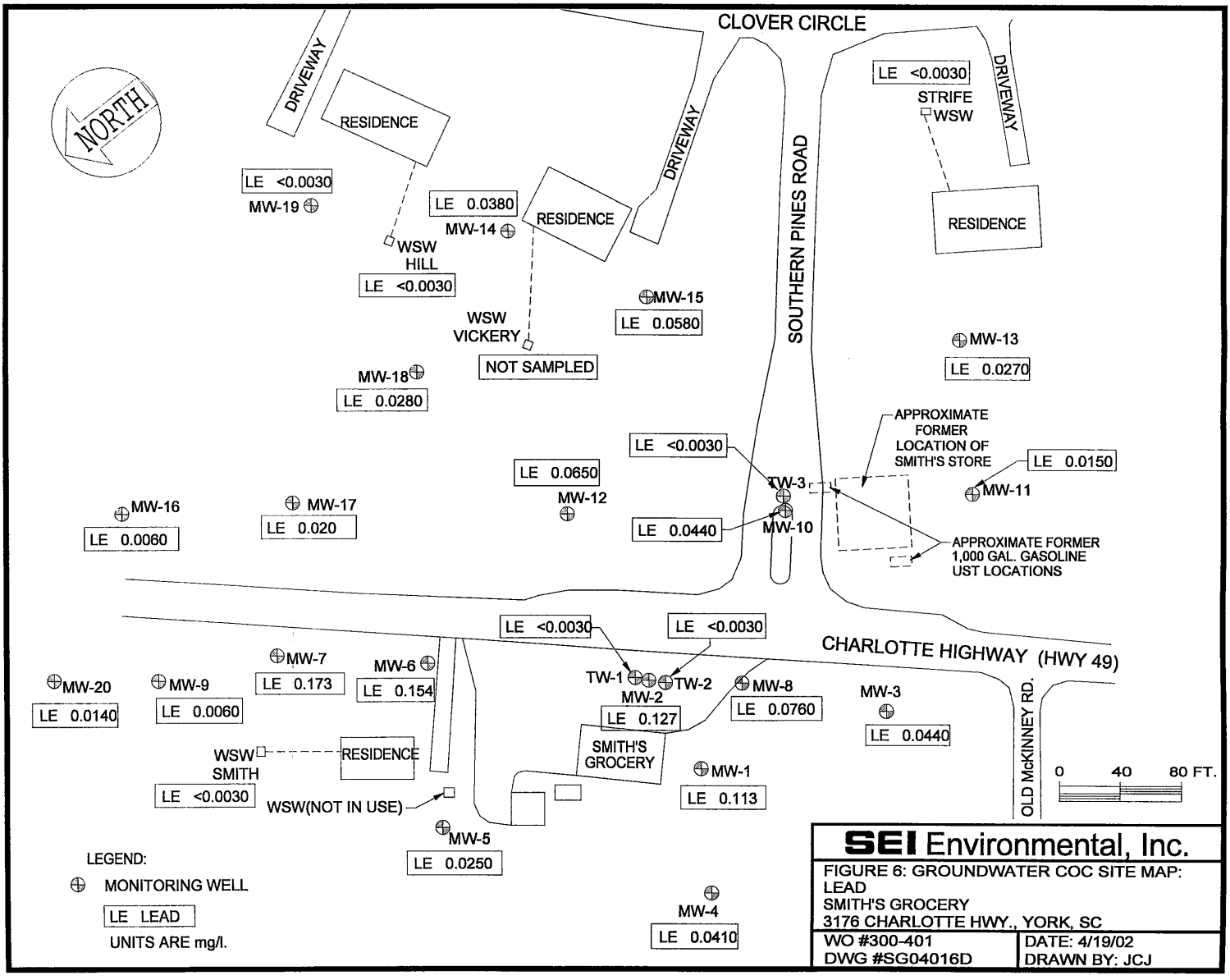
WO #300-401 | DATE: 4/19/02
DWG #SG04014D | DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 5: GROUNDWATER COC SITE MAP:
POLYNUCLEAR AROMATIC HYDROCARBONS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC

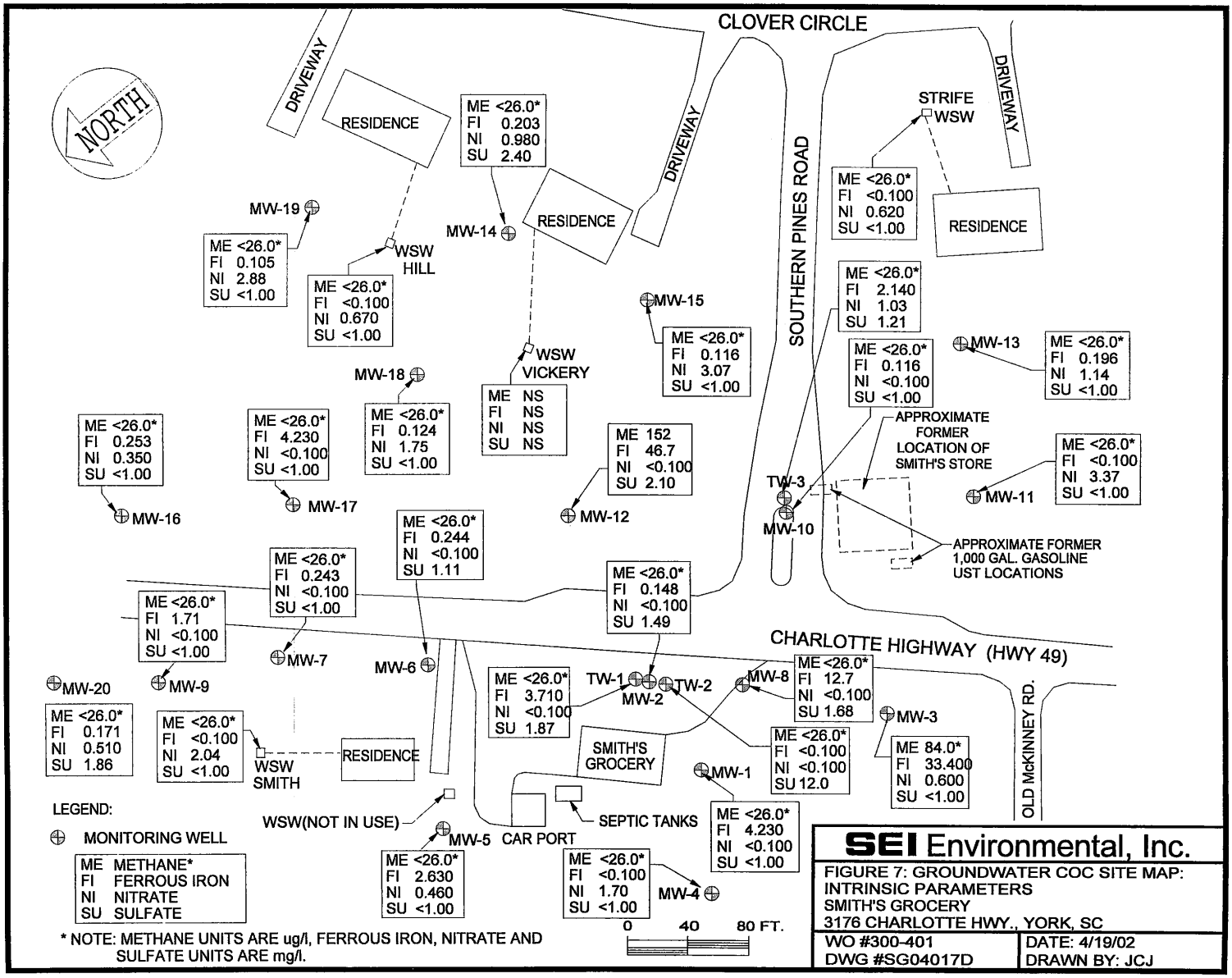
WO #300-401	DATE: 4/19/02
DWG #SG04015D	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 6: GROUNDWATER COC SITE MAP: LEAD
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC

WO #300-401	DATE: 4/19/02
DWG #SG04016D	DRAWN BY: JCJ


NORTH
CLOVER CIRCLE
DRIVEWAY
RESIDENCE
ME <26.0*
FI 0.203
NI 0.980
SU 2.40
DRIVEWAY
SOUTHERN PINES ROAD
STRIFE
WSW
DRIVEWAY
ME <26.0*
FI <0.100
NI 0.620
SU <1.00
RESIDENCE
MW-19
MW-14
RESIDENCE
ME <26.0*
FI 0.105
NI 2.88
SU <1.00
WSW
HILL
ME <26.0*
FI <0.100
NI 0.670
SU <1.00
MW-15
ME <26.0*
FI 0.116
NI 3.07
SU <1.00
ME <26.0*
FI 2.140
NI 1.03
SU 1.21
MW-13
ME <26.0*
FI 0.196
NI 1.14
SU <1.00
ME <26.0*
FI 0.116
NI <0.100
SU <1.00
MW-18
WSW
VICKERY
ME NS
FI NS
NI NS
SU NS
ME <26.0*
FI 0.124
NI 1.75
SU <1.00
ME <26.0*
FI 0.253
NI 0.350
SU <1.00
ME <26.0*
FI 4.230
NI <0.100
SU <1.00
ME 152
FI 46.7
NI <0.100
SU 2.10
APPROXIMATE
FORMER
LOCATION OF
SMITH'S STORE
ME <26.0*
FI <0.100
NI 3.37
SU <1.00
TW-3
MW-11
MW-16
MW-17
MW-12
MW-10
ME <26.0*
FI 0.244
NI <0.100
SU 1.11
APPROXIMATE FORMER
1,000 GAL. GASOLINE
UST LOCATIONS
ME <26.0*
FI 0.243
NI <0.100
SU <1.00
ME <26.0*
FI 0.148
NI <0.100
SU 1.49
ME <26.0*
FI 1.71
NI <0.100
SU <1.00
CHARLOTTE HIGHWAY (HWY 49)
MW-7
MW-6
MW-20
MW-9
ME <26.0*
FI 3.710
NI <0.100
SU 1.87
TW-1
MW-2
TW-2
MW-8
ME <26.0*
FI 12.7
NI <0.100
SU 1.68
MW-3
ME <26.0*
FI 0.171
NI 0.510
SU 1.86
ME <26.0*
FI <0.100
NI 2.04
SU <1.00
WSW
SMITH
RESIDENCE
SMITH'S
GROCERY
ME <26.0*
FI <0.100
NI <0.100
SU 12.0
MW-1
ME 84.0*
FI 33.400
NI 0.600
SU <1.00
OLD McKINNEY RD.
LEGEND:
MONITORING WELL
ME METHANE*
FI FERROUS IRON
NI NITRATE
SU SULFATE
WSW(NOT IN USE)
MW-5
CAR PORT
SEPTIC TANKS
ME <26.0*
FI 4.230
NI <0.100
SU <1.00
ME <26.0*
FI 2.630
NI 0.460
SU <1.00
ME <26.0*
FI <0.100
NI 1.70
SU <1.00
MW-4
0
40
80 FT.
* NOTE: METHANE UNITS ARE ug/l, FERROUS IRON, NITRATE AND
SULFATE UNITS ARE mg/l.
SEI Environmental, Inc.
FIGURE 7: GROUNDWATER COC SITE MAP:
INTRINSIC PARAMETERS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
WO #300-401
DWG #SG04017D
DATE: 4/19/02
DRAWN BY: JCJ

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
	GK4493	04-02-02

GENERATOR

3. Generator's Name and Mailing Address: SEI ENVIRONMENTAL, INC.
3021 MCNAUGHTON DR. SUITE 9
COLUMBIA, SC 29223

4. Generator's Phone ( )

5. Transporter 1 Company Name: SEI ENVRIONMENTAL, INC
6. US EPA ID Number:
A. Transporter's Phone: 803-788-2535

7. Transporter 2 Company Name
8. US EPA ID Number:
B. Transporter's Phone

9. Designated Facility Name and Site Address: G & K TANK SERVICES
PO BOX 1384
SUMTER, SC 29151
10. US EPA ID Number:
C. Facility's Phone: 800-800-6840

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER SMITH'S GROCERY YORK, SC	02	DR		
b. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER AMOCO #2 DARLINGTON, SC	02	DR		
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JOHN MONEGHAN	John Monegan	10	10	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
S. Collett	S. Collett	10	4	02

Printed by: USA ABLER & ASSOCIATES, INC.

ORIGINAL - RETURN TO GENERATOR

G & K
TANK SERVICES, INC.

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 2 Drums
Smith's Grocery
York, SC

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to cerify the above ~~soil~~ water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. Colley

Date 04/02/02

) H E C
OMOTE PROTECT PROSPER
00 Bull Street
lumbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT

Phone (800) 826-5435 Fax (803) 898-4330

DEC 18 2001

Ms. Lois B. Smith
3175 Charlotte Hwy
York, SC 29745-9802

Re: Smith's Grocery
UST Permit #09322; CP # 15367
Release I Reported on June 30, 1993
Bids Received December 13, 2001
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control recognizes your commitment to continue work at this site utilizing your own contractor. The UST Program has reviewed the analytical results of samples taken from Strife residence water supply well. The results of the water quality analysis indicate the presence of benzene.

Based on the available data, your site's priority classification is a 1D. Therefore, funds from the State Underground Petroleum Environmental Response Bank (SUPERB) Account are available for remediation of the water supply well and additional site investigative activities at this time.

Cost Proposal #15367 has been approved for $2,494.35 for the installation of a granular activated carbon (GAC) filter unit on your well. The GAC unit will cleanse the water passing through it of all potentially harmful petroleum constituents. Maintenance and cleansing of the unit will be performed as necessary. Please have your contractor install the GAC filter unit immediately upon receipt of this letter.

SEI Environmental, Inc. can submit an invoice for direct billing from the SUPERB account. Please note that all applicable South Carolina certification requirements apply to the laboratory services, well installation, and report preparation and that only EPA Method 8260B will be accepted for purgeable aromatic analyses. All site rehabilitation activities must be performed and submitted by a South Carolina Certified Underground Storage Tank Site Rehabilitation Contractor.

The invoice for GAC installation is due within 60 days from the date of this letter. Interim invoices may not be submitted for this scope of work. If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

Please note that Sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that no costs will be allowed unless prior approval from the Department is obtained. If for any reason additional tasks will be completed, these additional tasks and the associated cost must be preapproved by the Department for the cost to be paid. The SCDHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, SCDHEC reserves the right to question and/or reject costs if deemed unreasonable. The SCDHEC reserves the right to audit project records at any time during the project or after completion of work.

On all correspondence concerning this site, please reference **UST Permit #09322 and CP #15367.** If there are any questions concerning this project, please contact me at (803) 898-4318 or (800) 826-5435 (within South Carolina only).

Sincerely,

Paula Anderson

Paula Anderson, Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division

enc: SUPERB Report for Cost Proposal Number 15367

cc: SEI Environmental, Inc., Mr. Bob Bolton, 3021 McNaughton Drive Suite 9, Columbia, SC 29223 (w/enc)
Financial Section (w/copy of CP)
Read and Technical File (n/enc)

DHEC/UST/121101

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800.377.2826
803.788.2535
Fax 788.2399

RECEIVED
DEC 14 2001
Underground Storage
Tank Program

December 14, 2001

Ms. Paula Anderson, Hydrogeologist
SCDHEC - UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Re: Quarterly Groundwater Sampling Report
Smith's Grocery
3176 Charlotte Highway
York, South Carolina
UST Permit #09322

Dear Ms. Anderson:

Attached is the Corrective Action Quarterly Groundwater Sampling Report for Smith's Grocery. Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,
SEI Environmental, Inc.

Robert G. Bolton, Jr.
Project Manager

Attachment

cc: Ms. Lois B. Smith, Smith's Grocery

SEI
Environmental, Inc.

CORRECTIVE ACTION
QUARTERLY SAMPLING REPORT

Smith's Grocery
3176 Charlotte Highway
York, South Carolina
York County
UST Permit #09322

PREPARED FOR:

Ms. Paula Anderson
SCDHEC - UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

PREPARED BY:

SEI Environmental, Inc.
3021 McNaughton Drive, Suite 9
Columbia, South Carolina 29223
(803) 788-2535

Robert G. Bolton, Jr.
Project Manager

Frederick P. Lyke, P.G. #1055

December 14, 2001

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 METHODOLOGY 1

3.0 LABORATORY ANALYTICAL RESULTS 2

4.0 REMEDIATION EFFECTIVENESS 4

5.0 CONCLUSIONS 5

6.0 REPORT LIMITATIONS 7

LIST OF TABLES

TABLE I	Groundwater Elevation Data
TABLE II	Historical Groundwater Elevation Data
TABLE III	Groundwater Analytical Results
TABLE IV	Historical Groundwater Analytical Results
TABLE V	System Effectiveness Analysis

LIST OF FIGURES

FIGURE 1	Site Location Map
FIGURE 2	Site Map
FIGURE 3	Groundwater Elevation Contour Map
FIGURES 4-7	CoC Concentrations Maps

LIST OF APPENDICES

APPENDIX A	Groundwater Sampling Field Measurements
APPENDIX B	Laboratory Analytical Results and Chain-of-Custody
APPENDIX C	Disposal Manifest

1.0 INTRODUCTION

South Carolina Department of Health and Environmental Control (SCDHEC) contracted SEI Environmental, Inc. (SEI) to conduct corrective action and quarterly groundwater sampling activities at the Smith's Grocery facility (UST Permit #09322) located at 3176 Charlotte Highway in York, South Carolina. The approximate location of the project site is shown on the United States Geological Survey (USGS), 7.5-Minute Series Topographic Map provided as Figure 1. The corrective action and sampling activities were approved by SCDHEC in correspondence dated March 26, 2001.

2.0 METHODOLOGY

2.1 Site Hydrogeology

During the November 5, 2001, gauging event, liquid phase hydrocarbons (LPH) were not detected in any monitor wells. Groundwater flow direction is toward the northeast with a hydraulic gradient of 0.018 feet per foot as measured between Monitor Wells MW-1 and MW-19. Groundwater measurements are summarized in Table I, and a groundwater elevation contour map is depicted in Figure 3.

2.2 Groundwater Sampling and Analysis

On November 5-7, 2001, SEI personnel obtained groundwater samples from Monitor MW-1 through MW-20, TW-1 through TW-3. In addition, four drinking water wells (identified as Hill, Smith, Strife, and Vickery) were sampled on November 28, 2001. A new, disposable, polyethylene bailer was used for the collection of the water samples from the monitor wells. Each groundwater sample was obtained after pH values and temperature had equilibrated unless petroleum odor was emanating from the well. If petroleum odors were observed in the monitor well, the groundwater sample was obtained after three well volumes were purged. All purge

water was drummed for proper disposal at a permitted treatment facility. Field measurements are presented in Appendix A. New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The groundwater samples were placed in laboratory supplied containers, placed on ice, and delivered to TestAmerica Incorporated in Columbia, South Carolina for proper analysis. Proper preservation methods and chain-of-custody procedures were followed throughout the sampling process. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), naphthalene, and ethylene dibromide (EDB) by EPA method 8260B; polynuclear aromatic hydrocarbons (PAH) by EPA method 8270C; and lead by EPA method 200.7. In addition, the samples were analyzed for ferrous iron by EPA method 3500D; methane by EPA method RSK175M; nitrate by EPA method 353.2; and sulfate by EPA method 9056.

3.0 LABORATORY ANALYTICAL RESULTS

Groundwater analytical results for the samples collected in November 2001, detected the presence of benzene concentrations at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, TW-1, and TW-2. Toluene concentrations were detected at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, TW-1, and TW-2. Ethylbenzene concentrations were detected at Monitor Wells MW-1, MW-2, MW-6 through MW-10, MW-12, TW-1, and TW-2. Xylenes concentrations were detected at Monitor Wells MW-1, MW-2, MW-6 through MW-10, MW-12, TW-1, and TW-2. MTBE concentrations were detected at Monitor Wells MW-2, TW-1, and TW-2. Due to high dilution factors, MTBE concentrations were below detection limits at Monitor Wells MW-1, MW-6, MW-7, and MW-10; however, MTBE concentrations may exist at these locations. Naphthalene concentrations were detected at Monitor Wells MW-1, MW-2, MW-6 through MW-9, MW-12, and TW-2. Due to high dilution factors, naphthalene concentrations were below detection limits at Monitor Wells MW-10 and TW-1; however, naphthalene concentrations may exist at these locations. EDB concentrations were detected at Monitor Wells MW-1, MW-2, MW-6, MW-7,

MW-8, MW-10, MW-12, MW-14, MW-15, MW-17, MW-18, TW-1, and TW-2. In addition, EDB concentrations were detected at the drinking water wells identified as Hill (which has a filter) and Strife. However, SEI personnel resampled these two potable water wells on December 6-7, 2001. EDB concentrations were below detection limits at the Hill well, but EDB concentrations were detected at the Strife Well. PAH constituents (other than naphthalene) were not detected at any sample locations. Lead concentrations were detected at Monitor Wells MW-1 through MW-20 and TW-2. In addition, lead concentrations were detected at the Vickery drinking water well. Ferrous iron concentrations were detected at Monitor Wells MW-1, MW-2, MW-3, MW-5 through MW-9, MW-12, MW-17, MW-19, TW-1, and TW-3. Nitrate concentrations were detected at Monitor Wells MW-3, MW-4, MW-5, MW-11 through MW-20, and TW-3. Also, nitrate concentrations were detected at the drinking water wells identified as Hill, Smith, and Strife. Sulfate concentrations were detected at Monitor Wells MW-1, MW-2, MW-5, MW-6, MW-10, MW-12, MW-18, TW-1, TW-2, And TW-3.

At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2, benzene and toluene concentrations were detected greater than their respective site specific threshold levels (SSTL) computed specifically for these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2, ethylbenzene concentrations were detected greater than its SSTL computed specifically for these wells. At Monitor Wells MW-1, MW-6, MW-7, MW-8, and TW-2, xylenes concentrations were detected greater than its SSTL computed specifically for these wells. At MW-2 and TW-2, MTBE concentrations were detected greater than its computed SSTL at these wells. However, MTBE concentrations may exist greater than its SSTL at Monitor Wells MW-6, MW-7, MW-8, and MW-10 due to a high dilution factor which yielded results less than detection limits at these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, and TW-2, naphthalene concentrations were detected greater than its SSTL computed for each of these wells. However, naphthalene concentrations may exist greater than its SSTL at Monitor Well MW-10 due to a high dilution factor which yielded results less than its detection limit at this well. At Monitor Wells MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2, EDB

concentrations were detected greater than its SSTL calculated for each of these wells. At Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, and TW-2, lead concentrations were detected greater than its SSTL calculated for each of these wells. Groundwater analytical results are presented in Table III. Historical groundwater analytical results which compare current and past results with the SSTLs are presented in Table IV. Groundwater concentrations are depicted in Figures 4 through 7. Laboratory analyses and chain-of-custody are presented in Appendix B.

4.0 REMEDIATION EFFECTIVENESS

Chemicals of concern (CoC) concentration reduction is evaluated by verifying if the CoC concentrations reduction goals have been achieved in Monitor Wells MW-1 through MW-20, TW-1 through TW-3, and four drinking water wells named Hill, Smith, Strife, and Vickery. Therefore, chemical test data from Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, MW-18, MW-19, TW-2, and TW-3 are used to evaluate the effectiveness of the bioremediation.

The evaluation of the remediation effectiveness consists in comparing the November 2001, CoC concentrations against the baseline concentrations and determining the percent of total concentration reduction. This is calculated by subtracting the current sample concentrations above SSTLs from the baseline concentrations above SSTLs and multiplying this amount by 100. This number is then divided by the baseline concentrations above SSTLs. The calculation of the total concentration reduction is presented in Table V.

According to calculations made from the November 2001, sampling event, approximately 4.73 percent of the CoC concentrations has been removed from the site.

5.0 CONCLUSIONS

- Groundwater flow at the site is in a northeastern direction with a hydraulic gradient of 0.018 feet per foot as measured between Monitor Wells MW-1 and MW-19.
- Liquid phase hydrocarbons were not detected in any monitor wells during the current sampling activities.
- Benzene and toluene concentrations were detected greater than their respective calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-12, and TW-2.
- Ethylbenzene concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2.
- Xylenes concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-6, MW-7, MW-8, and TW-2.
- MTBE concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-2 and TW-2. MTBE concentrations may exist greater than the SSTL at Monitor Wells MW-6, MW-7, MW-8, and MW-10 due to a high dilution factor which yielded results less than detection limits at these wells.
- Naphthalene concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, and TW-2. Naphthalene concentrations may exist greater than the SSTL at Monitor Well MW-10 due to a high dilution factor which yielded results less than detection limits at these wells.
- EDB concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-2, MW-6, MW-7, MW-8, MW-10, and TW-2.
- EDB concentrations were detected at the Strife potable water well. As a result, SEI is in the process of having a filter installed on this well.
- Lead concentrations were detected greater than the calculated SSTLs at Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, and TW-2.

- According to calculation made from the November 2001, sampling event, approximately 4.73 percent of the CoC concentrations have been removed from the site.
- Filters on the drinking water wells, identified as Hill and Vickery, were changed November 29, 2001.

6.0 REPORT LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the current UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

REFERENCES

SCDHEC, May 15, 2001, *Risk-Based Corrective Action for Petroleum Releases*, Columbia, South Carolina.

SEI Environmental, Inc., November 30, 2001, Corrective Action Quarterly Groundwater Sampling Report – Smith's Grocery, Columbia, South Carolina.

Table I
Groundwater Elevation Data
Smith's Grocery/York South Carolina

Monitor Well Number	Date Measured	Top of Casing Elevation (feet)	Depth to Ground Water (feet)	Total Depth of Well (feet)	Groundwater Elevation (feet)
MW-1	11-5-01	91.16	29.75	35	61.41
MW-2	11-5-01	94.57	33.35	38	61.22
MW-3	11-5-01	91.91	30.44	35	61.47
MW-4	11-5-01	86.20	24.66	27	61.54
MW-5	11-5-01	89.29	28.47	30	60.82
MW-6	11-5-01	93.91	33.50	37	60.41
MW-7	11-5-01	91.68	32.52	36	59.16
MW-8	11-5-01	94.72	33.43	38	61.29
MW-9	11-5-01	90.54	31.47	36	59.07
MW-10	11-5-01	99.77	39.14	44	60.63
MW-11	11-5-01	100.46	39.90	44	60.56
MW-12	11-5-01	99.61	39.38	44	60.23
MW-13	11-5-01	100.39	42.77	47	57.62
MW-14	11-5-01	98.89	43.45	50	55.44
MW-15	11-5-01	100.18	44.58	50	55.60
MW-16	11-5-01	89.91	32.07	37	57.84
MW-17	11-5-01	94.46	36.56	40	57.90
MW-18	11-5-01	98.14	42.57	46	55.57
MW-19	11-5-01	98.27	45.21	50	53.06
MW-20	11-5-01	NS	29.25	35	NS
TW-1	11-5-01	94.72	35.16	61	59.56
TW-2	11-5-01	NS	33.45	88	NS
TW-3	11-5-01	NS	38.43	71	NS

NS = Not Surveyed

Table II
Historical Groundwater Elevation Data
Smith's Grocery/ York South Carolina

Monitor Well Number	Top of Casing Elevation	Depth to Groundwater (feet)		Groundwater Elevation (feet)	
		7-11-01	11-5-01	7-11-01	11-5-01
MW-1	91.16	28.33	29.75	62.83	61.41
MW-2	94.57	31.98	33.35	62.59	61.22
MW-3	91.91	29.00	30.44	62.91	61.47
MW-4	86.20	23.20	24.66	63.00	61.54
MW-5	89.29	27.08	28.47	62.21	60.82
MW-6	93.91	32.22	33.50	61.69	60.41
MW-7	91.68	31.14	32.52	60.54	59.16
MW-8	94.72	32.03	33.43	62.69	61.29
MW-9	90.54	30.04	31.47	60.50	59.07
MW-10	99.77	37.78	39.14	61.99	60.63
MW-11	100.46	38.42	39.90	62.04	60.56
MW-12	99.61	38.11	39.38	61.50	60.23
MW-13	100.39	41.53	42.77	58.86	57.62
MW-14	98.89	42.57	43.45	56.32	55.44
MW-15	100.18	43.67	44.58	56.51	55.60
MW-16	89.91	30.78	32.07	59.13	57.84
MW-17	94.46	35.41	36.56	59.05	57.90
MW-18	98.14	41.75	42.57	56.39	55.57
MW-19	98.27	44.01	45.21	54.26	53.06
MW-20	NS	27.81	29.25	NS	NS
TW-1	94.72	32.00	35.16	62.72	59.56
TW-2	NS	32.40	33.45	NS	NS
TW-3	NS	37.07	38.43	NS	NS

NS = Not Surveyed

TABLE III
Groundwater Analytical Results, dated November 2001
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1 (µg/l)	MW-2 (µg/l)	MW-3 (µg/l)	MW-4 (µg/l)	MW-5 (µg/l)	MW-6 (µg/l)	MW-7 (µg/l)	MW-8 (µg/l)	MW-9 (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	**899**	**26500**	<2.0	<2.0	<2.0	**2940**	**1020**	**8420**	<2.0
Toluene	9340	**39000**	<2.0	<2.0	<2.0	**16300**	4610	**50000**	<2.0
Ethylbenzene	2110	2960	<2.0	<2.0	<2.0	2150	2400	4020	2.6
Xylenes	12800	15000	<2.0	<2.0	<2.0	11400	15700	22600	447
Total BTEX	25149	83460	<8.0	<8.0	<8.0	32790	23730	85040	<453.6
MTBE	<50.0	**1290**	<2.0	<2.0	<2.0	<50.0	<50.0	**<500**	<2.0
Naphthalene	**581**	**714**	<5.0	<5.0	<5.0	**506**	**796**	**700**	39.3
EDB	0.14	**203**	<0.02	<0.02	<0.02	6.96	1.14	0.86	<0.02
Benzo(a)anthracene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(b)fluoranthene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(k)fluoranthene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chrysene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Dibenzo(a,h)anthracene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methane	39.0	44.0	65.0	26.0	<26.0	<26.0	44.0	<26.0	35.0

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated November 2001
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1 (mg/l)	MW-2 (mg/l)	MW-3 (mg/l)	MW-4 (mg/l)	MW-5 (mg/l)	MW-6 (mg/l)	MW-7 (mg/l)	MW-8 (mg/l)	MW-9 (mg/l)
Lead	0.0730	**0.665**	0.0280	0.0110	0.0390	0.169	**0.348**	0.125	0.124
Ferrous Iron	6.910	0.640	0.839	<0.100	0.116	0.514	2.800	7.700	0.819
Nitrate	<0.100	<0.100	0.910	2.21	0.840	<0.100	<0.100	<0.100	<0.100
Sulfate	1.24	1.76	<1.00	<1.00	1.04	1.06	<1.00	<1.00	<1.00

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated November 2001
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10 (µg/l)	MW-11 (µg/l)	MW-12 (µg/l)	MW-13 (µg/l)	MW-14 (µg/l)	MW-15 (µg/l)	MW-16 (µg/l)	MW-17 µg/l)	MW-18 (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	7430	<2.0	150	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	18700	3.3	7.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	2040	<2.0	13.6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes	10700	<2.0	209	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total BTEX	38870	<9.3	380.1	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
MTBE	<200	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Naphthalene	<500	<5.0	30.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
EDB	114	<0.02	4.83	<0.02	0.11	0.09	<0.02	0.08	0.09
Benzo(a)anthracene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(b)fluoranthene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(k)fluoranthene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chrysene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Dibenzo(a,h)anthracene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methane	<26.0	<26.0	68.0	<26.0	<26.0	39.0	<26.0	35.0	<26.0

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated November 2001
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10 (mg/l)	MW-11 (mg/l)	MW-12 (mg/l)	MW-13 (mg/l)	MW-14 (mg/l)	MW-15 (mg/l)	MW-16 (mg/l)	MW-17 (mg/l)	MW-18 (mg/l)
Lead	0.0890	0.0680	0.0520	0.0560	0.0180	0.0440	0.0220	0.143	0.0810
Ferrous Iron	<0.100	<0.100	10.900	<0.100	<0.100	<0.100	<0.100	5.360	<0.100
Nitrate	<0.10	4.47	0.15	1.31	2.33	3.99	0.43	0.11	2.47
Sulfate	1.42	<1.00	1.31	<1.00	<1.00	<1.00	<1.00	<1.00	2.21

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated November 2001
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19 (µg/l)	MW-20 (µg/l)	TW-1 (µg/l)	TW-2 (µg/l)	TW-3 (µg/l)	Hill (µg/l)	Smith (µg/l)	Strife (µg/l)	Vickery (µg/l)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	<2.0	<2.0	**4380**	**4950**	<2.0	<1.0	<1.0	<1.0	<1.0
Toluene	<2.0	<2.0	9540	3010	<2.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	<2.0	<2.0	1840	210	<2.0	<1.0	<1.0	<1.0	<1.0
Xylenes	<2.0	<2.0	10800	1790	<2.0	<1.0	<1.0	<1.0	<1.0
Total BTEX	<8.0	<8.0	26560	9960	<8.0	<4.0	<4.0	<4.0	<4.0
MTBE	<2.0	<2.0	3.7	52.3	<2.0	<1.0	<5.0	<5.0	<1.0
Naphthalene	<5.0	<5.0	**<500**	195	<5.0	<2.5	<5.0	<5.0	<2.5
EDB	<0.02	<0.02	0.96	5.47	0.19	<0.02	<0.02	1.17	<0.02
Benzo(a)anthracene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(b)fluoranthene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(k)fluoranthene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chrysene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Dibenzo(a,h)anthracene	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methane	<26.0	112	<26.0	80.0	<26.0	<26.0	<26.0	<26.0	<26.0

NA = Not Applicable

TABLE III (continued)
Groundwater Analytical Results, dated November 2001
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19 (mg/l)	MW-20 (mg/l)	TW-1 (mg/l)	TW-2 (mg/l)	TW-3 (mg/l)	Hill (mg/l)	Smith (mg/l)	Strife (mg/l)	Vickery (mg/l)
Lead	0.0450	0.0660	<0.0030	0.0040	<0.0030	<0.0030	<0.0030	<0.0030	0.0330
Ferrous Iron	0.137	<0.100	1.390	<0.100	1.500	<0.100	<0.100	<0.100	<0.100
Nitrate	3.69	0.750	<0.10	<0.10	1.69	0.690	2.81	0.830	<0.100
Sulfate	<1.00	<1.00	3.29	16.9	1.58	<1.00	<1.00	<1.00	<1.00

NA = Not Applicable

TABLE IV
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-1			MW-2			MW-3		
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)
Free Product Thickness	NA	None	None	NA	None	None	NA	None	None
Benzene	11	**830**	**899**	10	**33000**	**26500**	NA	<1.0	<2.0
Toluene	2223	**13200**	**9340**	2021	**50600**	**39000**	NA	<1.0	<2.0
Ethylbenzene	1558	**2300**	**2110**	1416	**2260**	**2960**	NA	<1.0	<2.0
Xylenes	10000	**15200**	**12800**	15000	12800	15000	NA	<1.0	<2.0
Total BTEX	13792	31530	25149	18447	98660	83460	NA	<4.0	<8.0
MTBE	80	**1220**	<50.0	81	<5.0	**1290**	NA	<5.0	<2.0
Naphthalene	56	**590**	**581**	51	<5.0	**714**	NA	<5.0	<5.0
EDB	0.32	**325**	0.14	10	<1.0	**203**	NA	<1.0	<0.02
Lead	2	**17.0**	**73.0**	30	**789**	**665**	NA	5.00	28.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-4			MW-5			MW-6		
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)
Free Product Thickness	NA	None	None	NA	None	None	NA	None	None
Benzene	NA	<1.0	<2.0	NA	<1.0	<2.0	6	**2840**	**2940**
Toluene	NA	<1.0	<2.0	NA	<1.0	<2.0	1212	**13500**	**16300**
Ethylbenzene	NA	<1.0	<2.0	NA	<1.0	<2.0	850	**1840**	**2150**
Xylenes	NA	<1.0	<2.0	NA	<1.0	<2.0	8000	**8440**	**11400**
Total BTEX	NA	<4.0	<8.0	NA	<4.0	<8.0	10068	26620	32790
MTBE	NA	<5.0	<2.0	NA	<5.0	<2.0	48	**<1000**	**<50.0**
Naphthalene	NA	<5.0	<5.0	NA	<5.0	<5.0	31	**<1000**	**506**
EDB	NA	<1.0	<0.02	NA	<1.0	<0.02	4.83	**<200**	**6.96**
Lead	NA	5.00	11.0	NA	6.00	39.0	18	11.0	**169**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-7			MW-8			MW-9		
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)
Free Product Thickness	NA	None	None	NA	None	None	NA	None	None
Benzene	6	980	**1020**	12	12000	**8420**	NA	34.0	<2.0
Toluene	1212	370	**4610**	2424	78000	**50000**	NA	19.0	<2.0
Ethylbenzene	850	900	**2400**	1700	6400	**4020**	NA	23.0	2.6
Xylenes	12123	4700	**15700**	16000	31400	**22600**	NA	175	447
Total BTEX	14191	6950	23730	20136	127800	85040	NA	251	<453.6
MTBE	48	<100	**<50.0**	96	4.7	**<500**	NA	56.0	<2.0
Naphthalene	31	360	**796**	62	910	**700**	NA	76.0	39.3
EDB	0.66	1.14	**1.14**	0.48	0.86	**0.86**	NA	<0.02	<0.02
Lead	18	**38.0**	**348**	4	**13.0**	**125**	NA	11.0	124

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-10			MW-11			MW-12		
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)
Free Product Thickness	NA	None	None	NA	None	None	NA	None	None
Benzene	9	**6450**	**7430**	5	<1.0	<2.0	7	**242**	**150**
Toluene	1819	**20400**	**18700**	5	<1.0	3.3	5	**14.8**	**7.5**
Ethylbenzene	1274	**2660**	**2040**	5	<1.0	<2.0	68	27.6	13.6
Xylenes	18185	15600	10700	10	<1.0	<2.0	730	327	209
Total BTEX	21287	**45110**	**38870**	25	<4.0	<9.3	810	611.4	380.1
MTBE	43	**<100**	**<200**	5	<1.0	<2.0	5	<1.0	<2.0
Naphthalene	46	**<250**	**<500**	5	<2.5	<5.0	36	**38.8**	30.8
EDB	9	**<100**	**114**	0.02	<1.0	<0.02	7	**12.7**	4.83
Lead	21	**74.0**	**89.0**	5	**18.0**	**68.0**	7	**11.0**	**52.0**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-13			MW-14			MW-15		
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)
Free Product Thickness	NA	None	None	NA	None	None	NA	None	None
Benzene	5	<1.0	<2.0	5	<1.0	<2.0	NA	<1.0	<2.0
Toluene	5	<1.0	<2.0	5	<1.0	<2.0	NA	<1.0	<2.0
Ethylbenzene	5	<1.0	<2.0	5	<1.0	<2.0	NA	<1.0	<2.0
Xylenes	10	<1.0	<2.0	10	<1.0	<2.0	NA	<1.0	<2.0
Total BTEX	25	<4.0	<8.0	25	<4.0	<8.0	NA	<4.0	<8.0
MTBE	5	<1.0	<2.0	5	<1.0	<2.0	NA	<1.0	<2.0
Naphthalene	5	<2.5	<5.0	5	<2.5	<5.0	NA	<2.5	<5.0
EDB	0.02	<1.0	<0.02	0.51	**2.7**	0.11	NA	<1.0	0.09
Lead	5	**28.0**	**56.0**	5	**6.0**	**18.0**	NA	25.0	44.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-16			MW-17			MW-18		
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)
Free Product Thickness	NA	None	None	NA	None	None	NA	None	None
Benzene	NA	<1.0	<2.0	5	<1.0	<2.0	5	<1.0	<2.0
Toluene	NA	<1.0	<2.0	5	<1.0	<2.0	5	<1.0	<2.0
Ethylbenzene	NA	<1.0	<2.0	5	<1.0	<2.0	5	<1.0	<2.0
Xylenes	NA	<1.0	<2.0	10	<1.0	<2.0	10	<1.0	<2.0
Total BTEX	NA	<4.0	<8.0	25	<4.0	<8.0	25	<4.0	<8.0
MTBE	NA	<1.0	<2.0	5	<1.0	<2.0	5	<1.0	<2.0
Naphthalene	NA	<2.5	<5.0	5	<2.5	<5.0	5	<2.5	<5.0
EDB	NA	<1.0	<0.02	0.02	<1.0	**0.08**	0.12	<1.0	0.09
Lead	NA	26.0	22.0	15	5.0	**143**	15	11.0	**81.0**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	MW-19			MW-20			TW-1		
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)
Free Product Thickness	NA	None	None	NA	None	None	NA	None	None
Benzene	5	<1.0	<2.0	NA	<1.0	<2.0	NA	<1.0	4380
Toluene	5	<1.0	<2.0	NA	<1.0	<2.0	NA	<1.0	3010
Ethylbenzene	5	<1.0	<2.0	NA	<1.0	<2.0	NA	<1.0	210
Xylenes	10	<1.0	<2.0	NA	<1.0	<2.0	NA	<1.0	1790
Total BTEX	25	<4.0	<8.0	NA	<4.0	<8.0	NA	<4.0	9960
MTBE	5	<1.0	<2.0	NA	<1.0	<2.0	NA	<1.0	52.3
Naphthalene	5	<2.5	<5.0	NA	<2.5	<5.0	NA	<2.5	195
EDB	0.02	<1.0	<0.02	NA	<1.0	<0.02	NA	<1.0	5.47
Lead	15	**31.0**	**45.0**	NA	29.0	66.0	NA	<3.0	<3.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	TW-2			TW-3			Hill		
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)
Free Product Thickness	NA	None	None	NA	None	None	NA	None	None
Benzene	5	**3610**	**4950**	5	<1.0	<2.0	2	NS	<1.0
Toluene	5	**1660**	**3010**	5	<1.0	<2.0	2	NS	<1.0
Ethylbenzene	5	**50.1**	**210**	5	<1.0	<2.0	2	NS	<1.0
Xylenes	180	**465**	**1790**	10	<1.0	<2.0	2	NS	<1.0
Total BTEX	195	5785.1	9960	25	<4.0	<8.0	8	NS	<4.0
MTBE	5	**50.8**	**52.3**	5	<1.0	<2.0	5	NS	<1.0
Naphthalene	18	**68.2**	**195**	5	<2.5	<5.0	5	NS	<2.5
EDB	0.05	**6.3**	**5.47**	0.23	<1.0	0.019	5	NS	<0.02
Lead	2	**6.0**	**4.0**	2	<3.0	<3.0	5	NS	<3.0

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable; NS = Not Sampled

TABLE IV (continued)
Historical Groundwater Analytical Results
Smith's Grocery / York, South Carolina

Chemical of Concern	Smith			Strife			Vickery		
Sampling Date	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)	SSTL (µg/l)	07/2001 (µg/l)	11/2001 (µg/l)
Free Product Thickness	NA	None	None	NA	None	None	NA	None	None
Benzene	5	NS	<1.0	2	NS	<2.0	5	NS	<1.0
Toluene	5	NS	<1.0	2	NS	<2.0	2	NS	<1.0
Ethylbenzene	5	NS	<1.0	2	NS	<2.0	2	NS	<1.0
Xylenes	15	NS	<1.0	2	NS	<2.0	26	NS	<1.0
Total BTEX	30	NS	<4.0	8	NS	<8.0	35	NS	<4.0
MTBE	5	NS	<5.0	2	NS	<2.0	2	NS	<1.0
Naphthalene	5	NS	<5.0	5	NS	<5.0	5	NS	<2.5
EDB	5	NS	<0.02	5	NS	1.17	5	NS	<0.02
Lead	5	NS	<3.0	5	NS	<3.0	5	NS	**33.0**

Bold concentrations represent those greater than the respective SSTL.
NA = Not Applicable; NS = Not Sampled

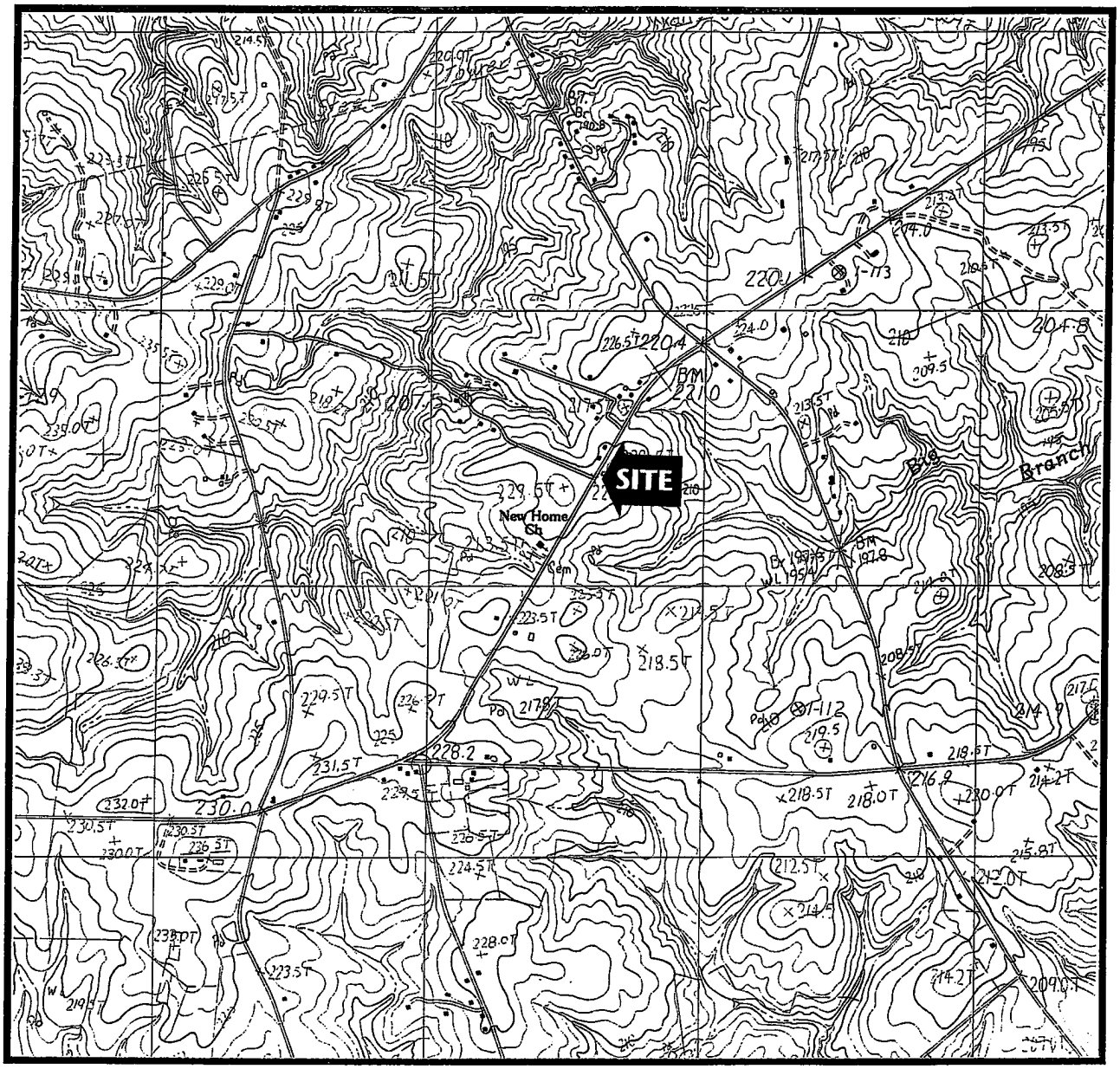
Table V
System Effectiveness Analysis
Smith's Grocery/York, South Carolina

Monitor Well Number	Date of Sample	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	MTBE (µg/L)	Lead (µg/L)	EDB (µg/L)	Total CoC (µg/L)
MW-1	11/05/01	**899**	9340	2110	12800	**581**	<50.0	73.0	0.14	25,852.14
MW-2	11/05/01	**26500**	**39000**	2960	15000	**714**	**1290**	**665**	**203**	86,332
MW-6	11/05/01	**2940**	**16300**	2150	11400	**506**	<50.0	169	6.96	33,520.96
MW-7	11/05/01	**1020**	4610	2400	15700	**796**	<50.0	**348**	1.14	24,924.14
MW-8	11/05/01	**8420**	**50000**	4020	22600	**700**	**<500**	125	0.86	86,364.86
MW-10	11/06/01	**7430**	**18700**	2040	10700	**<500**	<200	89.0	**114**	39,771
MW-11	11/06/01	<2.0	3.3	<2.0	<2.0	<5.0	<2.0	68.0	<0.02	71.3
MW-12	11/06/01	**150**	7.5	13.6	209	30.8	<2.0	52.0	4.83	467.73
MW-13	11/07/01	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	56.0	<0.02	56.0
MW-14	11/07/01	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	18.0	0.11	18.11
MW-15	11/07/01	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	44.0	0.09	44.09
MW-17	11/07/01	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	143	0.08	143.08
MW-18	11/07/01	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	81.0	0.09	81.09
MW-19	11/07/01	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	45.0	<0.02	45.0
TW-2	11/06/01	**4950**	3010	210	1790	195	52.3	4.00	5.47	10,216.77
TW-3	11/07/01	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<3.00	0.19	0.19
Sample Concentration	NA	52,309	140,970.8	15,903.6	90,199	4,021.8	2,187.3	1,980	336.96	307,908.46
Baseline Concentration	NA	47,644	158,164	19,824	84,035	4,820	1,694	1,716	322.43	318,219.43
Total SSTL Concentration	NA	120	10,975	7,772	80,343	391	490	199	53.33	100,343.33
Sample Concentration above SSTL on 11/01	NA	52,189	129,995.8	8,131.6	9,856	3,630.8	1,697.3	1,781	283.63	207,565.13

Bold concentrations represent those greater than the respective SSTL.

(Baseline Conc. Above SSTL – Sample Conc. Above SSTL on 11/01) (100) = (217876.1-207565.13)(100) = 4.73% complete
Baseline Conc. Above SSTL 217876.1

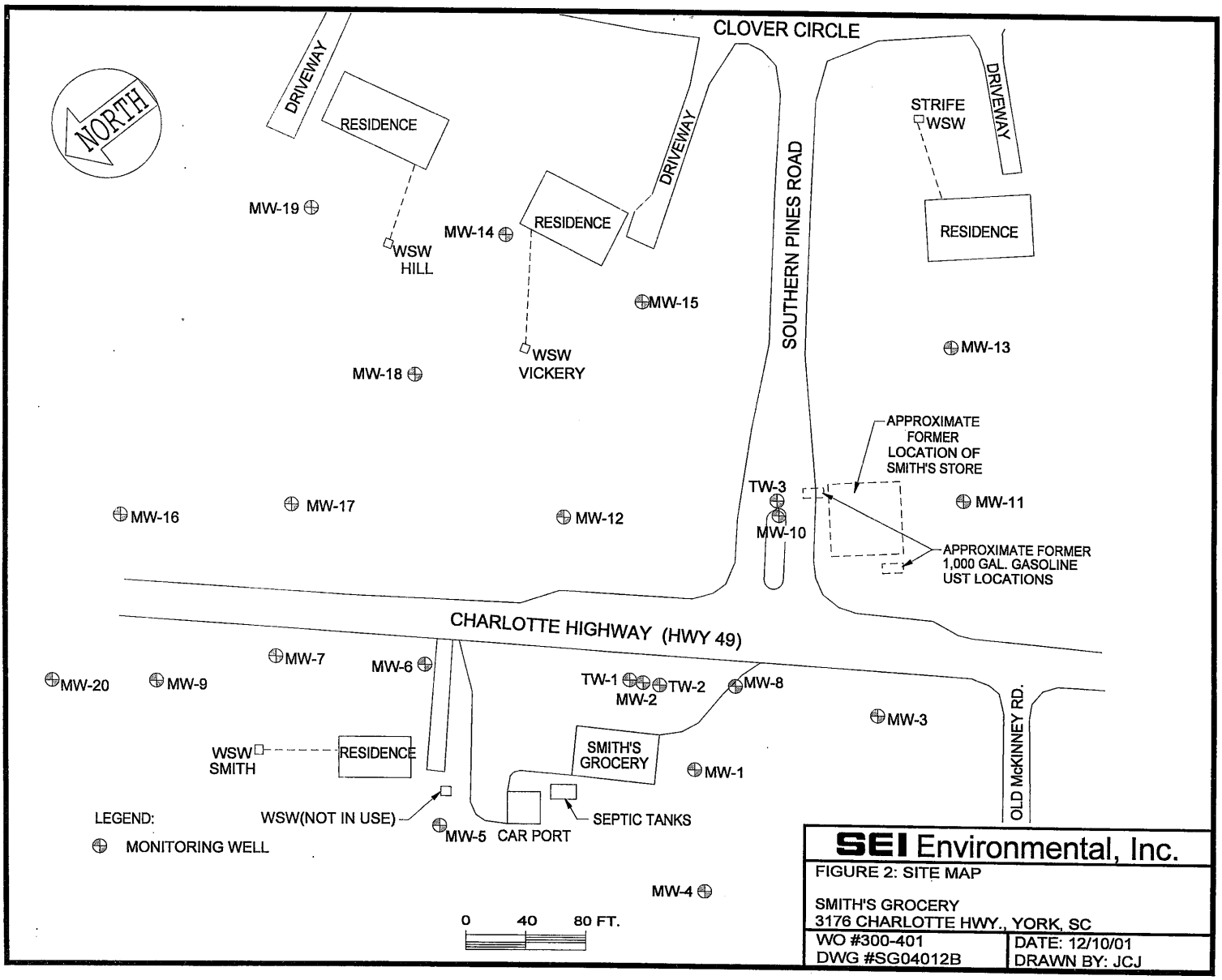
7.5 MINUTE SERIES(TOPOGRAPHIC) CLOVER QUADRANGLE



SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

WO #300-401	DATE: 12/7/01
DWG #	DRAWN BY: JCJ

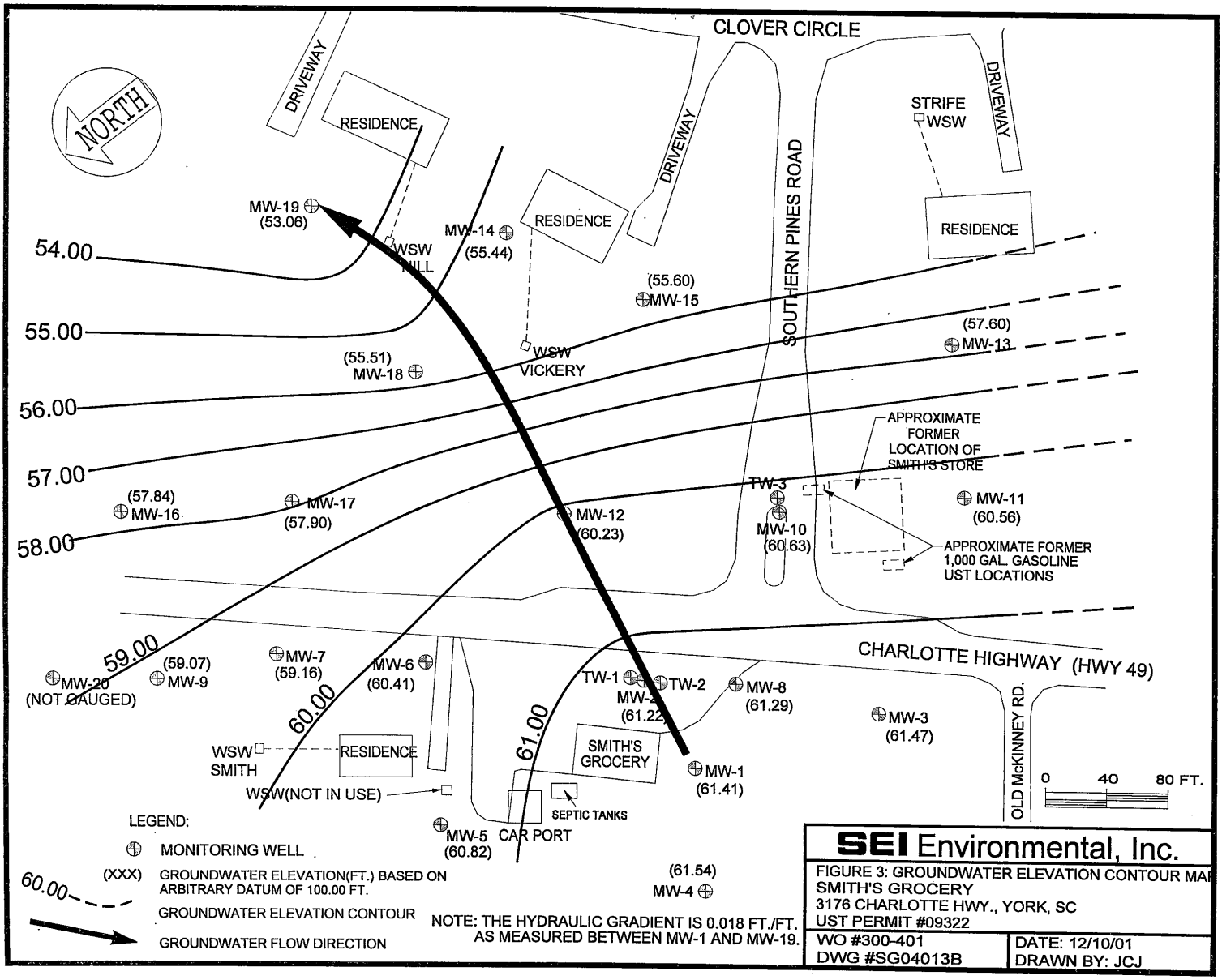


SEI Environmental, Inc.

FIGURE 2: SITE MAP

SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC

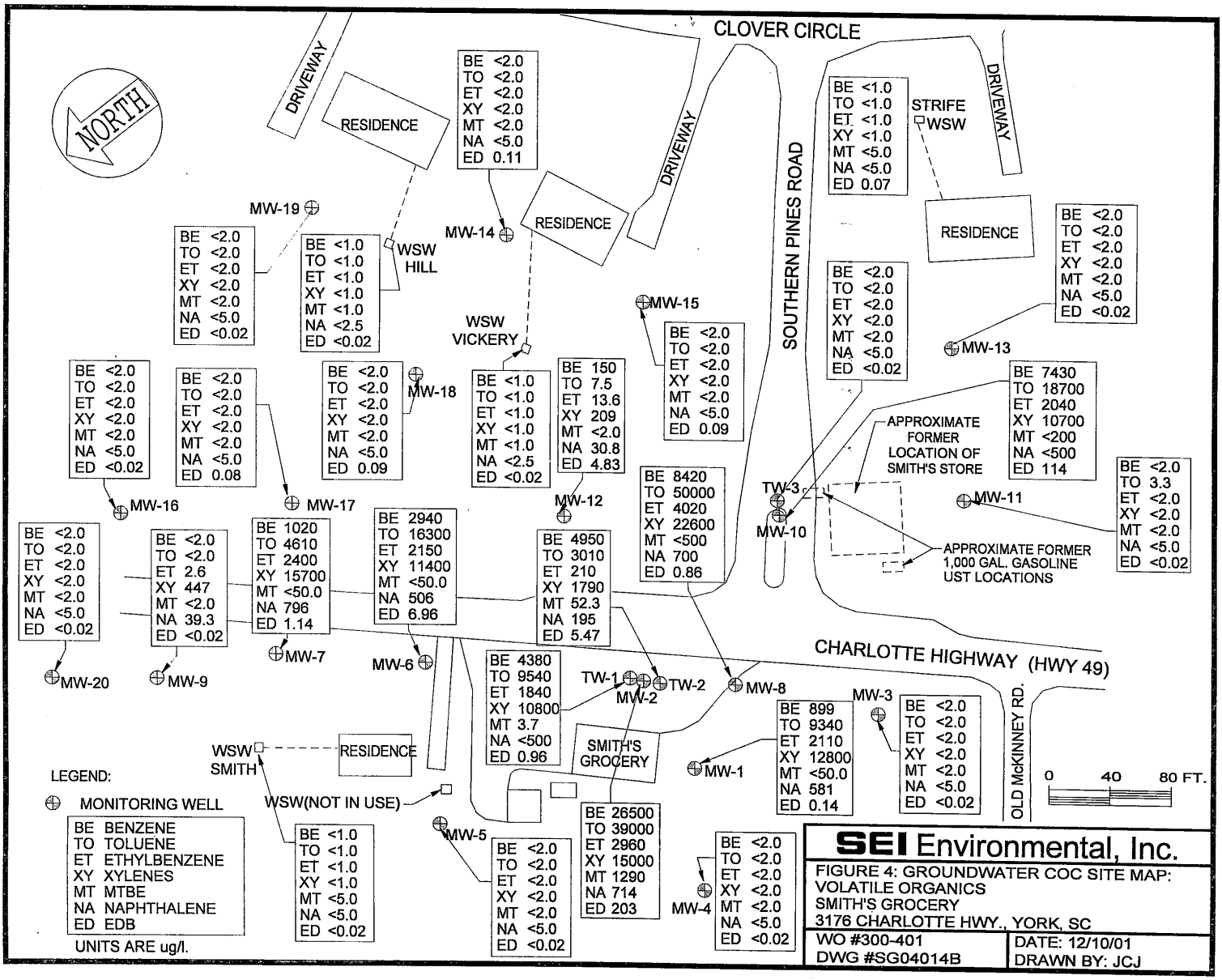
WO #300-401	DATE: 12/10/01
DWG #SG04012B	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: GROUNDWATER ELEVATION CONTOUR MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

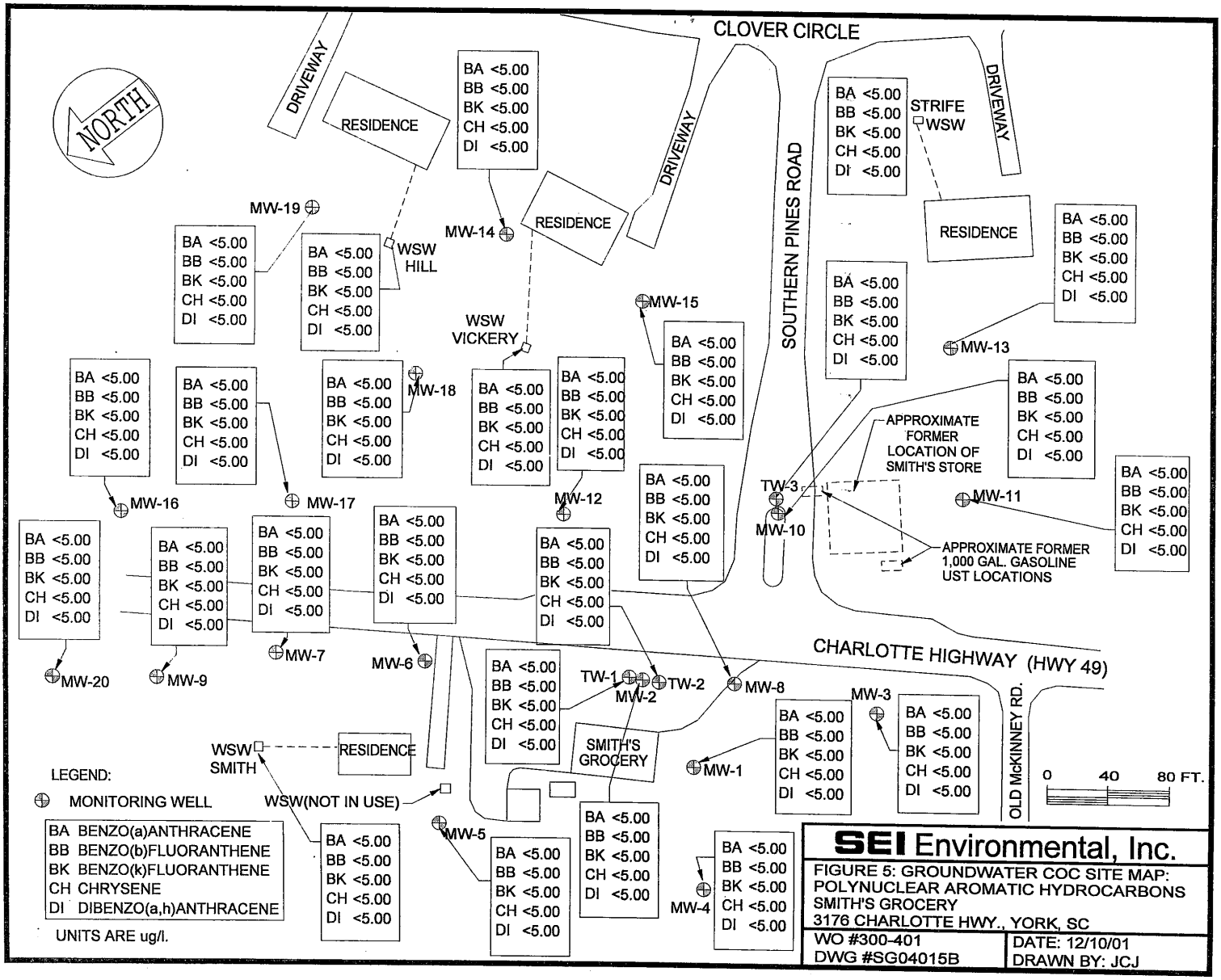
WO #300-401	DATE: 12/10/01
DWG #SG04013B	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP:
VOLATILE ORGANICS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC

WO #300-401 | DATE: 12/10/01
DWG #SG04014B | DRAWN BY: JCJ



LEGEND:

⊕ MONITORING WELL

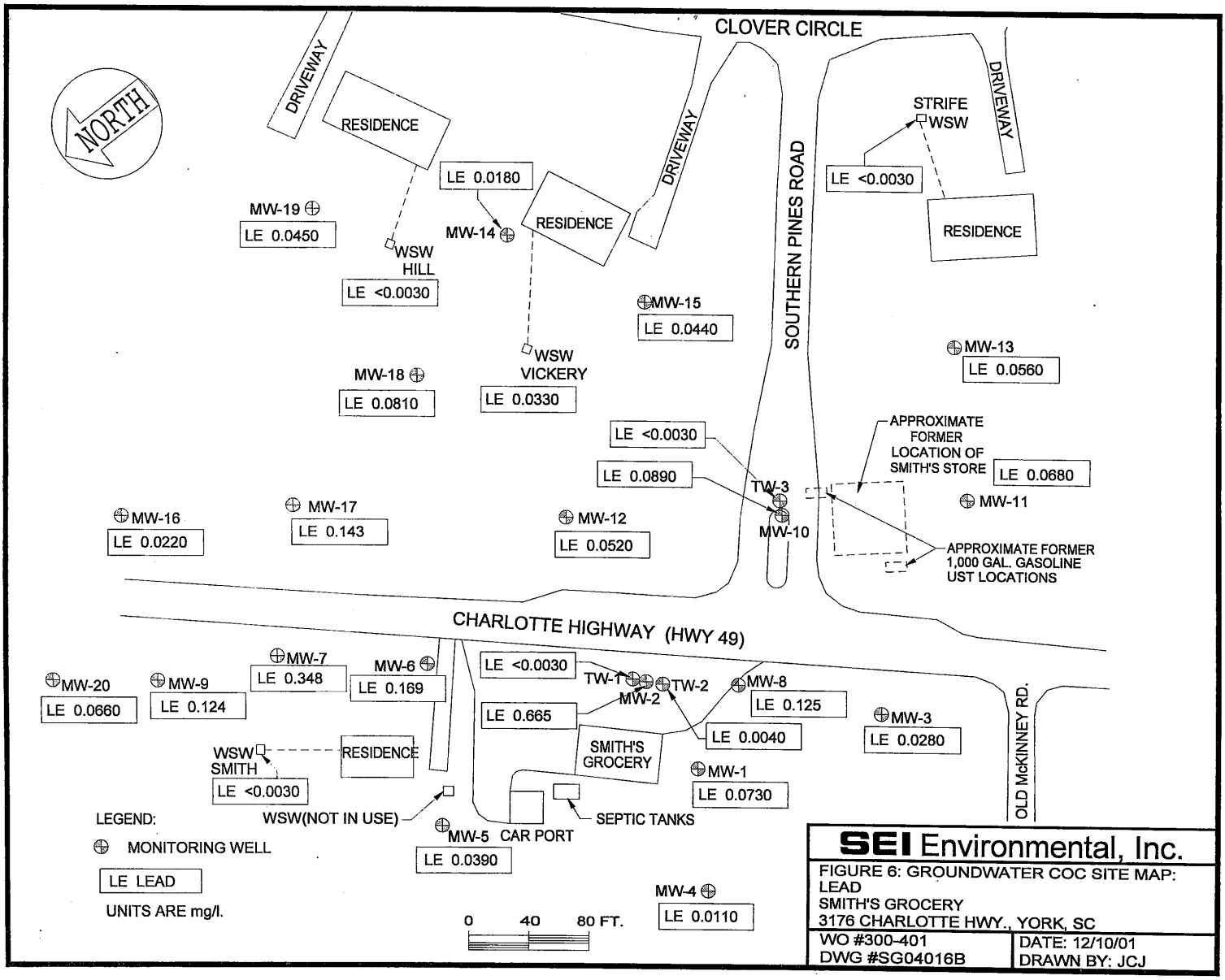
BA BENZO(a)ANTHRACENE
BB BENZO(b)FLUORANTHENE
BK BENZO(k)FLUORANTHENE
CH CHRYSENE
DI DIBENZO(a,h)ANTHRACENE

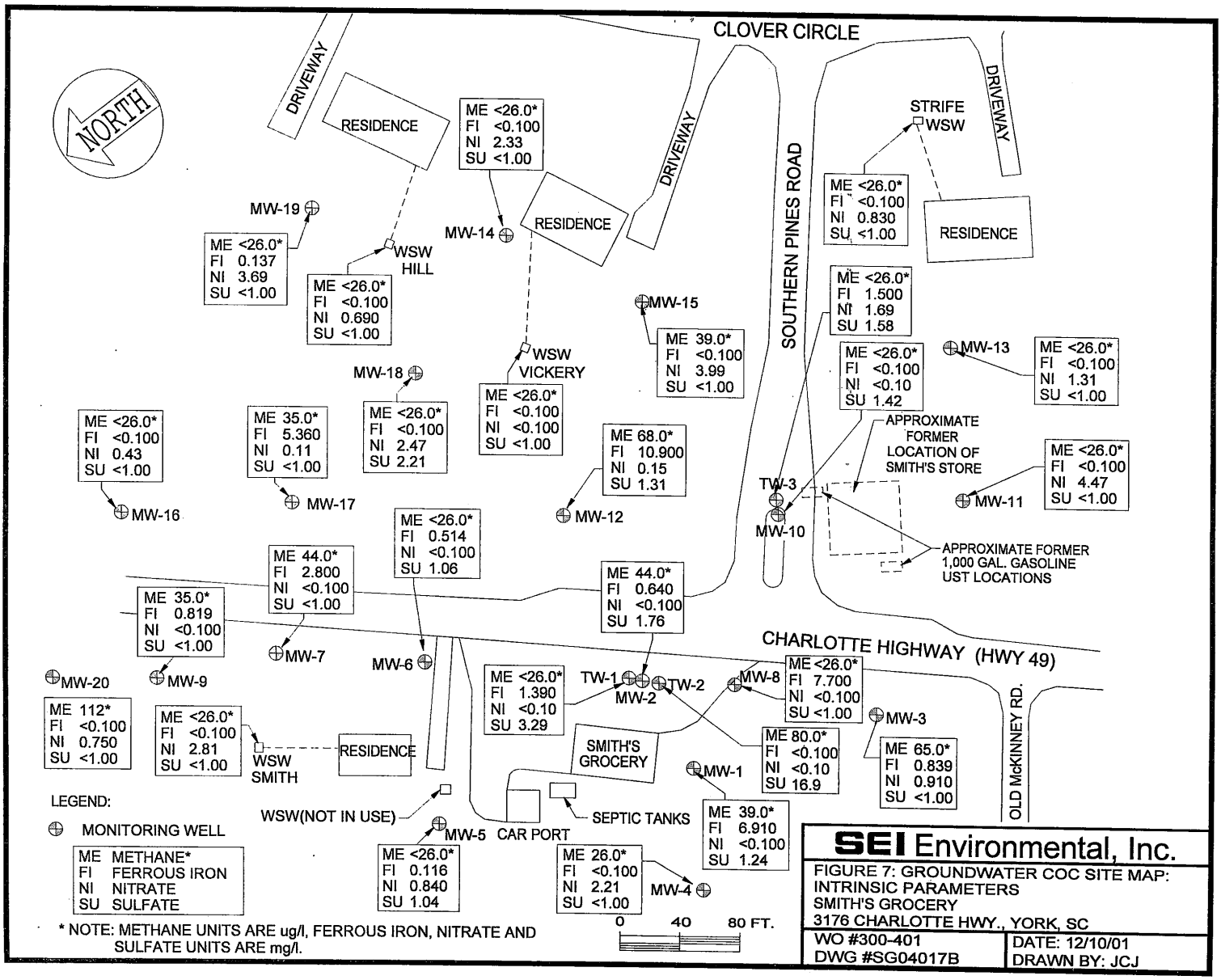
UNITS ARE ug/l.

SEI Environmental, Inc.

FIGURE 5: GROUNDWATER COC SITE MAP: POLYNUCLEAR AROMATIC HYDROCARBONS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC

WO #300-401 | DATE: 12/10/01
DWG #SG04015B | DRAWN BY: JCJ


NORTH
CLOVER CIRCLE
DRIVEWAY
RESIDENCE
LE 0.0180
MW-19
LE 0.0450
MW-14
WSW HILL
LE <0.0030
RESIDENCE
DRIVEWAY
SOUTHERN PINES ROAD
STRIFE WSW
LE <0.0030
DRIVEWAY
RESIDENCE
MW-15
LE 0.0440
MW-13
LE 0.0560
WSW VICKERY
LE 0.0330
MW-18
LE 0.0810
LE <0.0030
LE 0.0890
TW-3
MW-10
APPROXIMATE FORMER LOCATION OF SMITH'S STORE
LE 0.0680
MW-11
APPROXIMATE FORMER 1,000 GAL. GASOLINE UST LOCATIONS
MW-16
LE 0.0220
MW-17
LE 0.143
MW-12
LE 0.0520
CHARLOTTE HIGHWAY (HWY 49)
MW-20
LE 0.0660
MW-9
LE 0.124
MW-7
LE 0.348
MW-6
LE 0.169
LE <0.0030
TW-1
TW-2
MW-2
MW-8
LE 0.125
LE 0.665
LE 0.0040
MW-3
LE 0.0280
SMITH'S GROCERY
WSW SMITH
LE <0.0030
RESIDENCE
MW-1
LE 0.0730
OLD McKINNEY RD.
LEGEND:
MONITORING WELL
LE LEAD
UNITS ARE mg/l.
WSW(NOT IN USE)
MW-5 CAR PORT
LE 0.0390
SEPTIC TANKS
MW-4
LE 0.0110
0 40 80 FT.
SEI Environmental, Inc.
FIGURE 6: GROUNDWATER COC SITE MAP: LEAD
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
WO #300-401
DWG #SG04016B
DATE: 12/10/01
DRAWN BY: JCJ


NORTH
CLOVER CIRCLE
DRIVEWAY
RESIDENCE
ME <26.0*
FI <0.100
NI 2.33
SU <1.00
DRIVEWAY
SOUTHERN PINES ROAD
STRIFE
WSW
DRIVEWAY
ME <26.0*
FI <0.100
NI 0.830
SU <1.00
RESIDENCE
MW-19
ME <26.0*
FI 0.137
NI 3.69
SU <1.00
WSW
HILL
ME <26.0*
FI <0.100
NI 0.690
SU <1.00
MW-14
RESIDENCE
MW-15
ME 39.0*
FI <0.100
NI 3.99
SU <1.00
WSW
VICKERY
ME <26.0*
FI <0.100
NI <0.100
SU <1.00
MW-18
ME <26.0*
FI <0.100
NI 2.47
SU 2.21
ME <26.0*
FI 1.500
NI 1.69
SU 1.58
ME <26.0*
FI <0.100
NI <0.10
SU 1.42
MW-13
ME <26.0*
FI <0.100
NI 1.31
SU <1.00
APPROXIMATE
FORMER
LOCATION OF
SMITH'S STORE
ME <26.0*
FI <0.100
NI 0.43
SU <1.00
MW-16
ME 35.0*
FI 5.360
NI 0.11
SU <1.00
MW-17
ME 68.0*
FI 10.900
NI 0.15
SU 1.31
MW-12
TW-3
MW-10
MW-11
ME <26.0*
FI <0.100
NI 4.47
SU <1.00
ME <26.0*
FI 0.514
NI <0.100
SU 1.06
ME 44.0*
FI 2.800
NI <0.100
SU <1.00
ME 44.0*
FI 0.640
NI <0.100
SU 1.76
APPROXIMATE FORMER
1,000 GAL. GASOLINE
UST LOCATIONS
ME 35.0*
FI 0.819
NI <0.100
SU <1.00
CHARLOTTE HIGHWAY (HWY 49)
MW-7
MW-6
MW-20
MW-9
ME <26.0*
FI 1.390
NI <0.10
SU 3.29
TW-1
MW-2
TW-2
MW-8
ME <26.0*
FI 7.700
NI <0.100
SU <1.00
MW-3
ME 112*
FI <0.100
NI 0.750
SU <1.00
ME <26.0*
FI <0.100
NI 2.81
SU <1.00
WSW
SMITH
RESIDENCE
SMITH'S
GROCERY
ME 80.0*
FI <0.100
NI <0.10
SU 16.9
MW-1
ME 65.0*
FI 0.839
NI 0.910
SU <1.00
OLD McKINNEY RD.
LEGEND:
MONITORING WELL
ME METHANE*
FI FERROUS IRON
NI NITRATE
SU SULFATE
WSW(NOT IN USE)
MW-5
CAR PORT
SEPTIC TANKS
ME 39.0*
FI 6.910
NI <0.100
SU 1.24
ME <26.0*
FI 0.116
NI 0.840
SU 1.04
ME 26.0*
FI <0.100
NI 2.21
SU <1.00
MW-4
0
40
80 FT.
* NOTE: METHANE UNITS ARE ug/l, FERROUS IRON, NITRATE AND
SULFATE UNITS ARE mg/l.
SEI Environmental, Inc.
FIGURE 7: GROUNDWATER COC SITE MAP:
INTRINSIC PARAMETERS
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
WO #300-401
DWG #SG04017B
DATE: 12/10/01
DRAWN BY: JCJ

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800.377.2826
803.788.2535
Fax 788.2399

RECEIVED
DEC 03 2001
Underground Storage
Tank Program

November 30, 2001

Ms. Paula Anderson
SCDHEC
2600 Bull Street
Columbia, SC 29201

RE: Smith's Grocery
3176 Charlotte Hwy 49
York, SC
Site ID # 09322

Dear Ms. Anderson,

Please find enclosed the Corrective Action Quarterly Groundwater Sampling Report associated with the July 11, 2001 sampling event for the above referenced site. Copies of all pertinent maps can be found in the Figures section of the report. Quarterly sampling results are provided in the Tables section of the report. Copies of the analytical results are also attached in the Appendix of the report.

Please feel free to call me at (803) 788-2535 if you have any questions concerning this report.

Sincerely,
SEI Environmental

Fred Lyke
Branch Manager

Cc: Lois B. Smith – Smith's Grocery

SEI
Environmental, Inc.

CORRECTIVE ACTION
QUARTERLY SAMPLING REPORT

Smith's Grocery
3176 Charlotte Hwy 49
York, South Carolina
York County
Site ID #09322

PREPARED FOR:

Ms. Paula Anderson
Buerau of Underground Storage Tank Management
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201

PREPARED BY:

SEI Environmental, Inc.
3021 McNaughton Drive, Suite 9
Columbia, South Carolina 29223
(803) 788-2535

Marc L. McFarland
Staff Geologist

Frederick P. Lyke, P.G. #1055

November 9, 2001

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 GROUNDWATER SAMPLING METHODOLOGY 1

2.1 Groundwater Direction and Velocity 1

2.2 Groundwater Sampling and Analysis 2

3.0 LABORATORY RESULTS 3

4.0 REMEDIATION EFFECTIVENESS 4

5.0 SUMMARY OF FINDINGS AND CONCLUSIONS 4

6.0 REPORT LIMITATIONS 5

LIST OF TABLES

TABLE I Groundwater Elevation Data

TABLE II Historical Summary of Groundwater Elevation Data

TABLE III Groundwater Analytical Results

TABLE IV Historical Summary of Groundwater Analytical Results

TABLE V System Effectiveness Analysis

LIST OF FIGURES

FIGURE 1 Site Location Map

FIGURE 2 Site Map

FIGURE 3 Groundwater Elevation Contour Map

FIGURE 4 CoC Concentrations Map

LIST OF APPENDICES

APPENDIX A	Groundwater Sampling Field Measurements
APPENDIX B	Laboratory Analytical Results and Chain-of-Custody
APPENDIX C	Disposal Manifest

1.0 INTRODUCTION

South Carolina Department of Health and Environmental Control (SCDHEC) contracted SEI Environmental, Inc. (SEI) to conduct corrective action and quarterly groundwater sampling activities at the Smith's Grocery facility (Site ID No. 09322) located on US Highway 49 in York, South Carolina. The approximate location of the project site is shown on the United States Geological Survey (USGS), 7.5-Minute Series Topographic Map provided as **Figure 1**. The corrective action and sampling activities were approved by SCDHEC in correspondence dated May 30, 2000.

2.0 GROUNDWATER SAMPLING METHODOLOGY

CoC concentraiton reduction is evaluated by verifying if the CoC concentrations reduction goals have been achieved in Monitor Wells MW-1 through MW-20, TW-1 through TW-3, and four drinking water wells named Hill, Vickery, Strife, and Smith. Therefore, chemical test data from Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, through MW-5, MW-12 through MW-14, and MW-19 , MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-10 through MW-19, TW-2 and TW-3 as well as the four drinking water wells in conjunction with following information are used to evaluate the effectiveness of the bioremediation.

2.1 Groundwater Direction and Velocity

On July 11, 2001, SEI personnel conducted a gauging and groundwater sampling event at the subject site. A water level indicator was used to record the water level in each well. A water-level measuring point (top of PVC casing) was established for each monitor well and referenced to a relative benchmark (BM). Unconfined groundwater was measured to be between 23 and 45 feet below the measuring point. The water level measurements were converted to relative water table elevations by subtracting the water level measurements from the referenced measuring point elevations on the top of the PVC casing. The water table elevations were then contoured to determine the relative direction of groundwater flow in the surficial aquifer. Groundwater measurements from the February sampling event are summarized in **Table I**, and a groundwater elevation contour map

is depicted in **Figure 3**. Groundwater measurements from the February sampling event are also compared to previous sampling events summarized in **Table II**.

Based on the groundwater elevation calculation, it appears that groundwater at the site moves mostly in an eastern direction. It was calculated that groundwater moves under a hydraulic gradient of 0.017 feet per foot as measured between Monitor Well MW-4 and MW-19.

2.2 Groundwater Sampling and Analysis

On July 11, 2001, SEI personnel obtained groundwater samples from Monitor MW-1 through MW-20, TW-1 through TW-3, and four drinking water wells named Hill, Vickery, Strife, and Smith. A new, disposable, polyethylene bailer was used for the collection of the water samples from the monitor wells. Each groundwater sample was obtained after pH values and temperature had equilibrated unless petroleum odor was emanating from the well. If petroleum odors were observed in the monitor well, the groundwater sample was obtained after three well volumes were purged. All purge water was drummed for proper disposal at a permitted treatment facility. Field measurements are presented in **Appendix A.** New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The groundwater samples were placed in laboratory supplied containers, placed on ice, and delivered to TestAmerica Incorporated in Columbia, South Carolina for proper analysis. Proper preservation methods and chain-of-custody procedures were followed throughout the sampling process. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene by EPA method 8260; and polynuclear aromatic hydrocarbons by EPA method 8270; and lead by EPA method 200.7.

The four (4) drinking water wells located in the vicinity of this site will be sampled and the filters changed during the next sampling event due on October of 2001.

3.0 LABORATORY RESULTS

Groundwater analytical results for the samples collected on July 11, 2001, detected benzene concentrations in Compliance Monitor Wells MW-1 (830 µg/L), MW-2 (33,000 µg/L), MW-6 (2840 µg/L), MW-7 (980 µg/L), MW-8 (12000 µg/L), MW-10 (6450 µg/L), MW-12 (242 µg/L), and TW-2 (3610 µg/L) above its site specific target level (SSTL) of (11µg/l), (10 µg/L), (6 µg/L), (6 µg/L), (12 µg/L), (9 µg/L), (7 µg/L), and (5 µg/l) respectively. Toluene concentrations were detected in Compliance Monitor Wells MW-1 (13200 µg/L), MW-2 (50600 g/L), MW-6 (13500 µg/L), MW-8 (78000 µg/L), MW-10 (20400 µg/L)., MW-12 (14.8 µg/L), and TW-2 (1660 µg/L) above its SSTLs of (2223 µg/L), (2021 µg/L), (1212 µg/L), (2424 µg/L), (1819 µg/L), (5 µg/L), and (5 µg/L) respectively. Ethylbenzene concentrations were detected in Compliance Monitor Wells MW-1 (2300 µg/L), MW-2 (2260 µg/L), MW-6 (1840 µg/L), MW-7 (900 µg/L), MW-8 (6400 µg/L), MW-10 (2660 µg/L), and TW-2 (50.1 µg/L) above its SSTLs of (1558 µg/L), (1416 µg/L) (850 µg/L), (850 µg/L), (1700 µg/L), (1274 µg/L), and (5 µg/L) respectively. Xylene concentrations were detected in Monitor Wells MW-1 (15200 µg/L), MW-6 (8440 µg/L), MW-8 (31400 µg/L), and TW-2 (465 µg/L) above its SSTLs of (10000 µg/L), (8000 µg/L), (16000 µg/L), and (180 µg/l) respectively. MTBE concentrations were detected in Monitor Wells MW-2 (1220 µg/L) and TW-2 (50.8 µg/l) above its SSTLs of (81 µg/L) and (5 µg/l) respectively. Naphthalene concentrations were detected in Monitor Wells MW-1 (585 µg/L), MW-2 (590 µg/L), MW-7 (360 µg/L), MW-8 (910 µg/L), MW-12 (38.8 µg/L), and TW-2 (68.2 µg/L) above its SSTL of (56 µg/L), (51 µg/L), (31 µg/L), (62 µg/L), (36 µg/L), and (18 µg/L) respectively. All other Chemicals of Concern (CoC) were not detected at concentrations exceeding their associated SSTL in the wells that were actually sampled during this sampling event. Laboratory analytical results are summarized in **Table III** and are depicted in **Figure 4**. Laboratory analytical results are also compared to analytical results from previous sampling events and are summarized in **Table IV**. Laboratory analytical results and chain-of-custody are presented in **Appendix B**.

4.0 REMEDIATION EFFECTIVENESS

The evaluation of the remediation effectiveness consists in comparing the July 11, 2001, CoC concentrations against the base line and determining the percent of total concentration reduction. This is calculated by subtracting from the total concentration above SSTLs from baseline sampling the total concentration above SSTLs from the July 11, 2001, sampling event and dividing it by the total concentration above SSTLs from baseline sampling. The calculation of the total concentration reduction is presented in **Table V**.

According to calculations made from the July 11, 2001 sampling event, approximately 72.0 percent of the CoC concentrations have been removed from the site.

5.0 SUMMARY OF FINDINGS

Based on the above information, SEI findings are as follows:

- On July 11, 2001, SEI personnel obtained groundwater samples from Monitor Wells MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-10 through MW-19, TW-2 and TW-3.
- Based on the groundwater elevation calculation, it appears that groundwater at the site moves mostly in an eastern direction. It was calculated that groundwater moves under a hydraulic gradient of 0.017 feet per foot as measured between Monitor Well MW-4 and MW-19.
- Benzene concentrations in Compliance Monitor Wells MW-1 (830 µg/L), MW-2 (33,000 µg/L), MW-6 (2840 µg/L), MW-7 (980 µg/L), MW-8 (12000 µg/L), MW-10 (6450 µg/L), MW-12 (242 µg/L), and TW-2 (3610 µg/L) above its site specific target level (SSTL) of (11µg/l), (10 µg/L), (6 µg/L), (6 µg/L), (12 µg/L), (9 µg/L), (7 µg/L), and (5 µg/l) respectively.

- Toluene concentrations were detected in Compliance Monitor Wells MW-1 (13200 µg/L), MW-2 (50600 g/L), MW-6 (13500 µg/L), MW-8 (78000 µg/L), MW-10 (20400 µg/L)., MW-12 (14.8 µg/L), and TW-2 (1660 µg/L) above its SSTLs of (2223 µg/L), (2021 µg/L), (1212 µg/L), (2424 µg/L), (1819 µg/L), (5 µg/L), and (5 µg/L) respectively.
- Ethylbenzene concentrations were detected in Compliance Monitor Wells MW-1 (2300 µg/L), MW-2 (2260 µg/L), MW-6 (1840 µg/L), MW-7 (900 µg/L), MW-8 (6400 µg/L), MW-10 (2660 µg/L), and TW-2 (50.1 µg/L) above its SSTLs of (1558 µg/L), (1416 µg/L) (850 µg/L), (850 µg/L), (1700 µg/L), (1274 µg/L), and (5 µg/L) respectively.
- Xylene concentrations were detected in Monitor Wells MW-1 (15200 µg/L), MW-6 (8440 µg/L), MW-8 (31400 µg/L), and TW-2 (465 µg/L) above its SSTLs of (10000 µg/L), (8000 µg/L), (16000 µg/L), and (180 µg/l) respectively.
- MTBE concentrations were detected in Monitor Wells MW-2 (1220 µg/L) and TW-2 (50.8 µg/l) above its SSTLs of (81 µg/L) and (5 µg/l) respectively.
- Naphthalene concentrations were detected in Monitor Wells MW-1 (585 µg/L), MW-2 (590 µg/L), MW-7 (360 µg/L), MW-8 (910 µg/L), MW-12 (38.8 µg/L), and TW-2 (68.2 µg/L) above its SSTL of (56 µg/L), (51 µg/L), (31 µg/L), (62 µg/L), (36 µg/L), and (18 µg/L) respectively.
- According to calculations made from the July 11, 2001 sampling event, approximately 72.0 percent of the CoC concentrations have been removed from the site.
- Filters on the drinking water wells at this site will be changed during the next sampling event due in October of 2001. Samples will also then be collected for these drinking water wells at that time.

6.0 REPORT LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the current UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

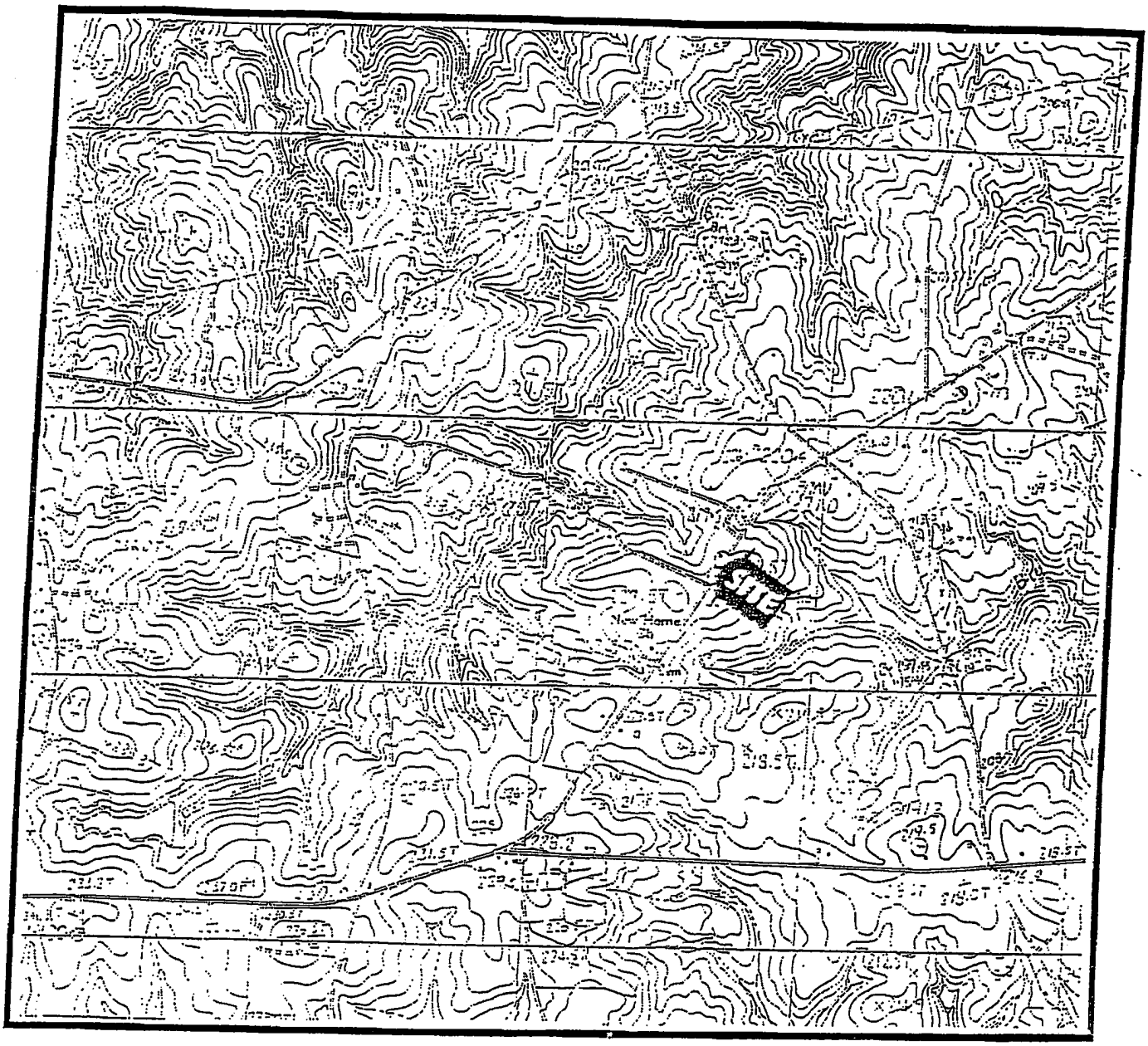
REFERENCES

Fetter, C. W., 1994, *Applied Hydrogeology*, Macmillan College Publishing Company, New York, New York.

SCDHEC, January 5, 1998, *Risk-Based Corrective Action for Petroleum Releases*, Columbia, South Carolina.

SEI Environmental, Inc., February 2, 2000, *Groundwater Sampling Report – Pantry #3229*, Columbia, South Carolina.

7.5 MINUTE SERIES(TOPOGRAPHIC)



SCALE 1:24000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

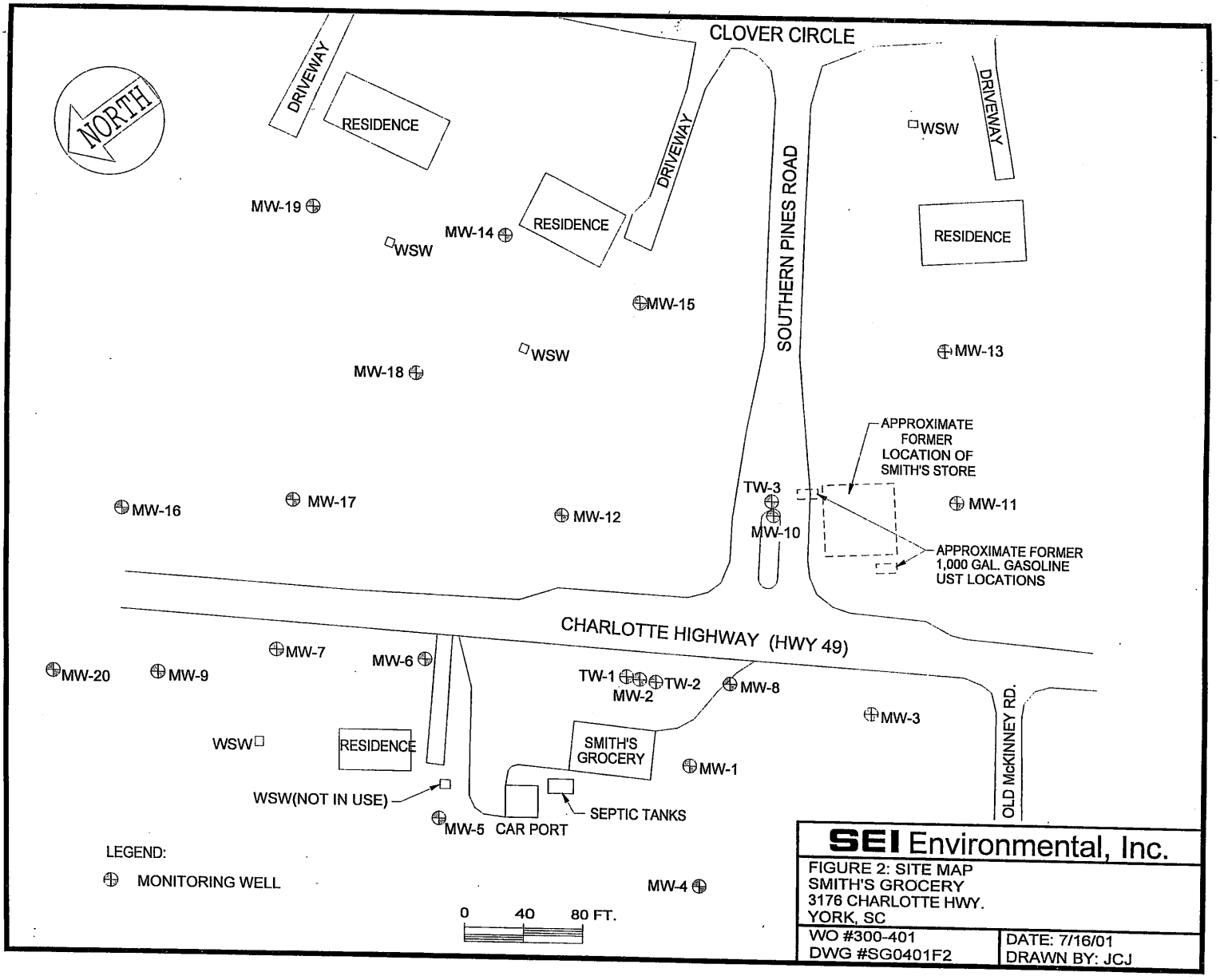
1 .5 0 1 KILOMETER

NORTH

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

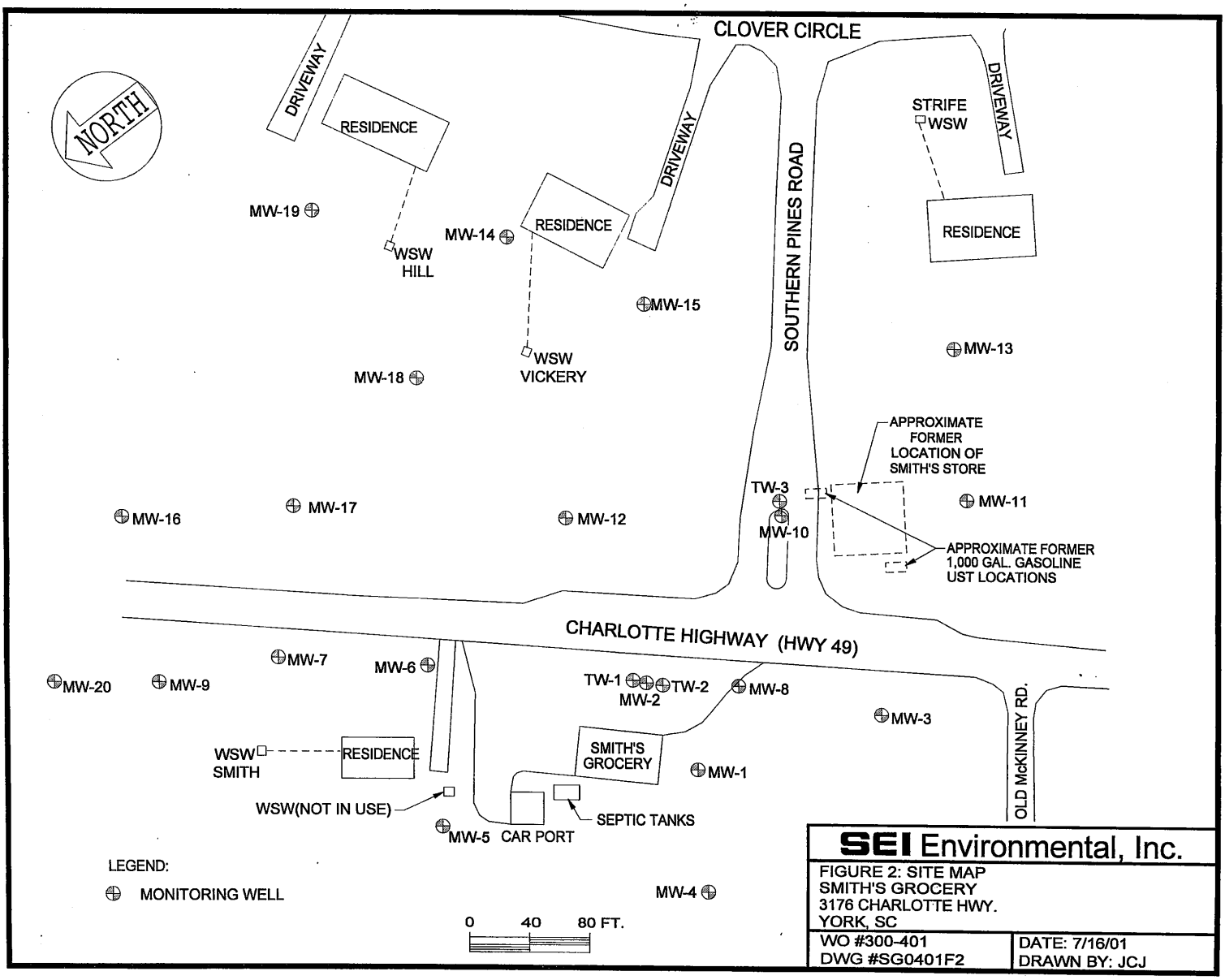
W.O. #: 300-401	DATE: 7/17/01
DWG #	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

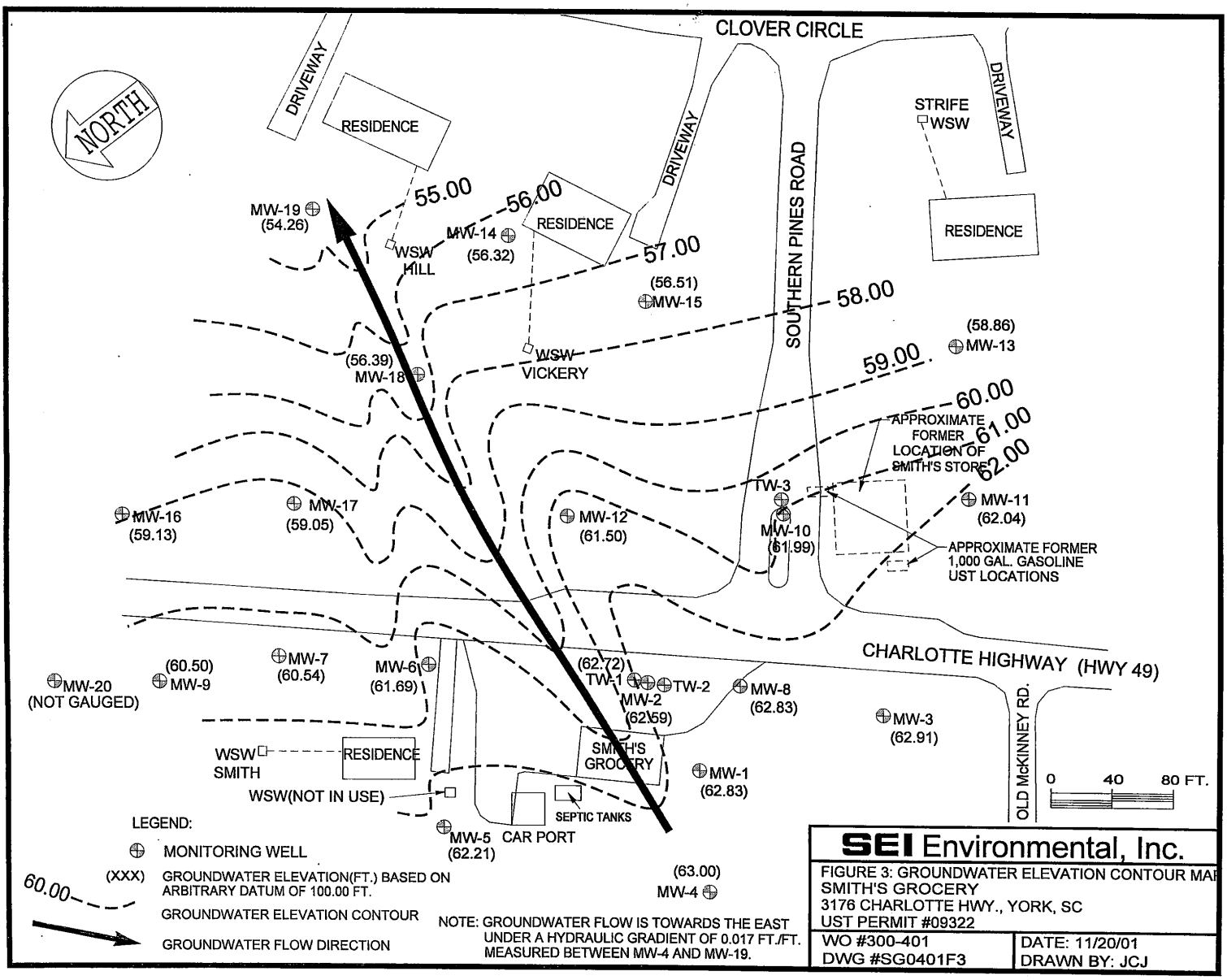
WO #300-401	DATE: 7/16/01
DWG #SG0401F2	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

WO #300-401	DATE: 7/16/01
DWG #SG0401F2	DRAWN BY: JCJ



SEI Environmental, Inc.

FIGURE 3: GROUNDWATER ELEVATION CONTOUR MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY., YORK, SC
UST PERMIT #09322

WO #300-401	DATE: 11/20/01
DWG #SG0401F3	DRAWN BY: JCJ

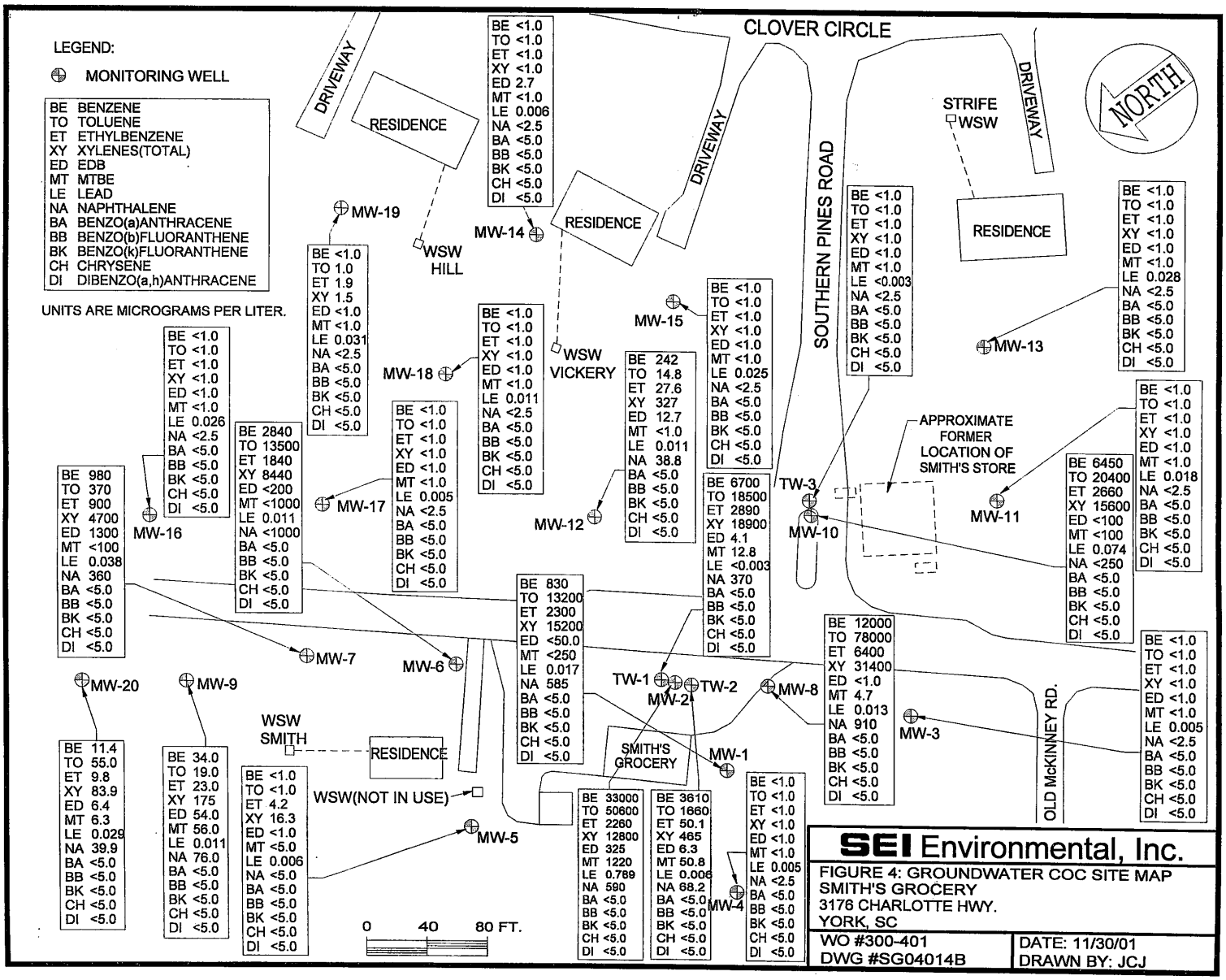

LEGEND:
MONITORING WELL
BE BENZENE
TO TOLUENE
ET ETHYLBENZENE
XY XYLENES(TOTAL)
ED EDB
MT MTBE
LE LEAD
NA NAPHTHALENE
BA BENZO(a)ANTHRACENE
BB BENZO(b)FLUORANTHENE
BK BENZO(k)FLUORANTHENE
CH CHRYSENE
DI DIBENZO(a,h)ANTHRACENE
UNITS ARE MICROGRAMS PER LITER.
CLOVER CIRCLE
SOUTHERN PINES ROAD
DRIVEWAY
RESIDENCE
NORTH
STRIFE WSW
WSW HILL
WSW VICKERY
WSW SMITH
WSW(NOT IN USE)
SMITH'S GROCERY
APPROXIMATE FORMER LOCATION OF SMITH'S STORE
OLD McKINNEY RD.
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8
MW-9
MW-10
MW-11
MW-12
MW-13
MW-14
MW-15
MW-16
MW-17
MW-18
MW-19
MW-20
TW-1
TW-2
TW-3
0 40 80 FT.
SEI Environmental, Inc.
FIGURE 4: GROUNDWATER COC SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC
WO #300-401
DWG #SG04014B
DATE: 11/30/01
DRAWN BY: JCJ

Table 1
Summary of Referenced Ground-Water Elevation
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Wells Number	Date Measured	Referenced Top of Casing Elevation (feet)	Measured Depth to Ground Water (feet)	Total Depth of Well (feet)	Referenced Ground-water Elevation (feet)
MW-1	7-11-01	91.16	28.33	35	62.83
MW-2	7-11-01	94.57	31.98	38	62.59
MW-3	7-11-01	91.91	29.00	35	62.91
MW-4	7-11-01	86.20	23.20	27	63.00
MW-5	7-11-01	89.29	27.08	30	62.21
MW-6	7-11-01	93.91	32.22	37	61.69
MW-7	7-11-01	91.68	31.14	36	60.54
MW-8	7-11-01	94.72	32.03	38	62.69
MW-9	7-11-01	90.54	30.04	36	60.50
MW-10	7-11-01	99.77	37.78	44	61.99
MW-11	7-11-01	100.46	38.42	44	62.04
MW-12	7-11-01	99.61	38.11	44	61.50
MW-13	7-11-01	100.39	41.53	47	58.86
MW-14	7-11-01	98.89	42.57	50	56.32
MW-15	7-11-01	100.18	43.67	50	56.51
MW-16	7-11-01	89.91	30.78	37	59.13
MW-17	7-11-01	94.46	35.41	40	59.05
MW-18	7-11-01	98.14	41.75	46	56.39
MW-19	7-11-01	98.27	44.01	50	54.26
MW-20	7-11-01	NS	27.81	35	NS
TW-1	7-11-01	94.72	32.00	61	62.72
TW-2	7-11-01	NS	32.40	88	NS
TW-3	7-11-01	NS	37.07	71	NS

Notes:
NS = Not Surveyed

Table 2
Historical Summary of Referenced Ground-Water Elevation
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Well Number	Referenced Top of Casing Elevation	Depth to Ground Water (feet)		Assumed Ground Water Elevation (feet)	
		8-21-00	7-11-01	8-21-00	7-11-01
MW-1	91.16	26.29	28.33	64.87	62.83
MW-2	94.57	31.90	31.98	62.67	62.59
MW-3	91.91	29.02	29.00	62.89	62.91
MW-4	86.20	23.11	23.20	63.09	63.00
MW-5	89.29	26.90	27.08	62.39	62.21
MW-6	93.91	32.10	32.22	61.81	61.69
MW-7	91.68	30.89	31.14	60.79	60.54
MW-8	94.72	32.00	32.03	62.72	62.69
MW-9	90.54	29.83	30.04	60.71	60.50
MW-10	99.77	37.77	37.78	62.00	61.99
MW-11	100.46	38.53	38.42	61.93	62.04
MW-12	99.61	37.93	38.11	61.68	61.50
MW-13	100.39	41.54	41.53	58.85	58.86
MW-14	98.89	42.25	42.57	56.64	56.32
MW-15	100.18	43.36	43.67	56.82	56.51
MW-16	89.91	30.54	30.78	59.37	59.13
MW-17	94.46	35.39	35.41	59.07	59.05
MW-18	98.14	41.32	41.75	56.82	56.39
MW-19	98.27	43.90	44.01	54.37	54.26
MW-20	NS	27.58	27.81	NS	NS
TW-1	94.72	32.08	32.00	62.64	62.72
TW-2	NS	32.00	32.40	NS	NS
TW-3	NS	37.00	37.07	NS	NS

Elevations are based upon the assumed elevation of 100.00 feet
* Corrected depth to water = depth to water – [(LPH thickness) x 0.78)]
LPH=Liquid Phase Hydrocarbons
N/M = Not Measured
NF = Not Found

Table 3
Summary of Ground-Water Analytical Test Results
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Well Number	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20
Sampling Date	**7-11-01**	**7-11-01**	**7-11-01**	**7-11-01**	**7-11-01**	**7-11-01**	**7-11-01**	**7-11-01**	**7-11-01**	**7-11-01**
Chemicals Of Concern (µg/L)										
Free Product Thickness (feet)	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Benzene	<1.0	**242**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11.4
Toluene	<1.0	**14.8**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	55.0
Ethylbenzene	<1.0	27.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	9.8
Xylenes (total)	<1.0	327	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	83.9
Total BTEX	<4.0	611.4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<5.4	160.1
EDB	<1.0	**12.7**	<1.0	**2.7**	<1.0	<1.0	<1.0	<1.0	<1.0	6.4
MTBE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.3
Lead	0.018	0.011	0.028	0.006	0.025	0.026	0.005	0.011	0.031	0.029
Naphthalene	<2.5	**38.8**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	39.9
Benzo(a)anthracene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(b)flouranthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(k)flouranthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chrysene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dibenzo(a,h)anthracene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0

Notes:
Bold Concentrations represent concentrations above their SSTL.
N/A = Not Applicable
ND = Not Detected
NS = Not Sampled

Table 3
Summary of Ground-Water Analytical Test Results
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Well Number	**TW-1**	**TW-2**	**TW-3**
Sampling Date	**7-11-01**	**7-11-01**	**7-11-01**
Chemicals Of Concern (µg/L)			
Free Product Thickness (feet)	ND	ND	ND
Benzene	6700	**3610**	<1.0
Toluene	18500	**1660**	<1.0
Ethylbenzene	2890	**50.1**	<1.0
Xylenes (total)	18900	**465**	<1.0
Total BTEX	46990	5785.1	<4.0
EDB	4.1	**6.3**	<1.0
MTBE	12.8	**50.8**	<1.0
Lead	<0.003	0.006	<0.003
Naphthalene	370	**68.2**	<2.5
Benzo(a)anthracene	<5.0	<5.0	<5.0
Benzo(b)flouranthene	<5.0	<5.0	<5.0
Benzo(k)flouranthene	<5.0	<5.0	<5.0
Chrysene	<5.0	<5.0	<5.0
Dibenzo(a,h)anthracene	<5.0	<5.0	<5.0

Notes:
Bold Concentrations represent concentrations above their SSTL.
N/A = Not Applicable
ND = Not Detected
NS = Not Sampled

Table 4
Historical Summary of Ground-Water Analytical Test Results
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Well Number	MW-1		MW-2		MW-3	
Sampling Date		7-11-01		7-11-01		7-11-01
Chemicals Of Concern (µg/L)	SSTL (µg/L)		SSTL (µg/L)		SSTL (µg/L)	
Free Product Thickness (feet)	ND	ND	ND	ND	ND	ND
Benzene	11	**830**	10	**33000**	NE	<1.0
Toluene	2223	**13200**	2021	**50600**	NE	<1.0
Ethylbenzene	1558	**2300**	1416	**2260**	NE	<1.0
Xylenes (total)	10000	**15200**	15000	12800	NE	<1.0
Total BTEX	N/A	31530	NA	98660	N/A	<4.0
EDB	0.32	<50.0	10	**325**	NE	<1.0
MTBE	80	<250	81	**1220**	NE	<5.0
Lead	2.0	0.017	30	0.789	NE	0.005
Naphthalene	56	**585**	51	**590**	NE	<5.0
Benzo(a)anthracene	N/A	<5.0	N/A	<5.0	NE	<5.0
Benzo(b)flouranthene	N/A	<5.0	N/A	<5.0	NE	<5.0
Benzo(k)flouranthene	N/A	<5.0	N/A	<5.0	NE	<5.0
Chrysene	N/A	<5.0	N/A	<5.0	NE	<5.0
Dibenzo(a,h)anthracene	N/A	<5.0	N/A	<5.0	NE	<5.0

Notes:
Bold Concentrations represent concentrations above their SSTL.
N/A = Not Applicable
ND = Not Detected
NS = Not Sampled

Table 4
Historical Summary of Ground-Water Analytical Test Results
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Well Number	MW-4		MW-5		MW-6	
Sampling Date		7-11-01		7-11-01		7-11-01
Chemicals Of Concern (µg/L)	SSTL (µg/L)		SSTL (µg/L)		SSTL (µg/L)	
Free Product Thickness (feet)	ND	ND	ND	ND	ND	ND
Benzene	NE	<1.0	NE	<1.0	6	**2840**
Toluene	NE	<1.0	NE	<1.0	1212	**13500**
Ethylbenzene	NE	<1.0	NE	4.2	850	**1840**
Xylenes (total)	NE	<1.0	NE	16.3	8000	**8440**
Total BTEX	N/A	<4.0	N/A	<22.5	N/A	26620
EDB	NE	<1.0	NE	<1.0	48	<200
MTBE	NE	<5.0	NE	<5.0	4.83	<1000
Lead	NE	0.005	NE	0.006	18	0.011
Naphthalene	NE	<5.0	NE	<5.0	31	<1000
Benzo(a)anthracene	NE	<5.0	NE	<5.0	NE	<5.0
Benzo(b)flouranthene	NE	<5.0	NE	<5.0	NE	<5.0
Benzo(k)flouranthene	NE	<5.0	NE	<5.0	NE	<5.0
Chrysene	NE	<5.0	NE	<5.0	NE	<5.0
Dibenzo(a,h)anthracene	NE	<5.0	NE	<5.0	NE	<5.0

Notes:
Bold Concentrations represent concentrations above their SSTL.
N/A = Not Applicable
ND = Not Detected
NS = Not Sampled

Table 4
Historical Summary of Ground-Water Analytical Test Results
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Well Number	MW-7		MW-8		MW-9	
Sampling Date		7-11-01		7-11-01		7-11-01
Chemicals Of Concern (µg/L)	SSTL (µg/L)		SSTL (µg/L)		SSTL (µg/L)	
Free Product Thickness (feet)	ND	ND	ND	NS	ND	ND
Benzene	6	**980**	12	**12000**	NE	34.0
Toluene	1212	370	2424	**78000**	NE	19.0
Ethylbenzene	850	**900**	1700	**6400**	NE	23.0
Xylenes (total)	12123	4700	16000	**31400**	NE	175
Total BTEX	N/A	6950	N/A	127800	N/A	251
EDB	0.66	**1300**	0.48	<1.0	NE	54.0
MTBE	48	<100	96	4.7	NE	56.0
Lead	18	0.038	4	0.013	NE	0.011
Naphthalene	31	**360**	62	**910**	NE	76.0
Benzo(a)anthracene	NE	<5.0	NE	<5.0	NE	<5.0
Benzo(b)flouranthene	NE	<5.0	NE	<5.0	NE	<5.0
Benzo(k)flouranthene	NE	<5.0	NE	<5.0	NE	<5.0
Chrysene	NE	<5.0	NE	<5.0	NE	<5.0
Dibenzo(a,h)anthracene	NE	<5.0	NE	<5.0	NE	<5.0

Notes:
Bold Concentrations represent concentrations above their SSTL.
N/A = Not Applicable
ND = Not Detected
NS = Not Sampled

Table 4
Historical Summary of Ground-Water Analytical Test Results
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Well Number	MW-10		MW-11		MW-12	
Sampling Date		7-11-01		7-11-01		7-11-01
Chemicals Of Concern (µg/L)	SSTL (µg/L)		SSTL (µg/L)		SSTL (µg/L)	
Free Product Thickness (feet)	ND	ND	ND	ND	ND	ND
Benzene	9	**6450**	5	<1.0	7	**242**
Toluene	1819	**20400**	5	<1.0	5	**14.8**
Ethylbenzene	1274	**2660**	5	<1.0	68	27.6
Xylenes (total)	18185	15600	10	<1.0	730	327
Total BTEX	N/A	45110	N/A	<4.0	N/A	611.4
EDB	9	<100	0.02	<1.0	7	**12.7**
MTBE	73	<100	5	<1.0	5	<1.0
Lead	21	0.074	5	0.018	7	0.011
Naphthalene	46	<250	5	<2.5	36	**38.8**
Benzo(a)anthracene	NE	<5.0	NE	<5.0	NE	<5.0
Benzo(b)flouranthene	NE	<5.0	NE	<5.0	NE	<5.0
Benzo(k)flouranthene	NE	<5.0	NE	<5.0	NE	<5.0
Chrysene	NE	<5.0	NE	<5.0	NE	<5.0
Dibenzo(a,h)anthracene	NE	<5.0	NE	<5.0	NE	<5.0

Notes:
Bold Concentrations represent concentrations above their SSTL.
N/A = Not Applicable
ND = Not Detected
NS = Not Sampled

Table 4
Historical Summary of Ground-Water Analytical Test Results
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Well Number	MW-13		MW-14		MW-15	
Sampling Date		7-11-01		7-11-01		7-11-01
Chemicals Of Concern (µg/L)	SSTL (µg/L)		SSTL (µg/L)		SSTL (µg/L)	
Free Product Thickness (feet)	ND	ND	ND	ND	ND	NS
Benzene	5	<1.0	5	<1.0	5	<1.0
Toluene	5	<1.0	5	<1.0	5	<1.0
Ethylbenzene	5	<1.0	5	<1.0	5	<1.0
Xylenes (total)	10	<1.0	10	<1.0	10	<1.0
Total BTEX	N/A	<4.0	N/A	<4.0	N/A	<4.0
EDB	0.02	<1.0	0.51	**2.7**	0.05	<1.0
MTBE	5	<1.0	5	<1.0	5	<1.0
Lead	5	0.028	5	0.006	5	0.025
Naphthalene	5	<2.5	5	<2.5	5	<2.5
Benzo(a)anthracene	NE	<5.0	NE	<5.0	NE	<5.0
Benzo(b)flouranthene	NE	<5.0	NE	<5.0	NE	<5.0
Benzo(k)flouranthene	NE	<5.0	NE	<5.0	NE	<5.0
Chrysene	NE	<5.0	NE	<5.0	NE	<5.0
Dibenzo(a,h)anthracene	NE	<5.0	NE	<5.0	NE	<5.0

Notes:
Bold Concentrations represent concentrations above their SSTL.
N/A = Not Applicable
ND = Not Detected
NS = Not Sampled

Table 4
Historical Summary of Ground-Water Analytical Test Results
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Well Number	MW-16		MW-17		MW-18	
Sampling Date		7-11-01		7-11-01		7-11-01
Chemicals Of Concern (µg/L)	SSTL (µg/L)		SSTL (µg/L)		SSTL (µg/L)	
Free Product Thickness (feet)	ND	ND	ND	ND	ND	ND
Benzene	NE	<1.0	5	<1.0	5	<1.0
Toluene	NE	<1.0	5	<1.0	5	<1.0
Ethylbenzene	NE	<1.0	5	<1.0	5	<1.0
Xylenes (total)	NE	<1.0	10	<1.0	10	<1.0
Total BTEX	N/A	<4.0	N/A	<4.0	N/A	<4.0
EDB	NE	<1.0	0.02	<1.0	0.12	<1.0
MTBE	NE	<1.0	5	<1.0	5	<1.0
Lead	NE	0.026	15	0.005	15	0.011
Naphthalene	NE	<2.5	5	<2.5	5	<2.5
Benzo(a)anthracene	NE	<5.0	NE	<5.0	NE	<5.0
Benzo(b)flouranthene	NE	<5.0	NE	<5.0	NE	<5.0
Benzo(k)flouranthene	NE	<5.0	NE	<5.0	NE	<5.0
Chrysene	NE	<5.0	NE	<5.0	NE	<5.0
Dibenzo(a,h)anthracene	NE	<5.0	NE	<5.0	NE	<5.0

Notes:
Bold Concentrations represent concentrations above their SSTL.
N/A = Not Applicable
ND = Not Detected
NS = Not Sampled

Table 4
Historical Summary of Ground-Water Analytical Test Results
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Well Number	MW-19		MW-20	
Sampling Date		**7-11-01**		**7-11-01**
Chemicals Of Concern (µg/L)	**SSTL (µg/L)**		**SSTL (µg/L)**	
Free Product Thickness (feet)	ND	ND	ND	ND
Benzene	5	<1.0	NE	11.4
Toluene	5	1.0	NE	55.0
Ethylbenzene	5	1.9	NE	9.8
Xylenes (total)	10	1.5	NE	83.9
Total BTEX	N/A	<5.4	N/A	160.1
EDB	0.02	<1.0	NE	6.4
MTBE	5	<1.0	NE	6.3
Lead	15	0.031	NE	0.029
Naphthalene	5	<2.5	NE	39.9
Benzo(a)anthracene	NE	<5.0	NE	<5.0
Benzo(b)flouranthene	NE	<5.0	NE	<5.0
Benzo(k)flouranthene	NE	<5.0	NE	<5.0
Chrysene	NE	<5.0	NE	<5.0
Dibenzo(a,h)anthracene	NE	<5.0	NE	<5.0

Notes:
Bold Concentrations represent concentrations above their SSTL.
N/A = Not Applicable
ND = Not Detected
NS = Not Sampled

Table 4
Historical Summary of Ground-Water Analytical Test Results
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Well Number	TW-1		TW-2		TW-3	
Sampling Date		7-11-01		7-11-01		7-11-01
Chemicals Of Concern (µg/L)	SSTL (µg/L)		SSTL (µg/L)		SSTL (µg/L)	
Free Product Thickness (feet)	ND	ND	ND	ND	ND	ND
Benzene	NE	6700	5	**3610**	5	<1.0
Toluene	NE	18500	8	**1660**	5	<1.0
Ethylbenzene	NE	2890	5	**50.1**	5	<1.0
Xylenes (total)	NE	18900	180	**465**	10	<1.0
Total BTEX	N/A	46990	N/A	5785.1	N/A	<4.0
EDB	NE	4.1	0.05	**6.3**	0.23	<1.0
MTBE	NE	12.8	5	**50.8**	5	<1.0
Lead	NE	<0.003	2	0.006	2	<0.003
Naphthalene	NE	370	18	**68.2**	5	<2.5
Benzo(a)anthracene	NE	<5.0	NE	<5.0	NE	<5.0
Benzo(b)flouranthene	NE	<5.0	NE	<5.0	NE	<5.0
Benzo(k)flouranthene	NE	<5.0	NE	<5.0	NE	<5.0
Chrysene	NE	<5.0	NE	<5.0	NE	<5.0
Dibenzo(a,h)anthracene	NE	<5.0	NE	<5.0	NE	<5.0

Notes:
Bold Concentrations represent concentrations above their SSTL.
N/A = Not Applicable
ND = Not Detected
NS = Not Sampled

Table 5
CoC Concentrations based on July 2001 Quarterly Sampling
Smith's Grocery
Site ID No. 09322
York, South Carolina

Monitor Well Number	Date of Sample	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	MTBE (µg/L)	Total CoC (µg/L)
MW-1	7-11-01	830	**13200**	**2300**	**15200**	**585**	250	32365
MW-2	7-11-01	**33000**	**50600**	**2260**	12800	**590**	**1220**	100470
MW-3	7-11-01	1	1	1	1	5	5	14
MW-4	7-11-01	1	1	1	1	5	5	14
MW-5	7-11-01	1	1	4.2	16.3	5	5	32.5
MW-12	7-11-01	**242**	**14.8**	27.6	327	38.8	1	651.2
MW-13	7-11-01	1	1	1	1	2.5	1	7.5
MW-14	7-11-01	1	1	1	1	2.5	1	7.5
MW-19	7-11-01	1	1	1.9	1.5	2.5	1	8.9
Sample Concentration	NA	34,078	63820.8	4,597.7	28,348.8	1,236.3	1,489	133,570.6
Baseline Concentration	NA	47,644	158,164	19,824	84,035	4,820	1,694	316,181
Total SSTL Concentration	NA	120	10,975	7,772	80,343	391	490	100,091
Sample Concentration above SSTL on 7-11-01	NA	33,958	52,845.8	0	0	845.3	999	88,648.1

Bold indicates concentrations above SSTL.

$$\frac{\text{(Baseline Conc. Above SSTL – Sample Conc. Above SSTL on 7-11-01) (100)}}{\text{Baseline Conc. Above SSTL}} = \frac{(316181-88648.1)(100)}{316181} = 72.0\% \text{ complete}$$

APPENDIX A

Groundwater Sampling Field Measurements

G & K
TANK SERVICES, INC.

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 2 Drums

Smith's Grocery
York, SC

Contaminant NonHazardous Petroleum Contaminanted Water

This is to cerify the above ~~soil~~ water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. Collins Date 07/12/01

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
	GK4141	11-08-01

3. Generator's Name and Mailing Address
SEI ENVIRONMENTAL, INC
3021 MCNAUGHTON DR, SUITE 9
COLOMBIA, SC 29223

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
SEI ENVRIONMENTAL, INC		803-788-2535
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address G & K TANK SERVICES PO BOX 1384 SUMTER, SC 29151	10. US EPA ID Number	C. Facility's Phone 800-800-6840

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINANTED SOIL WILL MART	03	DR		
b. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER PANTRY 3140	01	DR		
c.				
d. NON HAZARDOUS PETROLEUM CONTAMINANTED WATER SMITH'S GROCERY	02	DR		

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JOHN MONEGHAN	John Moneghan	11	08	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
S. Collett	S. Collett	11	08	01

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL - RETURN TO GENERATOR

G & K
TANK SERVICES, INC.

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 2 Drums
Smith's Grocery

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to cerify the above ~~soil~~ water has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. Golden

Date 11/05/01

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

MEMORANDUM

Date: December 11, 2001

To: K. Larry Baker, Environmental Health Director
Catawba Health District

Albert L. Williams, Director
Catawba EQC District

Bruce Bleau
Bureau of Water

Robert F. Marino, MD
Division of Health Hazard Evaluation

From: Paula Anderson, Hydrogeologist PA
Owner / Operator Assistance Section

Subject: Smith's Grocery, SC Hwy 49, York, SC
Petroleum Release reported June 30, 1993
UST Permit #09322

The Underground Storage Tank (UST) Program received notice from Bob Bolton of SEI Environmental on December 4, 2001 that a water supply well at the Strife residence was impacted by EDB from the facility referenced above. The well was resampled and results received December 11, 2001 confirmed the presence of EDB. A Granular Activated Carbon (GAC) filter unit will be installed on the well. Two nearby residences already have GAC filters installed on their water supply wells.

Corrective action activities are currently in progress at the facility.

If you have any questions, please call me at (803) 898-4318.

enc: Laboratory Analytical Reports

cc: Technical file

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800.377.2826
803.788.2535
Fax 788.2399

RECEIVED
DEC 0 6 2001
Underground Storage Tank Program

December 5, 2001

Ms. Paula Anderson, Hydrogeologist
SCDHEC - UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201-1708

Re: Smith's Grocery
3176 SC Highway 49
York, South Carolina
UST Permit #09322

Dear Ms. Anderson:

Please find enclosed corrected text and table for the Corrective Action Quarterly Groundwater Sampling Report – Smith's Grocery that SEI Environmental, Inc. (SEI) recently submitted. SEI apologizes for any inconvenience that this may have caused. Should you have any questions or require additional information, please contact Mr. Fred Lyke or me at 788-2535.

Sincerely,
SEI Environmental, Inc.

Bob Bolton
Project Manager

Enclosure

1.0 INTRODUCTION

South Carolina Department of Health and Environmental Control (SCDHEC) contracted SEI Environmental, Inc. (SEI) to conduct corrective action and quarterly groundwater sampling activities at the Smith's Grocery facility (UST Permit #09322) located on SC Highway 49 in York, South Carolina. The approximate location of the project site is shown on the United States Geological Survey (USGS), 7.5-Minute Series Topographic Map provided as **Figure 1**. The corrective action and sampling activities were approved by SCDHEC in correspondence dated March 26, 2001.

2.0 GROUNDWATER SAMPLING METHODOLOGY

CoC concentration reduction is evaluated by verifying if the CoC concentration reduction goals have been achieved in Monitor Wells MW-1 through MW-19, TW-1 through TW-3, and four drinking water wells named Hill, Vickery, Strife, and Smith. Therefore, chemical test data from Monitor Wells MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 through MW-15, MW-17, MW-18, MW-19, TW-2, and TW-3 are used to evaluate the effectiveness of the bioremediation.

2.1 Groundwater Direction and Velocity

On July 11, 2001, SEI personnel conducted a gauging and groundwater sampling event at the subject site. A water level indicator was used to record the water level in each well. A water-level measuring point (top of PVC casing) was established for each monitor well and referenced to a relative benchmark (BM). Unconfined groundwater was measured to be between 23 and 45 feet below the measuring point. The water level measurements were converted to relative water table elevations by subtracting the water level measurements from the referenced measuring point elevations on the top of the PVC casing. The water table elevations were then contoured to determine the relative direction of groundwater flow in the surficial aquifer. Groundwater measurements from the February sampling event are summarized in **Table I**, and a groundwater elevation contour map is depicted in **Figure 3**.

Based on the groundwater elevation calculation, it appears that groundwater at the site moves mostly in an eastern direction. It was calculated that groundwater moves under a hydraulic gradient of 0.017 feet per foot as measured between Monitor Well MW-4 and MW-19.

2.2 Groundwater Sampling and Analysis

On July 11, 2001, SEI personnel obtained groundwater samples from Monitor MW-1 through MW-20, TW-1 through TW-3, and four drinking water wells named Hill, Vickery, Strife, and Smith. A new, disposable, polyethylene bailer was used for the collection of the water samples from the monitor wells. Each groundwater sample was obtained after pH values and temperature had equilibrated unless petroleum odor was emanating from the well. If petroleum odors were observed in the monitor well, the groundwater sample was obtained after three well volumes were purged. All purge water was drummed for proper disposal at a permitted treatment facility. Field measurements are presented in **Appendix A.** New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The groundwater samples were placed in laboratory supplied containers, placed on ice, and delivered to TestAmerica Incorporated in Columbia, South Carolina for proper analysis. Proper preservation methods and chain-of-custody procedures were followed throughout the sampling process. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), ethylene dibromide (EDB), and naphthalene by EPA method 8260; polynuclear aromatic hydrocarbons by EPA method 8270; and lead by EPA method 200.7.

The four (4) drinking water wells located in the vicinity of this site will be sampled and the filters changed during the next sampling event due on October of 2001.

3.0 LABORATORY RESULTS

Groundwater analytical results for the samples collected on July 11, 2001, detected benzene concentrations in Compliance Monitor Wells MW-1 (830 µg/L), MW-2 (33,000 µg/L), MW-6 (2840 µg/L), MW-7 (980 µg/L), MW-8 (12000 µg/L), MW-10 (6450 µg/L), MW-12 (242 µg/L), and TW-2 (3610 µg/L) above its site specific target level (SSTL) of (11µg/l), (10 µg/L), (6 µg/L), (6 µg/L), (12 µg/L), (9 µg/L), (7 µg/L), and (5 µg/l) respectively. Toluene concentrations were detected in Compliance Monitor Wells MW-1 (13200 µg/L), MW-2 (50600 g/L), MW-6 (13500 µg/L), MW-8 (78000 µg/L), MW-10 (20400 µg/L)., MW-12 (14.8 µg/L), and TW-2 (1660 µg/L) above its SSTLs of (2223 µg/L), (2021 µg/L), (1212 µg/L), (2424 µg/L), (1819 µg/L), (5 µg/L), and (5 µg/L) respectively. Ethylbenzene concentrations were detected in Compliance Monitor Wells MW-1 (2300 µg/L), MW-2 (2260 µg/L), MW-6 (1840 µg/L), MW-7 (900 µg/L), MW-8 (6400 µg/L), MW-10 (2660 µg/L), and TW-2 (50.1 µg/L) above its SSTLs of (1558 µg/L), (1416 µg/L) (850 µg/L), (850 µg/L), (1700 µg/L), (1274 µg/L), and (5 µg/L) respectively. Xylene concentrations were detected in Monitor Wells MW-1 (15200 µg/L), MW-6 (8440 µg/L), MW-8 (31400 µg/L), and TW-2 (465 µg/L) above its SSTLs of (10000 µg/L), (8000 µg/L), (16000 µg/L), and (180 µg/l) respectively. MTBE concentrations were detected in Monitor Wells MW-2 (1220 µg/L) and TW-2 (50.8 µg/l) above its SSTLs of (81 µg/L) and (5 µg/l) respectively. Naphthalene concentrations were detected in Monitor Wells MW-1 (585 µg/L), MW-2 (590 µg/L), MW-7 (360 µg/L), MW-8 (910 µg/L), MW-12 (38.8 µg/L), and TW-2 (68.2 µg/L) above its SSTL of (56 µg/L), (51 µg/L), (31 µg/L), (62 µg/L), (36 µg/L), and (18 µg/L) respectively. All other Chemicals of Concern (CoC) were not detected at concentrations exceeding their associated SSTL in the wells that were actually sampled during this sampling event. Laboratory analytical results are summarized in **Table III** and are depicted in **Figure 4**. Laboratory analytical results are also compared to analytical results from previous sampling events and are summarized in **Table IV**. Laboratory analytical results and chain-of-custody are presented in **Appendix B**.

4.0 REMEDIATION EFFECTIVENESS

The evaluation of the remediation effectiveness consists in comparing the July 11, 2001, CoC concentrations against the baseline and determining the percent of total concentration reduction. This is calculated by subtracting the current sample concentrations above SSTLs from the baseline concentrations above SSTLs and multiplying this amount by 100. This number is then divided by the baseline concentrations above SSTLs. The calculation of the total concentration reduction is presented in **Table V**.

According to calculations made from the July 11, 2001 sampling event, approximately 0.00 percent of the CoC concentrations have been removed from the site.

5.0 SUMMARY OF FINDINGS

Based on the above information, SEI findings are as follows:

- On July 11, 2001, SEI personnel obtained groundwater samples from Monitor Wells MW-1, MW-2, MW-6 through MW-8, MW-10 through MW-15, MW-10 through MW-19, TW-2 and TW-3.
- Based on the groundwater elevation calculation, it appears that groundwater at the site moves mostly in an eastern direction. It was calculated that groundwater moves under a hydraulic gradient of 0.017 feet per foot as measured between Monitor Well MW-4 and MW-19.
- Benzene concentrations in Compliance Monitor Wells MW-1 (830 µg/L), MW-2 (33,000 µg/L), MW-6 (2840 µg/L), MW-7 (980 µg/L), MW-8 (12000 µg/L), MW-10 (6450 µg/L), MW-12 (242 µg/L), and TW-2 (3610 µg/L) above its site specific target level

(SSTL) of (11µg/l), (10 µg/L), (6 µg/L), (6 µg/L), (12 µg/L), (9 µg/L), (7 µg/L), and (5 µg/l) respectively.

- Toluene concentrations were detected in Compliance Monitor Wells MW-1 (13200 µg/L), MW-2 (50600 g/L), MW-6 (13500 µg/L), MW-8 (78000 µg/L), MW-10 (20400 µg/L)., MW-12 (14.8 µg/L), and TW-2 (1660 µg/L) above its SSTLs of (2223 µg/L), (2021 µg/L), (1212 µg/L), (2424 µg/L), (1819 µg/L), (5 µg/L), and (5 µg/L) respectively.
- Ethylbenzene concentrations were detected in Compliance Monitor Wells MW-1 (2300 µg/L), MW-2 (2260 µg/L), MW-6 (1840 µg/L), MW-7 (900 µg/L), MW-8 (6400 µg/L), MW-10 (2660 µg/L), and TW-2 (50.1 µg/L) above its SSTLs of (1558 µg/L), (1416 µg/L) (850 µg/L), (850 µg/L), (1700 µg/L), (1274 µg/L), and (5 µg/L) respectively.
- Xylene concentrations were detected in Monitor Wells MW-1 (15200 µg/L), MW-6 (8440 µg/L), MW-8 (31400 µg/L), and TW-2 (465 µg/L) above its SSTLs of (10000 µg/L), (8000 µg/L), (16000 µg/L), and (180 µg/l) respectively.
- MTBE concentrations were detected in Monitor Wells MW-2 (1220 µg/L) and TW-2 (50.8 µg/l) above its SSTLs of (81 µg/L) and (5 µg/l) respectively.
- Naphthalene concentrations were detected in Monitor Wells MW-1 (585 µg/L), MW-2 (590 µg/L), MW-7 (360 µg/L), MW-8 (910 µg/L), MW-12 (38.8 µg/L), and TW-2 (68.2 µg/L) above its SSTL of (56 µg/L), (51 µg/L), (31 µg/L), (62 µg/L), (36 µg/L), and (18 µg/L) respectively.
- According to calculations made from the July 11, 2001 sampling event, approximately 0.00 percent of the CoC concentrations have been removed from the site.
- Filters on the drinking water wells at this site will be changed during the next sampling event due in October of 2001. Samples will also then be collected for these drinking water wells at that time.

6.0 REPORT LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the current UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

REFERENCES

Fetter, C. W., 1994, *Applied Hydrogeology*, Macmillan College Publishing Company, New York, New York.

SCDHEC, January 5, 1998, *Risk-Based Corrective Action for Petroleum Releases*, Columbia, South Carolina.

Table V
CoC Concentrations, dated July 2001
Smith's Grocery/York, South Carolina

Monitor Well Number	Date of Sample	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	MTBE (µg/L)	Lead (µg/L)	EDB (µg/L)	Total CoC (µg/L)
MW-1	07/11/01	**830**	**13200**	2300	15200	**585**	<250	17.0	<50.0	32430
MW-2	07/11/01	**33000**	**50600**	2260	12800	**590**	**1220**	**789**	**325**	101584
MW-6	07/11/01	**2840**	**13500**	1840	8440	**<1000**	**<1000**	11.0	**<200**	28828
MW-7	07/12/01	**980**	370	900	4700	360	<100	38.0	**1300**	8747
MW-8	07/12/01	**12000**	**78000**	6400	31400	**910**	4.7	13.0	<1.0	128727.7
MW-10	07/11/01	**6450**	**20400**	2660	15600	<250	<100	74.0	<100	45631
MW-11	07/11/01	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	18.0	<1.0	18.0
MW-12	07/12/01	**242**	14.8	27.6	327	38.8	<1.0	11.0	12.7	673.9
MW-13	07/12/01	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	28.0	<1.0	28.0
MW-14	07/12/01	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	6.0	2.7	8.7
MW-15	07/12/01	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	25.0	<1.0	25.0
MW-17	07/12/01	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	5.0	<1.0	5.0
MW-18	07/12/01	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	11.0	<1.0	11.0
MW-19	07/12/01	<1.0	1.0	1.9	1.5	<2.5	<1.0	31.0	<1.0	35.4
TW-2	07/12/01	**3610**	1660	50.1	465	68.2	50.8	6.0	6.3	5916.4
TW-3	07/12/01	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<3.00	<1.0	--
Sample Concentration	NA	59,952	177,745.8	16,439.6	88,933.5	3,800	2,721.5	1,083	1,993.7	352,669.1
Baseline Concentration	NA	47,644	158,164	19,824	84,035	4,820	1,694	1,716	322.43	318,219.43
Total SSTL Concentration	NA	120	10,975	7,772	80,343	391	490	199	53.33	100,343.33
Sample Concentration above SSTL on 07/01	NA	59,832	166,770.8	8,667.6	8,590.5	3,409	2,231.5	884	1940.37	252,325.77

Bold indicates concentrations above SSTL.

(Baseline Conc. Above SSTL – Sample Conc. Above SSTL on 07/01) (100) = (217876.1-252325.77)(100) = 0.00% complete
Baseline Conc. Above SSTL 217876.1

09322

D H E C

PROMOTE PROTECT PROSPER

2600 Bull Street
Columbia, SC 29201-1708

COMMISSIONER:
Douglas E. Bryant

BOARD:
Bradford W. Wyche
Chairman

William M. Hull, Jr., MD
Vice Chairman

Mark B. Kent
Secretary

Howard L. Brilliant, MD

Brian K. Smith

Louisiana W. Wright

Larry R. Chewning, Jr., DMD

October 22, 2001

RECEIVED
OCT 24 2001
Underground Storage Tank Program

Ms. Lois B. Smith
3176 Charlotte Highway
York, SC 29745

Re: Underground Injection Control Permit #563
Smith's Grocery Site
York County

Dear Ms. Smith:

Enclosed is a Permit to Operate for eighteen (18) Class VA-I (Aquifer Remediation) injection wells at Smith's Grocery Site, York County, SC.

If you have any question, please call me at (803) 898-3549.

Sincerely,

Todd Adams, Hydrologist
Groundwater Management Section
Bureau of Water

cc: Scott McInnis, BLWM-USTP
Fred Lyke, SEI

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

COMMISSIONER:
Douglas E. Bryant

BOARD:
Bradford W. Wyche
Chairman

William M. Hull, Jr., MD
Vice Chairman

Mark B. Kent
Secretary

Howard L. Brilliant, MD

Brian K. Smith

Louisiana W. Wright

Larry R. Chewning, Jr., DMD

Water Monitoring Assessment & Protection Division

Injection Well Operating Approval
for

Class II, III, and V.A. Injection Well(s)

Permit #563 Date of Issue: October 22, 2001

In accordance with the provisions of Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, and pursuant to receiving a Permit to Construct eighteen (18) Class V.A.-I (Aquifer Remediation) injection wells, authorization is granted to Ms. Smith to operate eighteen (18) Class V.A.-I injection wells located at the Smith's Grocery Site, York County, SC, and are subject to the attached provisos noted for the operator.

Pursuant to Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, this authorization may be rescinded if these injection wells should, at any time, contaminate, pollute, or otherwise adversely affect other water in the vicinity or for any other conditions contained in R61-87, Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended.

Expires: October 22, 2003

Todd Adams, Hydrologist
Groundwater Management Section
Bureau of Water

October 22, 2001
Date

DHEC 2104 (6/88)

Provisos to the Injection Well Operating Approval
for
Underground Injection Well Permit #563
Smith's Grocery Site
York County, S.C.
October 22, 2001

1) Construction of new or abandonment of existing wells must be reported to the Department within thirty (30) days of completion.

2) Only microbial biomass and ambient air as described in the Corrective Action Plan may be injected into the subsurface. Any changes in the system operation other than as presented in the UIC Permit Application must be reported to the Department prior to implementation.

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
OCT 10 2001
Underground Storage
Tank Program

October 10, 2001

Ms. Paula Anderson
SCDHEC
2600 Bull Street
Columbia, SC 29201

Re: Smith Grocery CA, Site #09322, CP #13099

Dear Ms. Anderson:

This correspondence is to notify your office that the installation of the remediation system referenced above has been completed. A copy of our invoice #42380 for $79,743.60 is attached and the original invoice has been sent to Pat Holland for payment in separate correspondence.

On August 22, 2001, six injection wells (IW-1 through IW-6) were installed at the facility. On September 25 and 26, 2001, the remaining injection wells (IW-7 through IW-18) were installed. The injection well installations comply with UIC permit #563. A site map (Figure 1) is attached illustrating the location of the injection wells installed. Well construction records are also provided. A copy of this correspondence and attachments are being sent to Todd Adams for his files.

If you have any questions please do not hesitate to call.

Best regards,

SEI Environmental, Inc.

Fred Lyke, PG
Branch Manager

CC Todd Adams – UIC #563

CA BID INVOICE

SOUTH CAROLINA

Department of Health and Environmental Control (DHEC)
Bureau of Underground Storage Tank Management

CORRECTIVE ACTION (CA) BID INVOICE

SITE ID # 09322 COUNTY York
FACILITY NAME Smith Grocery
STREET ADDRESS 3176 Charlotte Hwy York, SC
INVOICE # 42380 Cost Proposal # 13099
For work performed during (specify time period) August 1, 2001 to Oct. 1, 2001

Contract Award Price for CA $ 199359.00

Based on a Report Submitted 10/10/01 (date)

Request Payment for the following Pay for Performance Item(s) as checked:

[X] **Corrective Action Method or Technology Implemented and/or Operational**
(40 % of Contract Award Price or $) 79,743.60

Reduction in Chemicals of Concern (COC)

[ ] **25% Reduction in COC or Removal of Free Product**
(10 % of Contract Award Price or $)

[ ] **50% Reduction in COC**
(10 % of Contract Award Price or $)

[ ] **75% Reduction in COC**
(15 % of Contract Award Price or $)

[ ] **100% Reduction in COC (meets Standard) AND CA System Removed**
(25 % of Contract Award Price or $)

I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this and any attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, and any other information I may be aware of, I believe that the submitted information is true, accurate, and complete. I further agree, in accordance with any DHEC demand letter, to promptly repay the appropriate account for any overpayment received.

COMPENSATION INFORMATION Make Payment to:

SEI Environmental Inc 3021 McNaughton Dr. #9 Columbia SC 788-2535
Company Name Address Telephone Number

Fred Lyke 56-1903158
Name (Type or Print) Federal Tax ID or Social Security Number

Fred Lyke Branch Manager 10/01/01
Signature (please use non-black ink) Title Date Signed

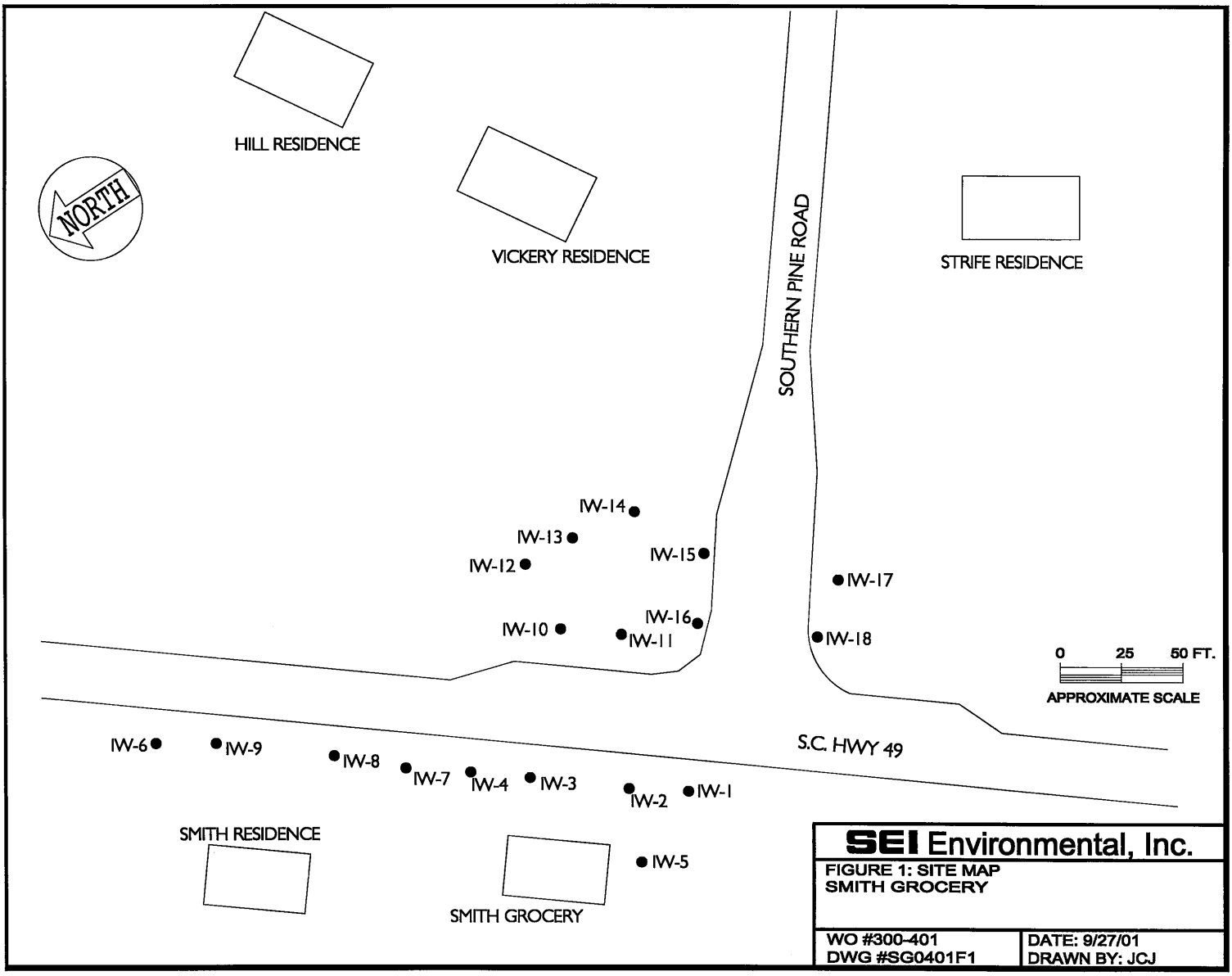
Please complete if payment is not to UST Owner or Operator
UST Owner or Operator

Signature (please use non-black ink) Title (President, Owner) Date Signed

Name (Type or Print) Telephone Number

Address

CA BID INVOICE


HILL RESIDENCE
NORTH
VICKERY RESIDENCE
SOUTHERN PINE ROAD
STRIFE RESIDENCE
IW-14
IW-13
IW-12
IW-15
IW-17
IW-16
IW-10
IW-11
IW-18
0 25 50 FT.
APPROXIMATE SCALE
S.C. HWY 49
IW-6
IW-9
IW-8
IW-7
IW-4
IW-3
IW-2
IW-1
SMITH RESIDENCE
IW-5
SMITH GROCERY
SEI Environmental, Inc.
FIGURE 1: SITE MAP
SMITH GROCERY
WO #300-401
DWG #SG0401F1
DATE: 9/27/01
DRAWN BY: JCJ

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. LOCATION OF WELL: Smith Grocery
Street Address: 3176 Charlotte Hwy 49
County: York City: York Zip:
Latitude: Longitude:

2. System Name: System Number:

3. WELL DEPTH (completed): 45' ft. Date Started: Date Completed:

4. ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☒ Other HSA

5. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brn SI	30	30
Brn S SI	15	45

*Indicate Water Bearing Zones (Use a 2nd sheet if needed)

REMARKS: IW-1
Bentonite Seal from 11'-13'

7. WELL OWNER NAME: Smyth (last) Lois B. (first)
Address: 3176 Charlotte Hwy. York, SC 29745
Telephone Work: Home:

8. Well Driller: Chris Bender Cert. No.: 1333
Address: ECS Inc. PO Box 703 Matthews NC 28106
Telephone No.: (704) 849-0888

9. Permit Number: UIC #563

10. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ ~~Monitor Well~~ Injection ☐ Replacement

11. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 15 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below N/A Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

12. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 30'
Set Between: 15 ft. and 45 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

13. STATIC WATER LEVEL
32' ft. below land surface after 24 hours

14. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
N/A Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

15. WATER QUALITY
N/A Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

16. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45' ft.
Effective size #20/30 Uniformity Coefficient Silica Sand

17. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other _____
Depth: From 0 ft. to 11' ft.

18. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
N/A Type well disinfected ☐ Yes Type: _____
_____ upon completion ☐ No Amount: _____

19. PUMP: Date installed: _____ ☐ Not installed
Mfr. Name: _____ Model No.: _____
N/A H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: Chris Bender (Authorized Representative) Date: 8-22-01

COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS)

D H E C

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

LOCATION OF WELL: Smith Grocery

Street Address: 3176 Charlotte Hwy 49

County: York City: York Zip:

Latitude: Longitude:

System Name: System Number:

WELL DEPTH (completed): 45' ft Date Started: Date Completed:

☐ Mud Rotary ☐ Jetted ☐ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☒ Other HSA

CUTTING SAMPLES ☐ Yes ☒ No

Geophysical Logs ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brn SI	30	30
Brn S SI	15	45

Indicate Water Bearing Zones

(Use a 2nd sheet if needed)

REMARKS: IW-2

Bentonite Seal from 11'-13'

7. WELL OWNER NAME: Smith (last), Lois B. (first)

Address: 3176 Charlotte Hwy York, SC 29745

Telephone Work: Home:

8. Well Driller: Chris Bender Cert. No.: 1333

Address: ECS Inc. PO Box 703 Matthews NC 28106

Telephone No.: (704) 849-0888

9. Permit Number: UIC #563

10. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ ~~Monitor Well~~ Injection ☐ Replacement

11. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized
☐ Steel ☐ Other
0 in. to 15 ft. depth
in. to ft. depth

Height: Above/Below Surface N/A ft
Weight lb./ft.
Drive Shoe? ☐ Yes ☐ No

12. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 30'
Set Between: 15 ft. and 45 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

13. STATIC WATER LEVEL
32' ft. below land surface after 24 hours

14. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
N/A Pumping Test: ☐ Yes (please enclose) ☐ No
Yield:

15. WATER QUALITY
N/A Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

16. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13' ft. to 45' ft.
Effective size 20/30 Uniformity Coefficient Silica Sand

17. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 11' ft.

18. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
N/A Type well disinfected ☐ Yes Type:
upon completion ☐ No Amount:

19. PUMP: Date installed: Not installed ☐
N/A Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Chris Bender Date 8-22-01
Authorized Representative

COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

LOCATION OF WELL: Smith Grocery
Street Address: 3176 Charlotte Hwy 49
County: York
City: York
Zip:
Latitude:
Longitude:

System Name:
System Number:

WELL DEPTH (completed): 45' ft
Date Started:
Date Completed:

☐ Mud Rotary ☐ Jetted ☐ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☒ Other HSA

CUTTING SAMPLES ☐ Yes ☒ No

Geophysical Logs ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brn SI	30	30
Brn S SI	15	45

Water Bearing Zones
(Use a 2nd sheet if needed)

REMARKS: IW-3
Bentonite Seal from 11'-13'

7. WELL OWNER NAME: Smith (last), Lois B. (first)
Address: 3176 Charlotte Hwy York, SC 29745
Telephone Work:
Home:

8. Well Driller: Chris Bender
Cert. No.: 1333
Address: ECS Inc. PO Box 703 Matthews NC 28106
Telephone No.: (704) 849-0888

9. Permit Number: UIC #563

10. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ ~~Monitor Well~~ Injection ☐ Replacement

11. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized
☐ Steel ☐ Other
0 in. to 15 ft. depth
in. to ft. depth

Height: Above/Below Surface N/A
Weight lb./ft
Drive Shoe? ☐ Yes ☐ No

12. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 30'
Set Between: 15 ft. and 45 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

13. STATIC WATER LEVEL
32' ft. below land surface after 24 hours

14. PUMPING LEVEL Below Land Surface.
N/A
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield:

15. WATER QUALITY
N/A
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

16. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45' ft.
Effective size 20/30 Uniformity Coefficient Silica Sand

17. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 11' ft

18. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
N/A
Type well disinfected ☐ Yes Type:
upon completion ☐ No Amount:

19. PUMP: Date installed: Not installed ☐
N/A
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Chris Bender
Authorized Representative
Date 8-22-01

COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

LOCATION OF WELL: Smith Grocery

Street Address: 3176 Charlotte Hwy 49

County: York City: York Zip:

Latitude: Longitude:

System Name: System Number:

WELL DEPTH (completed): 45' ft. Date Started: Date Completed:

☐ Mud Rotary ☐ Jetted ☐ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☒ Other HSA

CUTTINGS SAMPLES ☐ Yes ☒ No

Geophysical Logs ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brn SI	30	30
Brn S SI	15	45

*Estimate Water Bearing Zones

(use a 2nd sheet if needed)

REMARKS: IW-4
Bentonite Seal from 11'-13'

7. WELL OWNER NAME: Smith (last), Lois B. (first)
Address: 3176 Charlotte Hwy York, SC 29745
Telephone Work: Home:

8. Well Driller: Chris Bender Cert. No.: 1333
Address:
ECS Inc. PO Box 703 Matthews NC 28106
Telephone No.: (704) 849-0888

9. Permit Number: UIC #563

10. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ ~~Monitor Well~~ Injection ☐ Replacement

11. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 15 ft. depth
in. to ft. depth
Height: Above/Below N/A Surface ft
Weight lb./ft.
Drive Shoe? ☐ Yes ☐ No

12. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 30'
Set Between: 15 ft. and 45 ft.
ft. and ft.
Sieve Analysis ☐ Yes (please enclose) ☒ No
NOTE: MULTIPLE SCREENS USE SECOND SHEET

13. STATIC WATER LEVEL
32' ft. below land surface after 24 hours

14. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
N/A Pumping Test: ☐ Yes (please enclose) ☐ No
Yield:

15. WATER QUALITY
N/A Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

16. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45' ft.
Effective size #0/.30 Uniformity Coefficient Silica Sand

17. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 11' ft

18. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
N/A Type well disinfected ☐ Yes Type:
upon completion ☐ No Amount:

19. PUMP: Date installed: ☐ Not installed
Mfr. Name: Model No.:
N/A H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: Chris Bender Authorized Representative Date 8-22-01

COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

LOCATION OF WELL: Smith Grocery
Street Address: 3176 Charlotte Hwy 49
County: York City: York Zip:
Latitude: Longitude:
System Name: System Number:
WELL DEPTH (completed): 45' ft Date Started: Date Completed:
☐ Mud Rotary ☐ Jetted ☐ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☒ Other HSA
CUTTING SAMPLES ☐ Yes ☒ No
Geophysical Logs ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brn Sl	30	30
Brn S Sl	15	45

Water Bearing Zones
(Use a 2nd sheet if needed)
REMARKS: IW-5
Bentonite Seal from 11'-13'

7. WELL OWNER NAME: Smith, (last) Lois B. (first)
Address: 3174 Charlotte Hwy York, SC 29745
Telephone Work: Home:
8. Well Driller: Chris Bender Cert. No.: 1333
Address: ECS Inc. PO Box 703 Matthews NC 28106
Telephone No.: (704) 849-0888
9. Permit Number: UIC #563
10. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ ~~Monitor Well~~ Injection ☐ Replacement
11. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 15 ft. depth
in. to ft. depth
Height: Above/Below Surface N/A ft
Weight lb./ft
Drive Shoe? ☐ Yes ☐ No
12. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 30'
Set Between: 15 ft. and 45 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No
13. STATIC WATER LEVEL
32' ft. below land surface after 24 hours
14. PUMPING LEVEL Below Land Surface.
N/A ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield:
15. WATER QUALITY
N/A Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.
16. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45' ft.
Effective size 20/30 Uniformity Coefficient Silica Sand
17. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 11' ft
18. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
N/A Type well disinfected ☐ Yes Type:
upon completion ☐ No Amount:
19. PUMP: Date installed: Not installed ☐
N/A Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal
20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: Chris Bender Date 8-22-01
Authorized Representative

COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

LOCATION OF WELL: Smith Grocery
Street Address: 3176 Charlotte Hwy 49
County: York
City: York
Zip:
Latitude:
Longitude:
System Name
System Number:
WELL DEPTH (completed): 45' ft
Date Started:
Date Completed:
☐ Mud Rotary ☐ Jetted ☐ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☒ Other HSA
CUTTING SAMPLES ☐ Yes ☒ No
Geophysical Logs ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brn Sl	30	30
Brn S Sl	15	45

Water Bearing Zones
(Use a 2nd sheet if needed)
REMARKS: IW-6
Bentonite Seal from 11'-13'

7. WELL OWNER NAME: Smith, Lou B (last) (first)
Address: 3176 Charlotte Hwy York, SC 29745
Telephone Work: Home:

8. Well Driller: Chris Bender Cert. No.: 1333
Address: ECS Inc. PO Box 703 Matthews NC 28106
Telephone No.: (704) 849-0888

9. Permit Number: UIC # 563

10. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ ~~Monitor Well~~ Injection ☐ Replacement

11. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized
☐ Steel ☐ Other
0 in. to 15 ft. depth
in. to ft. depth
Height: Above/Below Surface N/A ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☐ No

12. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 30'
Set Between: 15 ft. and 45 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

13. STATIC WATER LEVEL
32' ft. below land surface after 24 hours

14. PUMPING LEVEL Below Land Surface.
N/A
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield:

15. WATER QUALITY
N/A
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

16. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45' ft.
Effective size 20/30 Uniformity Coefficient Silica Sand

17. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 11' ft.

18. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
N/A
Type well disinfected ☐ Yes Type:
upon completion ☐ No Amount:

19. PUMP: Date installed: Not installed ☐
N/A
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Chris Bender
Authorized Representative
Date 8-22-01

COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith, Mrs. B. (last) (first)
Address: 3176 Charlotte Hwy.
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 3176 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: SYSTEM NUMBER:

4. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
DEAD RED TO TAN SANDY SILT		19.5
TAN/WHITE SANDY CLAYEY SILT		45.0
LW-12		

*Indicate Water Bearing Zones (Use a 2nd sheet if needed)

5. REMARKS:
BENTONITE 10.0 TO 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 SEPT 01
45 ft. Date Completed: 26 SEPT 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable-tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 15 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCH40 PVC Diam.: 2"
Slot/Gauge: 010 Length: 30.0'
Set Between: 15 ft. and 45 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL
37 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
NA ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results. NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other _____
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
NA Type well disinfected ☐ Yes Type: _____
_____ upon completion ☐ No Amount: _____

18. PUMP: Date installed: NA ☐ Not installed
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS Inc. CERT. NO.: 922
Address:
PO Box 703 MATTHEWS NC 28106
Telephone No.: 704 849 0898

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 27 SEPT 01
Authorized Representative

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith (last) Lois B (first)
Address: 3176 Charlotte Hwy.
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 3176 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: **SYSTEM NUMBER:**

4. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
DARK GRAY RED TO TAN SANDY SILT		19.5
TAN/WHITE SANDY CLAYEY SILT		45.0
IW-11		
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
BENTONITE 10.0 TO 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 SEPT 01
45 ft. Date Completed: 26 SEPT 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 15 ft. depth
in. to ft. depth
Height: Above/Below Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCHED PVC Diam.: 2"
Slot/Gauge: .010 Length: 30.0
Set Between: 15 ft. and 45 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL
37 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
NA ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield:

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results. NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
NA Type well disinfected ☐ Yes Type:
upon completion ☐ No Amount:

18. PUMP: Date Installed: NA Not installed ☐
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS Inc. CERT. NO.: 922
Address: PO Box 703 MATTHEWS NC 28106
Telephone No.: 704 849 0883

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Jimmie R Dollar Date: 27 Sept 01
Authorized Representative

D·H·E·C
PROMOTE·PROTECT·PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith (last), Lois B. (first)
Address: 3176 Charlotte Hwy.
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 3176 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: **SYSTEM NUMBER:**

4. CUTTING SAMPLES: ☐ Yes ☒ No
Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
ORANGISH RED		
TO TAN SANDY SILT		19.5
TAN/WHITE SAND		
CLAYEY SILT		45.0
IW-10		
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
BENTONITE 10.0 TO 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 SEPT 01
45 ft. Date Completed: 26 SEPT 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 15 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCH40 PVC Diam.: 2"
Slot/Gauge: .010 Length: 30.0
Set Between: 15 ft. and 45 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis: ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL
37 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
NA ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results. NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other _____
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
NA Type well disinfected ☐ Yes Type: _____
_____ upon completion ☐ No Amount: _____

18. PUMP: Date Installed: NA ☐ Not Installed
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS LLC. CERT. NO.: 922
Address: PO Box 703 MATTHEWS NC 28106
Telephone No.: 704 849 0883

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 27 SEPT 01
Authorized Representative

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith (last) Lois B (first)
Address: 3176 Charlotte Hwy
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 3176 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: SYSTEM NUMBER:

4. CUTTING SAMPLES: ☐ Yes ☒ No
Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
DARK GREY RED		
TO TAN SANDY SILT		19.5
TAN/WHITE SANDY		
CLAYEY SILT		45.0
IW-9		
Indicate Water Bearing Zones. (Use a 2nd sheet if needed)		

5. REMARKS: BENTONITE 18.0 TO 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 SEPT 01
45 ft. Date Completed: 26 SEPT 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 15 ft. depth
___ in. to ___ ft. depth
Height: Above/Below Surface ___ ft.
Weight ___ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCHED PVC Diam.: 2"
Slot/Gauge: 010 Length: 30.0
Set Between: 15 ft. and 45 ft.
___ ft. and ___ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL
37 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
NA ft. after ___ hrs. Pumping ___ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ___

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results. NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient ___

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other ___
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ___ ft. ___ direction
NA Type well disinfected ☐ Yes Type: ___
___ upon completion ☐ No Amount: ___

18. PUMP: Date installed: NA Not installed ☐
Mfr. Name: ___ Model No.: ___
H.P. ___ Volts ___ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS INC. CERT. NO.: 922
Address: PO Box 703 MATTHEWS NC 28106
Telephone No.: 704 849 0883

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: [signature] Authorized Representative Date: 27 SEPT 01

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lou B. (last) (first)
Address: 3176 Charlotte Hwy
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 3176 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: SYSTEM NUMBER:

4. CUTTING SAMPLES: ☐ Yes ☒ No
Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
Orangish Red		
To Tan Sandy Silt		19.5
Tan/White Sandy		
Clayey Silt		45.0
IW-8		
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
Bentonite 10.0 to 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 Sept 01
45 ft. Date Completed: 26 Sept 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized
☐ Steel ☐ Other
2 in. to 15 ft. depth
in. to ft. depth
Height: Above/Below Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCH40 PVC Diam.: 2"
Slot/Gauge: .010 Length: 30.0
Set Between: 15 ft. and 45 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL
57 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
NA ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield:

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results: NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
NA Type well disinfected ☐ Yes Type:
upon completion ☐ No Amount:

18. PUMP: Date Installed: NA Not Installed ☐
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS Inc. CERT. NO.: 922
Address: PO Box 703 Matthews NC 28106
Telephone No.: 704 849 0883

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Jimmie L. Dollar Date: 27 Sept 01
Authorized Representative

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith Lois B. (last) (first)
Address: 3176 Charlotte Hwy
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 3176 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: **SYSTEM NUMBER:**

4. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
ORANGISH RED		
TAN SANDY SILT		19.5
TAN/WHITE SAND		
CLAYEY SILT		45.0
IW-7		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
BENTONITE 10.0 TO 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 SEPT 01
45 ft. Date Completed: 26 SEPT 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 15 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCH40 PVC Diam.: 2"
Slot/Gauge: 010 Length: 30.0
Set Between: 15 ft. and 45 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL:
37 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
NA ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results. NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other _____
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
NA Type well disinfected ☐ Yes Type: _____
_____ upon completion ☐ No Amount: _____

18. PUMP: Date Installed: NA Not Installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS Inc. CERT. NO.: 922
Address: PO Box 703 Matthews NC 28106
Telephone No.: 704 849 0883

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 27 SEPT 01
Authorized Representative

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith (last) Lois B (first)
Address: 3176 Charlotte Hwy.
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 3176 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: **SYSTEM NUMBER:**

4. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
ORANGISH RED TO TAN SANDY SILT		19.5
TAN/WHITE SANDY CLAYEY SILT		45.0
IW-13		
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
BENTONITE 10.0 TO 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 SEPT 01
45 ft. Date Completed: 26 SEPT 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 15 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCHED PVC Diam.: 2"
Slot/Gauge: 010 Length: 30.0
Set Between: 15 ft. and 45 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL
37 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
NA ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results. NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other _____
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
NA Type well disinfected ☐ Yes Type: _____
_____ upon completion ☐ No Amount: _____

18. PUMP: Date installed: NA ☐ Not installed
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS Inc. CERT. NO.: 922
Address: PO Box 703 MATTHEWS NC 28106
Telephone No.: 704 849 0883

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 27 SEPT 01
Authorized Representative

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith, (last) Lois B. (first)
Address: 3176 Charlotte Hwy
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 3176 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: **SYSTEM NUMBER:**

4. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
DRAB/GRAY RED		
TO TAN SANDY SILT		19.5
TAN/WHITE SANDY		
CLAYEY SILT		45.0
IW-14		
Indicate Water Bearing Zones (Use a 2nd sheet if needed):		

5. REMARKS:
BENTONITE 10.0 TO 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 SEPT 01
45 ft. Date Completed: 26 SEPT 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 15 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCH40 PVC Diam.: 2"
Slot/Gauge: 010 Length: 30.0
Set Between: 15 ft. and 45 ft. NOTE: MULTIPLE SCREENS
_____ ft. and _____ ft. USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL
37 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
NA ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results. NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other _____
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
NA Type well disinfected ☐ Yes Type: _____
_____ upon completion ☐ No Amount: _____

18. PUMP: Date Installed: NA Not Installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm.
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS Inc. CERT. NO.: 922
Address: PO Box 703 MATTHEWS NC 28106
Telephone No.: 704 849 0883

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Jimmie R. Dudley Date: 27 SEPT 01
Authorized Representative

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith (last) Lois B (first)
Address: 3176 Charlotte Hwy.
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 3176 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: SYSTEM NUMBER:

4. CUTTING SAMPLES: ☐ Yes ☒ No
Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
ORANGISH RED		
TO TAN SANDY SILT		19.5
TAN/WHITE SANDY		
CLAYEY SILT		45.0
IW-15		
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
BENTONITE 10.0 TO 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 SEPT 01
45 ft. Date Completed: 26 SEPT 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 15 ft. depth
in. to ft. depth
Height: Above/Below Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCHED PVC Diam.: 2"
Slot/Gauge: .010 Length: 30.0
Set Between: 15 ft. and 45 ft. NOTE: MULTIPLE SCREENS
ft. and ft. USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL
57 ft. below land surface after 24 hours

13. PUMPING LEVEL: Below Land Surface.
NA ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield:

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results. NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
NA Type well disinfected ☐ Yes Type:
upon completion ☐ No Amount:

18. PUMP: Date Installed: NA ☐ Not Installed
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS Inc. CERT. NO.: 922
Address:
PO Box 703 MATTHEWS NC 28106
Telephone No.: 704 849 0898

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: [signature] Authorized Representative Date: 27 SEPT 01

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith (last) Lois B (first)
Address: 3176 Charlotte Hwy
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 3176 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: **SYSTEM NUMBER:**

4. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
DARK GRAY RED		
TO TAN SANDY SILT		19.5
TAN/WHITE SAND		
CLAYEY SILT		45.0
IW-16		
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
BENTONITE 10.0 TO 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 SEPT 01
45 ft. Date Completed: 26 SEPT 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 45 ft. depth
___ in. to ___ ft. depth
Height: Above/Below Surface ___ ft.
Weight ___ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCHED PVC Diam.: 2"
Slot/Gauge: 010 Length: 30.0
Set Between: 15 ft. and 45 ft.
___ ft. and ___ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL
37 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
NA ft. after ___ hrs. Pumping ___ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: ___

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results. NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient ___

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other ___
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ___ ft. ___ direction
NA Type well disinfected ☐ Yes Type: ___
___ upon completion ☐ No Amount: ___

18. PUMP: Date installed: NA ☐ Not installed
Mfr. Name: ___ Model No.: ___
H.P. ___ Volts: ___ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS LLC. CERT. NO.: 922
Address: PO Box 703 MATTHEWS NC 28106
Telephone No.: 704 849 0883

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [signature] Authorized Representative Date: 27 SEPT 01

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith (last) Lois G (first)
Address: 3176 Charlotte Hwy.
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 3176 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: SYSTEM NUMBER:

4. CUTTING SAMPLES: ☐ Yes ☒ No
Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
ORANGISH RED		
TO TAN SANDY SILT		19.5
TAN/WHITE SANDY		
CLAYEY SILT		45.0
IW-17		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
BENTONITE 10.0 TO 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☒ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 SEPT 01
45 ft. Date Completed: 26 SEPT 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 45 ft. depth
in. to ft. depth
Height: Above/Below Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCHED PVC Diam.: 2"
Slot/Gauge: .010 Length: 30.0
Set Between: 15 ft. and 45 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL
37 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
NA ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield:

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results. NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
NA Type well disinfected ☐ Yes Type:
upon completion ☐ No Amount:

18. PUMP: Date Installed: NA ☐ Not Installed
Mfr. Name: Model No.:
H.P.: Volts: Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS LLC. CERT. NO.: 922
Address: PO Box 703 MATTHEWS NC 28106
Telephone No.: 704 849 0883

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: Authorized Representative Date: 27 SEPT 01

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Smith, Lois B (last) (first)
Address: 376 Charlotte Hwy
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 376 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: SYSTEM NUMBER:

4. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
ORANGISH RED		
TO TAN SANDY SILT		19.5
TAN/WHITE SANDY		
CLAYEY SILT		45.0
IW-18		
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
BENTONITE 10.0 TO 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 SEPT 01
45 ft. Date Completed: 26 SEPT 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized
☐ Steel ☐ Other
2 in. to 15 ft. depth
in. to ft. depth
Height: Above/Below Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCHED BVC Diam.: 2"
Slot/Gauge: 010 Length: 30.0
Set Between: 15 ft. and 45 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL
57 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
NA ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield:

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results. NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
NA Type well disinfected ☐ Yes Type:
upon completion ☐ No Amount:

18. PUMP: Date Installed: NA Not installed ☐
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS Inc. CERT. NO.: 922
Address:
PO Box 703 MATTHEWS NC 28106
Telephone No.: 704 849 8898

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [signature] Authorized Representative Date: 27 SEPT 01

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia, South Carolina 29201
Phone (800) 826-5435 Fax (803) 898-4330

SEP 24 2001

Ms. Lois B. Smith
3175 Charlotte Hwy
York, SC 29745-9802

Re: Smith's Grocery
UST Permit # 09322
Corrective Action Plan received July 17, 2001
York County

Dear Ms. Smith:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced documents. Further, as required by Section 280.67 of the South Carolina Underground Storage Tank Regulations R.61-92, the UST Program has provided a public notice period including notice of the pending corrective actions to the surrounding land owners via certified correspondence. No objections to the proposed actions were expressed; therefore, corrective action activities may proceed at this time. A Copy of the Bureau of Air Quality permit exemption and Underground Injection Control Permit to Construct have already been forwarded.

As stated in Specifications for Corrective Action, Item 2 of the Request for Bids, an initial monitoring report documenting CoC concentrations in all wells and potentiometric conditions prior to start up must be submitted to the UST Program within 45 days of award of bid contract. **Sampling for this initial monitoring event must occur prior to system startup.**

The UST Program grants preapproval for transportation of virgin petroleum contaminated soil and groundwater which may be generated during site construction, drilling, and well development / purging from the referenced site to a permitted treatment facility. If the contaminated soil or ground water is not immediately transported to the permitted treatment facility, it must be properly stored in labeled containers or covered with plastic as appropriate. The contaminated soil and/or groundwater must be accepted by the approved treatment facility. There can be no spillage or leakage in transport. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included in the report.

As outlined in the Department's March 26, 2001, correspondence, cost proposal #13099 has been approved in the amount of $ 199,359.00. The first pay-for-performance invoice in the amount of $ 79,743.60 (40%) may be submitted (on the enclosed invoice form) once the Underground Injection Control Permit to Operate has been issued and the treatment system has been placed into operation.

On all correspondence regarding this site, please reference the UST Permit #09322. If you have any questions, please contact me at (803) 898-4318 or (800) 826-5435 (within South Carolina only).

Sincerely,

Paula Anderson

Paula Anderson, Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

enc: Corrective Action Invoice (SCDHEC Form 3687)

cc: Mr. Fred Lyke, SEI Environmental, Inc., 3021 McNaughton Drive Suite 9, Columbia, SC 29223 (w/enc)
Read and Technical File (w/out enc)
Financial File (w/out enc)

DHEC/UST/082201

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

UST # 09332

1. WELL OWNER INFORMATION:
Name: Smith (last), Lois B. (first)
Address: 3176 Charlotte Hwy
City: York State: SC Zip: 29745
Telephone: Work: Home:

2. LOCATION OF WELL:
Name: SMITH'S GROCERY
Street Address: 3176 CHARLOTTE HWY 49
City: YORK Zip:
COUNTY: YORK
Latitude: Longitude:

3. SYSTEM NAME: **SYSTEM NUMBER:**

4. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
ORANGISH RED TO TAN SANDY SILT		19.5
TAN/WHITE SANDY CLAYEY SILT		45.0
IW-7		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
BENTONITE 10.0 TO 13.0

6. PERMIT NUMBER:

7. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

8. WELL DEPTH (completed) Date Started: 25 SEPT 01
45 ft. Date Completed: 26 SEPT 01

9. ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 15 ft. depth
in. to ft. depth
Height: Above/Below Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN
Type: SCH40 PVC Diam.: 2"
Slot/Gauge: 010 Length: 30.0'
Set Between: 15 ft. and 45 ft. NOTE: MULTIPLE SCREENS
ft. and ft. USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL
37 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
NA ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield:

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results. NA

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 13 ft. to 45.0 ft.
Effective size 20/30 Uniformity Coefficient

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 10.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
NA Type well disinfected ☐ Yes Type:
upon completion ☐ No Amount:

18. PUMP: Date installed: NA Not installed ☐
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: ECS Inc. CERT. NO.: 922
Address:
PO Box 703 MATTHEWS NC 28106
Telephone No.: 704 849 0898

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Jimmie R. Dudley Date: 27 SEPT 01
Authorized Representative

D H E C
PROMOTE PROTECT PROSPER

2600 Bull Street
Columbia, SC 29201-1708

COMMISSIONER:
Douglas E. Bryant

BOARD:
Bradford W. Wyche
Chairman

William M. Hull, Jr., MD
Vice Chairman

Mark B. Kent
Secretary

Howard L. Brilliant, MD

Brian K. Smith

Louisiana W. Wright

Larry R. Chewning, Jr., DMD

August 6, 2001

RECEIVED
AUG 07 2001
Underground Storage
Tank Program

Ms. Lois B. Smith
3176 Charlotte Highway
York, SC 29745

Re: Underground Injection Control Permit #563
Smith's Grocery
York County, South Carolina

Dear Ms. Smith:

Enclosed is a Permit to Construct for eighteen (18) Class VA-I injection wells at the Smith's Grocery as requested in the UIC application received July 17, 2001. An inspection of the UIC System must be conducted prior to issuance of Approval to Operate. After completion of the inspection, Approval to Operate #563 will be issued.

If you have any questions, please feel free to call me at (803) 898-3549.

Sincerely,

Todd Adams, Hydrogeologist
Groundwater Management Section
Water Monitoring, Assessment & Protection Division
Bureau of Water

cc: Scott McInnis, BL&WM-USTP
Fred Lyke, SEI

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

COMMISSIONER:
Douglas E. Bryant

BOARD:
Bradford W. Wyche
Chairman

William M. Hull, Jr., MD
Vice Chairman

Mark B. Kent
Secretary

Howard L. Brilliant, MD

Brian K. Smith

Louisiana W. Wright

Larry R. Chewning, Jr., DMD

WATER MONITORING ASSESSMENT & PROTECTION DIVISION

Injection Well Construction Permit
for
Class II, III, and V.A. Injection Well(s)

Permit #563

Date Issued: August 6, 2001
Date Expired: August 6, 2002

For (Operator): SEI

In accordance with provisions of Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, permission is granted for construction of eighteen (18) Class V.A.-I injection wells located at the Smith's Grocery, York County, SC with the following provisions:

1) The operator shall submit completed SCDHEC well record forms to the Department's Water Monitoring, Assessment & Protection Division after completion of the injection wells.

2) Upon completion of construction, injection activities shall not commence prior to receiving approval from the Department to operate the injection wells.

3) When the injection wells are no longer in use, or upon request by the Department, within sixty (60) days all injection wells must be permanently abandoned in accordance with the South Carolina Well Standards and Regulations (R.61-71.10).

4) Injection wells must be installed and grouted in accordance with the South Carolina Well Standards and Regulations (R.61-71).

Todd Adams, Hydrologist
GroundWater Management Section
Bureau of Water

August 6, 2001
Date

DHEC 2104 (6/88)

STATEMENT OF BASIS - UIC DRAFT PERMIT #563

In accordance with the South Carolina Underground Injection Control Regulations, Section R61-87.12,J., this "Statement of Basis" has been prepared for the Underground Injection Control permit application received July 17, 2001.

Ownership of the proposed injection wells is Ms. Lois B. Smith, 3176 Charlotte Highway, York, SC 29745. The permit (UIC #563) is for the construction of eighteen (18) injection wells for ground water remediation at the Smith's Grocery. The intent of the injection wells is to remediate volatile organic compounds by injection of a microbial biomass with ambient air into the subsurface as described in UIC application. The draft permit for the underground injection proposal has been prepared based on staff review and the application of the Pollution Control Act of South Carolina and the Underground Injection Control Regulations of South Carolina.

Conditions of the permit issuance include the submittal of well records for all injection wells installed and the inspection of well construction by the Department prior to injection.

CBM

ENVIRONMENTAL SERVICES, INC.

July 31, 2000

Ms. Paula Anderson
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

RECEIVED
AUG 02 2001
Underground Storage
Tank Program

CR# 14363
Part of Bid
Spec.

RE: Water Supply Well Sampling
Vickery & Hill Residences
Smith's Grocery
York, York County
Site ID #: 09322
CBM #: 10629

Dear Ms. Anderson:

The purpose of this correspondence is to request approval of the attached ACCP, which outlines the costs necessary to continue monthly sampling of two water supply wells located adjacent to the above referenced site. The wells, which have been affected by a release of petroleum products from an unknown source, are currently in use by the Vickery family and the Hill family. The proposed costs cover continued monthly sampling activities at the residences for three months (August 2001 through October 2001) and analysis of the samples for BTEX, MTBE and naphthalene by Method 8260. Update reports documenting the results of the sampling will be submitted to the SCDHEC monthly.

If you have any questions or require additional information concerning this matter, please contact the undersigned at (803) 548-5989.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Assessment Director

cc: file

P. O. Box 411387
Charlotte, NC 28241
704 527-4391

101 West 14th Street, #107
Greenville, NC 27834
252 752-0200

377 Carowinds Boulevard, #118
Fort Mill, SC 29708
803 548-5989

730 East Main Street
Frankfort, KY 40601
502 223-2701

302 Knights Run Avenue
Tampa, FL 33602
813 224-9680

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia, South Carolina 29201
Phone (800) 826-5435 Fax (803) 898-4330

AUG 24 2001

CERTIFIED MAIL Receipt # 7001 0360 0002 0803 9472
Mr. Frontis Tyree Hemphill and Ms. Etta L. Hemphill
2146 Old McKinney Rd
York, SC 29745

Re: Smith's Grocery, 3175 Charlotte Hwy, York, SC 29745-9802
UST Permit # 09322
Tax Map # 456-00-00-003 and 456-00-00-041
Corrective Action Plan Received July 17, 2001
York County

Dear Mr. and Ms. Hemphill:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental, Inc. has been retained to initiate corrective action of the impacted soil and groundwater using in situ bioremediation followed by natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental, Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 898-4318 or 1-800-826-5435. All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson, Hydrologist
Owner/Operator Assistance Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

enc: Public Notice (copy)

cc: ~~Technical file (without enclosure)~~

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia, South Carolina 29201
Phone (800) 826-5435 Fax (803) 898-4330

AUG 24 2001

MEMORANDUM

DATE: August 22, 2001

TO: Dale Stoudemire
Compliance Section
Regulatory Compliance Division

FROM: Paula Anderson PA
Owner/Operator Assistance Section
Assessment and Corrective Action Division

SUBJECT: Public Notice # 09322-01
Smith's Grocery, UST Permit # 09322
York County

Per section 280.67 of the South Carolina Underground Storage Tank Control Regulations R. 61-91, the South Carolina Department of Health and Environmental Control (SCDHEC) is required to provide public notice of proposed corrective actions at underground storage tank facilities.

The Assessment & Corrective Action Division requests your assistance in posting the enclosed notice at public offices (e.g. post offices, court houses, etc.) located in close proximity to the referenced facility.

If possible, the notice should be posted for 15 days. The attached notice has been postdated to August 31, 2001 to allow your office time to have it posted prior to its beginning date. Your assistance is greatly appreciated.

Questions may be referred to my attention at (803) 898-4318.

enc: Public Notice (4 copies)

cc: Technical File

SCDHEC/UST/082201

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia, South Carolina 29201
Phone (800) 826-5435 Fax (803) 898-4330

AUG 24 2001

MEMORANDUM

DATE: August 22, 2001

TO: Jody Hamm
Freedom of Information Office

FROM: Paula Anderson PA
Owner/Operator Assistance Section
Assessment and Corrective Action Division

SUBJECT: Public Notice # 09322-01
Smith's Grocery, UST Permit # 09322
York County

Per section 280.67 of the South Carolina Underground Storage Tank Control Regulations R. 61-91, the South Carolina Department of Health and Environmental Control (SCDHEC) is required to provide public notice of proposed corrective actions at underground storage tank facilities.

The Assessment and Corrective Action Division requests your assistance in making the technical file for the referenced facility available for review by any concerned citizens and/or environmental consultants.

The notice has been postdated to August 31, 2001 and will be posted for 15 days. A copy is enclosed for your information. Your assistance is greatly appreciated.

Questions may be referred to my attention at (803) 898-4318.

enc: Public Notice

cc: Technical File

SCDHEC/UST/082201

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia, South Carolina 29201
Phone (800) 826-5435 Fax (803) 898-4330

AUG 24 2001

CERTIFIED MAIL Receipt # 7001 0360 0002 0803 9489

Ms. Lois B. Smith
3176 Charlotte Hwy
York, SC 29745

Re: Smith's Grocery, 3175 Charlotte Hwy, York, SC 29745-9802
UST Permit # 09322
Tax Map # 456-00-00-005 and 456-00-00-043
Corrective Action Plan Received July 17, 2001
York County

Dear Ms. Smith:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental, Inc. has been retained to initiate corrective action of the impacted soil and groundwater using in situ bioremediation followed by natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental, Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 898-4318 or 1-800-826-5435. All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Assistance Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

enc: Public Notice (copy)

cc: Technical file (without enclosure)

D H E C
ROMOTE PROTECT PROSPER
600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia, South Carolina 29201
Phone (800) 826-5435 Fax (803) 898-4330

CERTIFIED MAIL Receipt # 7001 0360 0002 0803 9496

AUG 24 2001

Mr. J. B. Norris and Ms. Miranda S. Norris
2239 Old McKinney Rd.
York, SC 29745

Re: Smith's Grocery, 3175 Charlotte Hwy, York, SC 29745-9802
UST Permit # 09322
Tax Map # 456-00-00-056, 456-00-00-058, and 456-00-00-057
Corrective Action Plan Received July 17, 2001
York County

Dear Mr. and Ms. Norris:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental, Inc. has been retained to initiate corrective action of the impacted soil and groundwater using in situ bioremediation followed by natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental, Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 898-4318 or 1-800-826-5435. All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Assistance Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

enc: Public Notice (copy)

cc: Technical file (without enclosure)

D H E C
ROMOTE PROTECT PROSPER
600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia, South Carolina 29201
Phone (800) 826-5435 Fax (803) 898-4330

AUG 24 2001

CERTIFIED MAIL Receipt # 7001 0360 0002 0803 9526

Mr. Jeffery D. Vickery and Ms. Tonya E. Vickery
3043 Clover Circle
York, SC 29745

Re: Smith's Grocery, 3175 Charlotte Hwy, York, SC 29745-9802
UST Permit # 09322
Tax Map # 489-4-1-24
Corrective Action Plan Received July 17, 2001
York County

Dear Mr. and Ms. Vickery:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental, Inc. has been retained to initiate corrective action of the impacted soil and groundwater using in situ bioremediation followed by natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental, Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 898-4318 or 1-800-826-5435. All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Assistance Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

enc: Public Notice (copy)

cc: Technical file (without enclosure)

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia, South Carolina 29201
Phone (800) 826-5435 Fax (803) 898-4330

AUG 24 2001

CERTIFIED MAIL Receipt # 7001 0360 0002 0803 9519
Mr. Tony H. Hill and Ms. Susan W. Hill
3049 Clover Circle
York, SC 29745

Re: Smith's Grocery, 3175 Charlotte Hwy, York, SC 29745-9802
UST Permit # 09322
Tax Map # 489-4-1-23
Corrective Action Plan Received July 17, 2001
York County

Dear Mr. and Ms. Hill:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental, Inc. has been retained to initiate corrective action of the impacted soil and groundwater using in situ bioremediation followed by natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental, Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 898-4318 or 1-800-826-5435. All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Assistance Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

enc: Public Notice (copy)

cc: ~~Technical file (without enclosure)~~

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia, South Carolina 29201
Phone (800) 826-5435 Fax (803) 898-4330

AUG 24 2001

CERTIFIED MAIL Receipt # 7001 0360 0002 0803 9502
Mr. Roger Foster and Ms. Kelly B. Foster
2102 Pinewild Court
York, SC 29745

Re: Smith's Grocery, 3175 Charlotte Hwy, York, SC 29745-9802
UST Permit # 09322
Tax Map # 489-4-1-22
Corrective Action Plan Received July 17, 2001
York County

Dear Mr. and Ms. Foster:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental, Inc. has been retained to initiate corrective action of the impacted soil and groundwater using in situ bioremediation followed by natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 898-3882 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental, Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call or write Paula Anderson at (803) 898-4318 or 1-800-826-5435. All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Paula Anderson

Paula Anderson, Hydrologist
Owner/Operator Assistance Section
Assessment & Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management

enc: Public Notice (copy)

cc: Technical file (without enclosure)

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED
JUL 17 2001
Underground Storage
Tank Program

July 13, 2001

Mr. Scott McInnis
SCDHEC
Bureau of Underground Storage Tank Management
2600 Bull Street
Columbia, S.C. 29201

Re: Corrective Action Plan
Smith's Grocery, Site ID # 09322
York County

Dear Mr. McInnis:

Enclosed please find three copies of the Corrective Action Plan for the above referenced site. If you have any questions or require additional information, please contact SEI Environmental, Inc. at 803-788-2535.

Sincerely
SEI Environmental, Inc.

Fred Lyke
Branch Manager

Enclosure

SEI
Environmental, Inc.

INSITU BIOREMEDIATION
CORRECTIVE ACTION PLAN

Smith Grocery
3176 Charlotte Highway, SC Hwy 49
York, South Carolina
York County
Site # 09322

PREPARED FOR:

South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

PREPARED BY:

SEI Environmental, Inc.
3021 McNaughton Drive, Suite 9
Columbia, South Carolina 29223
(803) 788-2535

Frederick P. Lyke
Professional Geologist #1055

July 13, 2001

TABLE OF CONTENTS

1.0 INTRODUCTION

2.0 SITE CHARACTERIZATION

3.0 GROUNDWATER QUALITY

4.0 GROUNDWATER REMEDIATION

5.0 CORRECTIVE ACTION MONITORING

6.0 ABANDONMENT

7.0 REFERENCES

LIST OF FIGURES

FIGURE 1 Site Location Map

FIGURE 2 Site Map

FIGURE 3 CoC Concentration Map

FIGURE 4 Proposed Location of Injection Wells

FIGURE 4 Typical Injection Well Schematic

LIST OF APPENDICES

APPENDIX A Information for Bioremediation Project

APPENDIX B Underground Injection Control Permit Application

APPENDIX C Performance Bond

APPENDIX D Adjacent Property Owners – Tax Map

1.0 INTRODUCTION

The South Carolina Department of Health and Environmental Control (SCDHEC) Bureau of Groundwater requested that a Corrective Action Plan be prepared for Smith's Grocery located at 3176 Charlotte Highway in York, South Carolina. A Site Location Map is provided as Figure 1 and a Site Map is provided as Figure 2..

2.0 SITE CHARACTERIZATION

The regional geology of York can be described broadly as the Charlotte Belt. Structurally, it is described as a broad belt of medium to high-grade metamorphic rocks with common rock types including gneisses, schists, and amphibolites. The regional hydrogeology occurs in two types of materials: 1.) clayey and sandy soil and weathered material and 2.) underlying bedrock consisting of uneven distribution and size of rock fractures (that permit circulation and supply of groundwater). (Fairey, 1977).

Surficial groundwater generally flows to the southeast, which is consistent with the topography of the area. Saturated conditions are encountered approximately 26 - 43 feet below grade.

3.0 GROUNDWATER QUALITY

CBM preformed a Rapid Assessment at the subject site in August and October 2000. A table and site map depicting the analytical results of the groundwater samples collected were included in the corrective action bid package. Free product was not identified within the last year. Dissolved petroleum constituents above the risk based screening levels (RBSLs) were detected at several monitor wells located on the subject and adjacent properties.

4.0 GROUNDWATER REMEDIATION

Groundwater remediation will be accomplished by biologically treating the dissolved-phase product in situ. Detailed descriptions of the techniques are presented in the sections that follow.

4.1 In Situ Bioremediation Theory

In situ bioremediation refers to the use of natural microbiological processes occurring in the subsurface environment to breakdown complex organic compounds into simpler, non-toxic compounds without the removal of aquifer material. Contaminant degradation takes place by microorganisms when the contaminants either serve as a primary energy source (electron donor), or are fortuitously metabolized when other primary substrates are available to the microorganisms (co-metabolism).

In order for the electron donors to be utilized by the indigenous microbial community, compounds must also be available which allow energy transfer by the microorganisms to take place. Such compounds are classified as electron acceptors, and are generally believed to be used in sequential fashion based on the energy yield that results to the microorganisms when energy production and electron donor utilization is taking place.

For in situ biodegradation to occur in the subsurface, the following basic requirements need to be met (Bedient et al., 1994):

- Presence of appropriate microbial population – generally microorganisms that are able to degrade petroleum products are ubiquitous in the subsurface environments;

- Energy source and a carbon source – organic carbon is utilized both as an energy source by releasing electrons during transformation and by cells for maintenance and growth;

- Electron acceptor – the electrons released by the carbon transformation must be taken up by some other chemical. Oxygen is the preferred electron acceptor and is necessary for the aerobic biodegradation of organic compounds. Residual oxygen concentrations of <1.0 mg/l in ground water tend to limit the overall aerobic reaction rates;

- Nutrients – for bacterial growth to occur nutrients are needed (e.g.; nitrogen, phosphorous, calcium, potassium, magnesium, iron, etc.). The major nutrients (nitrogen and phosphorous) are required in order of magnitude higher levels than the minor and trace nutrients (sodium, potassium, calcium, magnesium, iron, chloride, and sulfur). A typical C:N:P ratio of approximately 100:10:1 (by weight ratio) is used to ensure that adequate levels of N and P exist for unhindered bioremediation, and;

- Appropriate environmental conditions – microbial activity is dependent upon many environmental conditions such as temperature, pH, salinity, pressure, concentrations of the constituents of concern, and the presence of inhibitors.

Typically the rate of naturally occurring bioremediation of benzene, toluene, ethyl benzene, and xylene (BTEX) compounds is often limited by either the concentration of an appropriate electron acceptor or a nutrient needed during the transformation of the BTEX into a non-toxic compound. Enhanced in situ bioremediation attempts to stimulate biodegradation by indigenous microbial populations. This is accomplished by adding the limiting electron acceptor and/or the appropriate nutrients to the subsurface environment until the hydrocarbon substrate becomes the limiting factor (i.e., hydrocarbon concentrations are reduced to levels that will not sustain the microbial population).

Typical electron acceptors in order of relative amount of energy available to a given microbial community are: oxygen, nitrate, iron (III), sulfate, and carbon dioxide. Microbes tend to oxidize hydrocarbons (and other organic substrates) by using the electron acceptor that provides the most energy (Strumm and Morgan, 1981). Oxygen provides microbes with more free energy (via oxygen reduction) than any other electron acceptor. Nitrate is the second best electron acceptor. Research has shown that BTEX compounds are some of the most aerobically biodegradable anthropogenic compounds found in the subsurface environment (Lee et al., 1987). Table 1 below (modified from Bedient et al., 1994) lists research supporting biodegradation of BTEX compounds.

Research supporting biodegradation of BTEX compounds (modified from Bedient et al., 1994).

Compound	***Conditions***	***Test***	***Reference(s)***
Benzene	Aerobic	In situ	Wilson et al., 1986b
	Methanogenic, microcosm	Field simulation	Wilson et al., 1986c
	Aerobic, batch study	Laboratory	Tabak et al., 1990
Ethyl Benzene	Methanogenic, microcosm	Laboratory	Wilson et al., 1986
	Anaerobic, continuous flow column	Field sample	Kuhn et al., 1988
	Aerobic, batch study	Laboratory	Tabak et al., 1990
	Nitrate reducing	Laboratory	Arcangeli et al., 1994
Toluene	Aerobic, microcosm	Field sample	Wilson et al., 1983b
	Aerobic	In situ	Wilson et al., 1986a
	Aerobic	In situ	Wilson et al, 1986b
	Methanogenic, microcosm	Field sample	Wilson et al., 1986c
	Anaerobic, continuous flow column	Field sample	Zeyer et al., 1986
	Aerobic, batch study	Field sample	Swindoll et al., 1988
	Anaerobic, continuous flow column	Field sample	Kuhn et al., 1988
	Iron reducing, batch study	Laboratory, pure culture	Lovley & Lonergan, 1990
	Aerobic, batch study	Laboratory	Tabak et al., 1990
	Methanogenic, microcosm	Field sample	Beller et al., 1991
	Nitrate reducing microcosm & field study	Field sample	Barbaro et al., 1992

m-Xylene	Acrobic	In situ	Wilson ct al., 1986a
	Anaerobic, continuous flow column	Field sample	Kuhn et al., 1988
	Acrobic, batch study	Laboratory	Tabak ct al., 1990

4.2 In Situ Bioremediation Evaluation and Design

A subsurface microbial community has been identified at several sites that exhibit similar subsurface conditions to the subject site. Based on the analyses conducted at these similar sites, a selected biologic community of indigenous BTEX degraders will be grown to provide the inoculum for the in situ injection wells. A Safety Evaluation was performed by the State of South Carolina Toxicologist on Micro-Bac International Bioremediation Product. The State Toxicologist issued a safety evaluation letter dated January 15, 1999. A copy of this letter is included in Appendix A.

Up to eighteen (18) in situ injection wells will be installed at the locations depicted in Figure 4. The injection wells will be installed using 2-inch diameter Schedule 40 PVC casing approximately fifty (50) feet long. Perforations along the length will allow impacted ground water to enter the reactor and will allow the treated oxygenated ground water and excess biomass to exit the reactors. A schematic drawing of the typical injection well is provided as Figure 5.

In biological processes, microorganisms degrade organic compounds either directly to obtain carbon and/or energy, or in a co-metabolic process with no significant benefit to the organism. In a situation where the microorganisms are in equilibrium (i.e., biomass decay approximately equals biomass growth) the stoichiometric equation describing the degradation of hydrocarbons (using n-hexane as a typical hydrocarbon) is:

$C_6H_{14} + 9.5O_2 \rightarrow 6CO_2 + 7H_2O$

Based on the above equation 9.5 moles of oxygen are required for every mole of hydrocarbon consumed, or on a weight basis, approximately 3.5 grams of oxygen area required for every 1 gram of hydrocarbon. In actual cases biodegradation rates range from approximately 2 mg/l-day to 20 mg/l-day, affected by initial concentrations, temperature, and initial biomass (USEPA, 1995). For Smith's Grocery site, a conservative oxygen utilization rate of 6% per day is assumed. Bacteria and nutrients purchased from MicroBac will be injected into the shallow aquifer through the proposed injection wells. Excess biomass and ground water will flow out through perforations to the water table. The treatment radius of each in situ immobilized bed bioreactor will be limited by the permiability of the subsurface. Field experience from other sites and the rule of thumb derived from air sparging projects indicate that this radius will be on the order of 12 to 15 feet. Initial nutrients will be provided in the form of time-released solids mixed with water and installed in the bioreactor.

Using a first order decay rate of .35, calculated from the reported half-life value for benzene of 24 months, the average degradation rate for the site can be determined. The half-life value for benzene was selected because it is the longest half-life of the two constituents present above SSTL concentrations. The half-life of benzene was taken from Table 2C of the South Carolina Risked-Based Corrective Action for Petroleum Releases document dated January 5, 1998. The first order degradation rate is calculated by:

$L_t = Le^{-kt}$ (Cookson, 1995)

Where: L_t = concentration after degradation for time (t) in days

L = original concentration

k = first-order degradation rate constant, unit per day

The sum total of the constituents of concern (COC) above calculated SSTL values (as presented in the bid specifications) was 1.407 mg/l. Based on the above calculation the target levels can be

reached in less than12 months. A safety factor is appropriate and therefore, a remediation time frame of 36 months is suggested.

To monitor actual remediation rates, a field-monitoring program will be proposed to provide evidence that the site will be remediated within the required time frame. Because of the widely variable hydrocarbon concentrations, the average biodegradation rate does not reflect actual biodegradation rates throughout the site. Biodegradation rates may also fluctuate with the season and as contaminant concentration decreases

5.0 CORRECTIVE ACTION MONITORING

Sampling and reporting will be conducted on a quarterly basis. Quarterly samples will be conducted on all monitor wells. The groundwater samples will be analyzed for the BTEX compounds, Naphthalene, and MTBE. Analytical methodologies shall be as specified in SCDHEC DUSTM guidance documents (or equivalent). Proper field notes and chain of custody documentation will be maintained.

6.0 ABANDONMENT

Upon achieving remediation goals, all monitoring wells will be abandoned in accordance with SCDHEC guidelines.

7.0 REFERENCES

Bedient, P.B., Rifai, H.S., and Newell, C.J., 1994, *Ground Water Contamination: Transport and Remediation,* PTR Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

Cookson, Jr., John T., 1995, *Bioremediation Engineering,* McGraw-Hill, Inc., New York, New York.

Lee, M.D., Jamison, V.W., and Raymond, R.L., 1987, Applicability of in situ bioreclamation as a remedial action alternative. *In Proceedings of the Petroleum hydrocarbons and Organic Chemicals in Ground Water: Prevention, Detection, and Restoration,* Houston, TX, National Water Well Association, Dublin, Ohio. Pp.167-185.

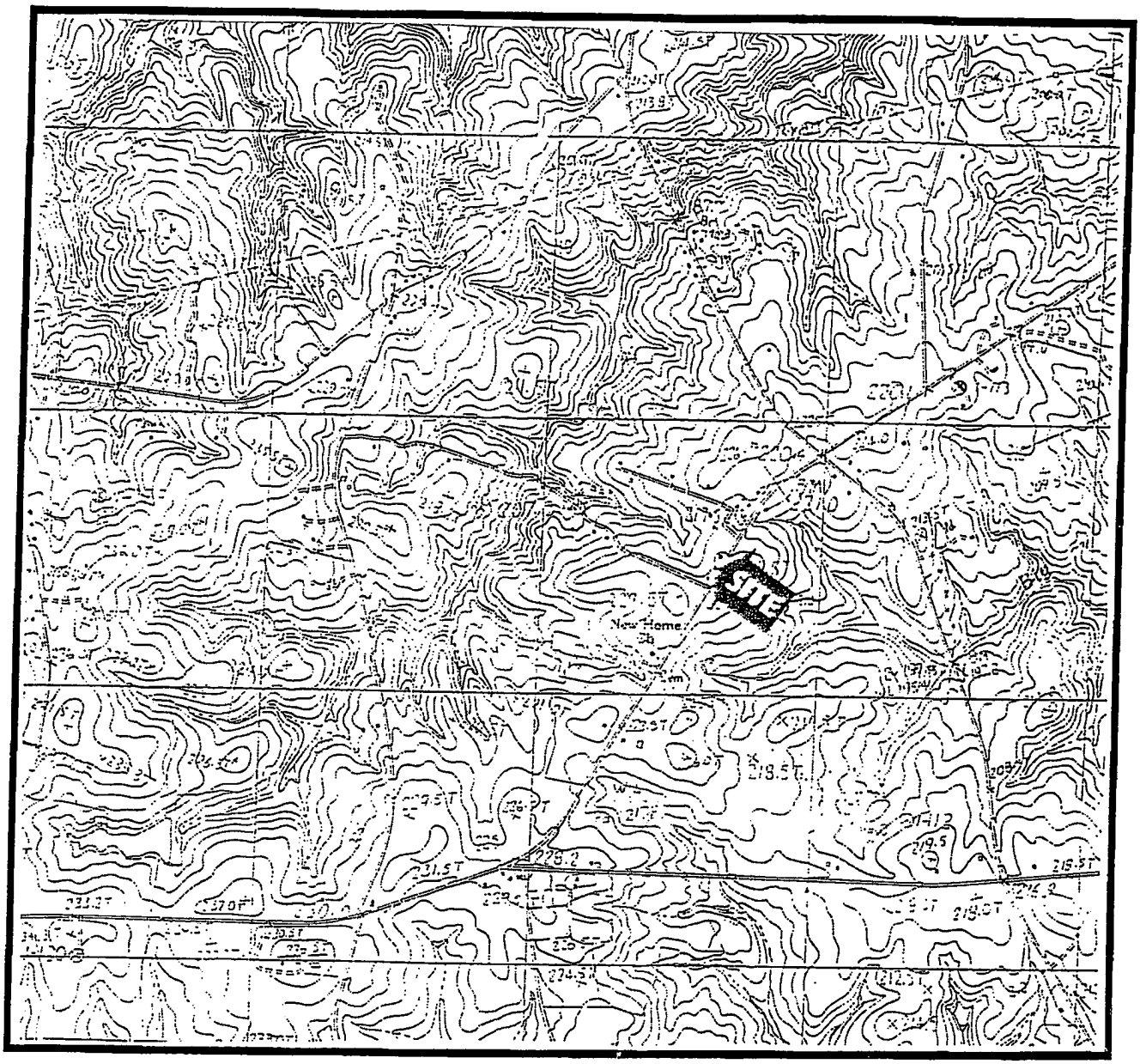
Portier, Ph.D., Ralph J., Louisiana State University, Aquatic/Industrial Toxicology Laboratory, Institute for Environmental Studies, 1997. Personal communication.

SEI Environmental, Inc., December 7, 1999, *Tier II Evaluation – Winnsboro Petroleum Bulk Plant,* Columbia, South Carolina.

Strumm, W. and Morgan, J.J., 1981, *Aquatic Chemistry,* J. Wiley & Sons, New York, New York, Chapter 7.

USEPA, 1995, *Bioventing Principles and Practice, Volume I and II,* EPA/540/R-95/53a, Office of Research and Development, Washington, D.C.

7.5 MINUTE SERIES(TOPOGRAPHIC)



SCALE 1:24000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

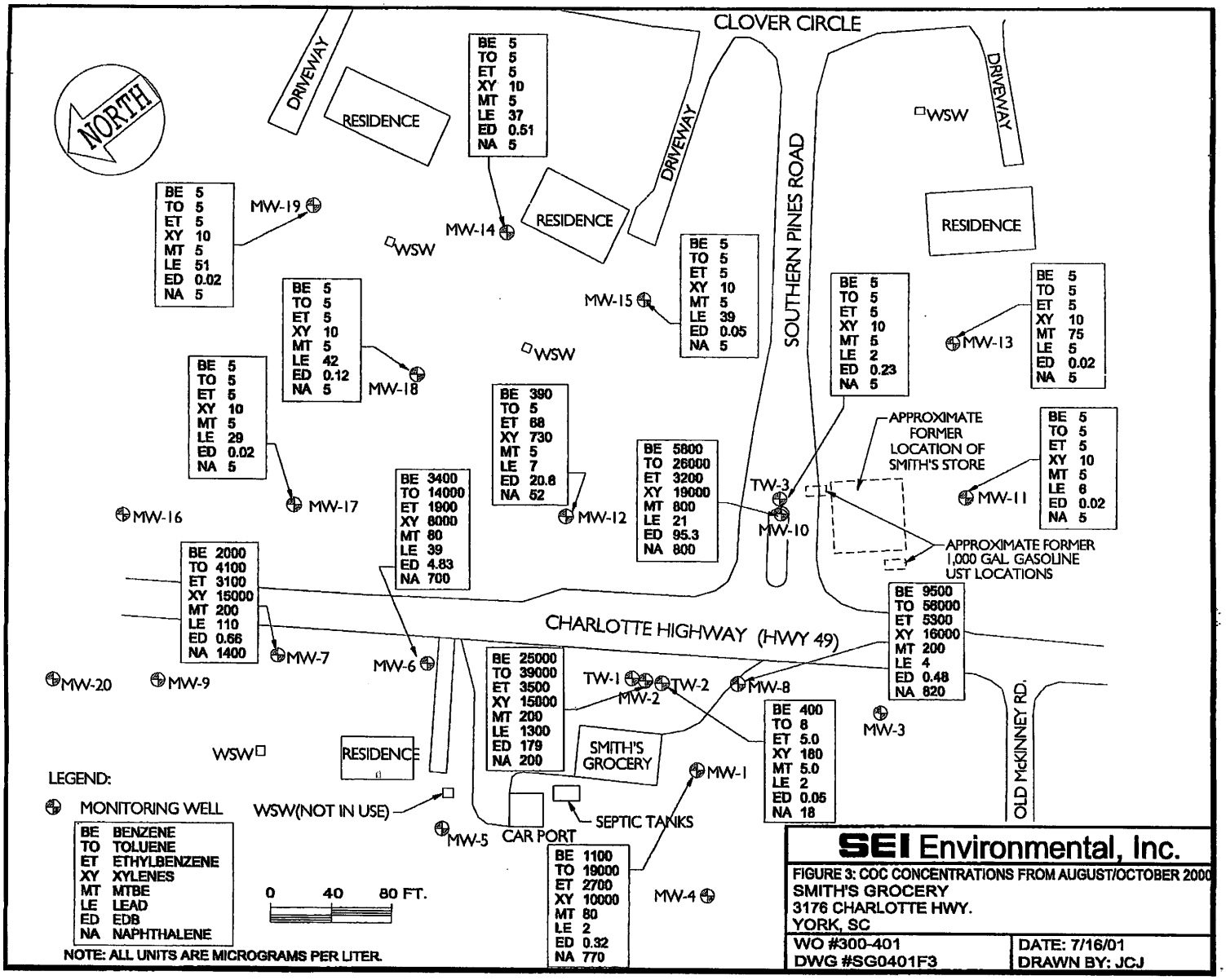
NORTH

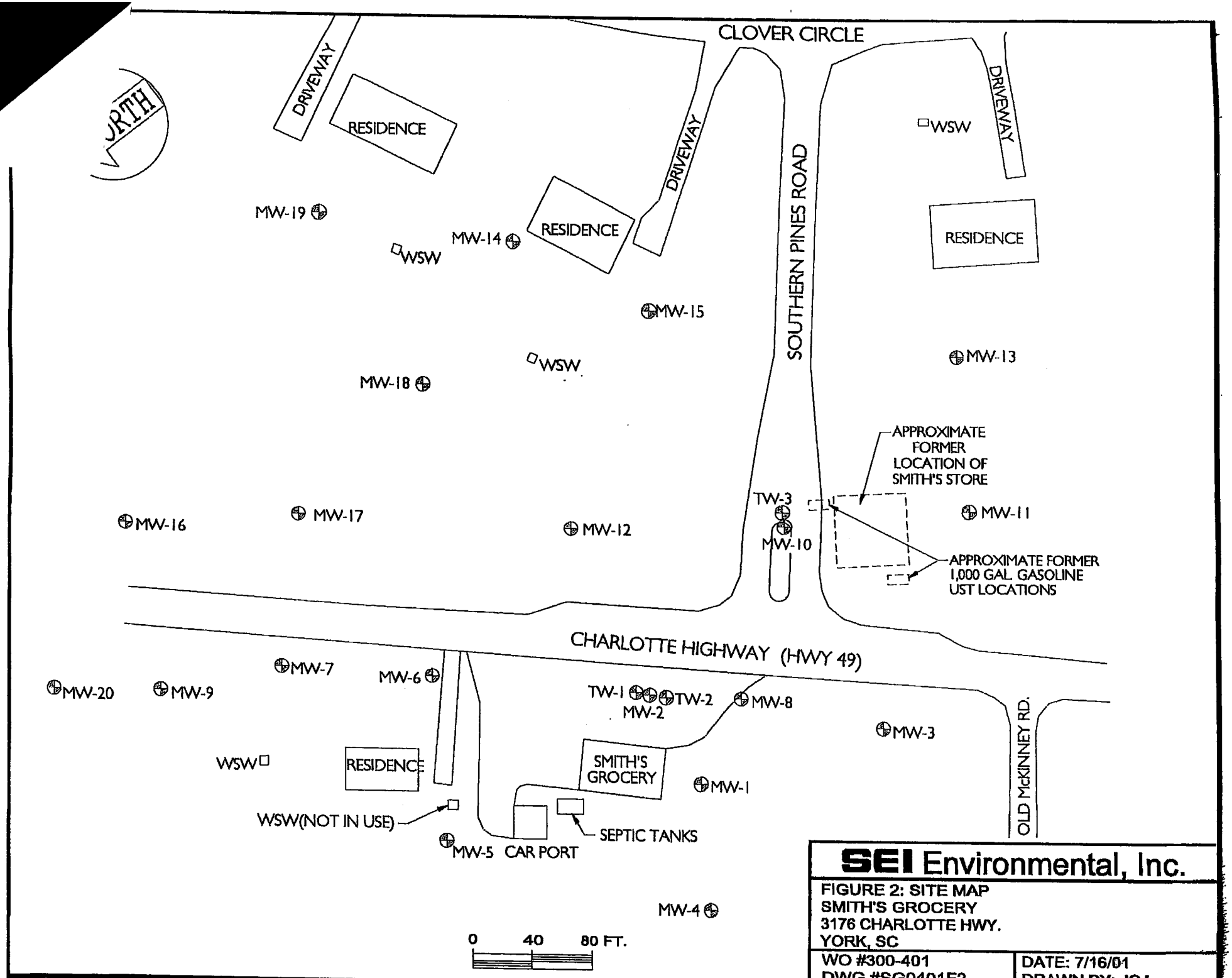
SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

W.O. #: 300-401
DWG #

DATE: 7/17/01
DRAWN BY: JCJ

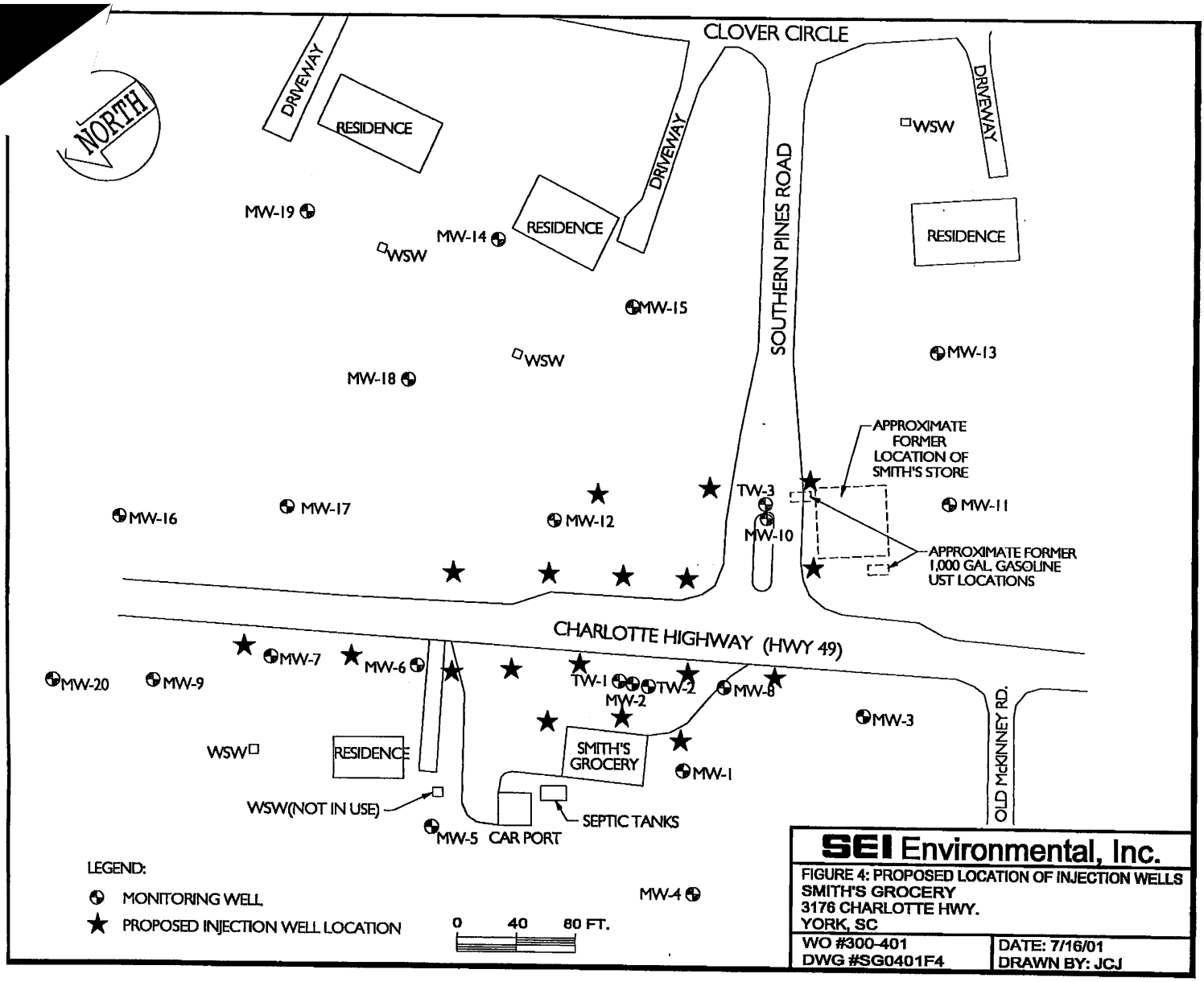

CLOVER CIRCLE
NORTH
DRIVEWAY
RESIDENCE
DRIVEWAY
DRIVEWAY
SOUTHERN PINES ROAD
WSW
RESIDENCE
RESIDENCE
BE 5
TO 5
ET 5
XY 10
MT 5
LE 37
ED 0.51
NA 5
MW-19
BE 5
TO 5
ET 5
XY 10
MT 5
LE 51
ED 0.02
NA 5
MW-14
WSW
MW-15
BE 5
TO 5
ET 5
XY 10
MT 5
LE 39
ED 0.05
NA 5
BE 5
TO 5
ET 5
XY 10
MT 5
LE 2
ED 0.23
NA 5
MW-13
BE 5
TO 5
ET 5
XY 10
MT 75
LE 5
ED 0.02
NA 5
BE 5
TO 5
ET 5
XY 10
MT 5
LE 42
ED 0.12
NA 5
MW-18
WSW
BE 5
TO 5
ET 5
XY 10
MT 5
LE 29
ED 0.02
NA 5
MW-17
BE 390
TO 5
ET 68
XY 730
MT 5
LE 7
ED 20.8
NA 52
MW-12
BE 5800
TO 26000
ET 3200
XY 19000
MT 800
LE 21
ED 95.3
NA 800
TW-3
MW-10
APPROXIMATE FORMER LOCATION OF SMITH'S STORE
MW-11
BE 5
TO 5
ET 5
XY 10
MT 5
LE 6
ED 0.02
NA 5
MW-16
BE 3400
TO 14000
ET 1900
XY 8000
MT 80
LE 39
ED 4.83
NA 700
BE 2000
TO 4100
ET 3100
XY 15000
MT 200
LE 110
ED 0.66
NA 1400
APPROXIMATE FORMER 1,000 GAL GASOLINE UST LOCATIONS
BE 9500
TO 58000
ET 5300
XY 16000
MT 200
LE 4
ED 0.48
NA 820
CHARLOTTE HIGHWAY (HWY 49)
MW-7
MW-6
MW-20
MW-9
BE 25000
TO 39000
ET 3500
XY 15000
MT 200
LE 1300
ED 179
NA 200
TW-1
MW-2
TW-2
MW-8
BE 400
TO 8
ET 5.0
XY 180
MT 5.0
LE 2
ED 0.05
NA 18
MW-3
OLD McKINNEY RD.
WSW
RESIDENCE
SMITH'S GROCERY
MW-1
LEGEND:
MONITORING WELL
WSW(NOT IN USE)
SEPTIC TANKS
MW-5
CAR PORT
BE BENZENE
TO TOLUENE
ET ETHYLBENZENE
XY XYLENES
MT MTBE
LE LEAD
ED EDB
NA NAPHTHALENE
0 40 80 FT.
BE 1100
TO 19000
ET 2700
XY 10000
MT 80
LE 2
ED 0.32
NA 770
MW-4
NOTE: ALL UNITS ARE MICROGRAMS PER LITER.
SEI Environmental, Inc.
FIGURE 3: COC CONCENTRATIONS FROM AUGUST/OCTOBER 2000
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC
WO #300-401
DWG #SG0401F3
DATE: 7/16/01
DRAWN BY: JCJ

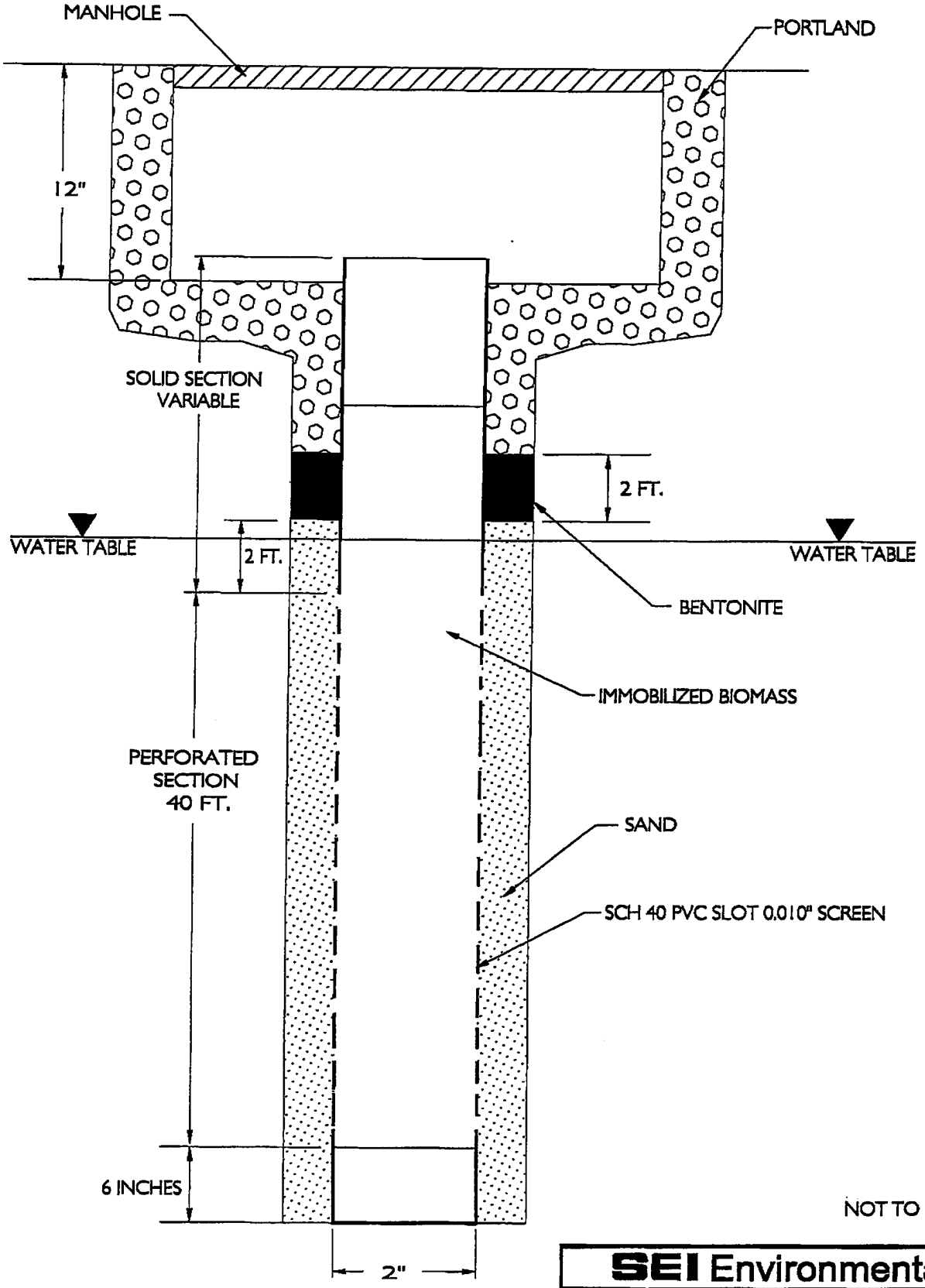


SEI Environmental, Inc.

FIGURE 2: SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

WO #300-401	DATE: 7/16/01
DWG #SG0401F2	DRAWN BY: JCJ


NORTH
CLOVER CIRCLE
DRIVEWAY
RESIDENCE
DRIVEWAY
DRIVEWAY
WSW
SOUTHERN PINES ROAD
RESIDENCE
MW-19
MW-14
WSW
MW-15
MW-13
WSW
MW-18
APPROXIMATE FORMER LOCATION OF SMITH'S STORE
TW-3
MW-16
MW-17
MW-12
MW-10
MW-11
APPROXIMATE FORMER 1,000 GAL. GASOLINE UST LOCATIONS
CHARLOTTE HIGHWAY (HWY 49)
MW-7
MW-6
MW-20
MW-9
TW-1
MW-2
TW-2
MW-8
MW-3
OLD McKINNEY RD.
WSW
RESIDENCE
SMITH'S GROCERY
MW-1
WSW(NOT IN USE)
SEPTIC TANKS
MW-5
CAR PORT
MW-4
LEGEND:
MONITORING WELL
PROPOSED INJECTION WELL LOCATION
0
40
80 FT.
SEI Environmental, Inc.
FIGURE 4: PROPOSED LOCATION OF INJECTION WELLS
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC
WO #300-401
DWG #SG0401F4
DATE: 7/16/01
DRAWN BY: JCJ



NOT TO SCALE

SEI Environmental, Inc.

FIGURE 5: INJECTION WELL SCHEMATIC
SMITH'S GROCERY
3176 CHARLOTTE HWY.
YORK, SC

WO #300-401	DATE: 7/17/01
DWG #SG0401F5	DRAWN BY: JCI

APPENDIX A
Information for Bioremediation Project

D H E C

PROMOTE PROTECT PROSPER

Post-it Fax Note 7671	Date 1-21-98	# of pages ▶ 1
To Dr Dennis Schneider	From Dr John Brown	
Co./Dept.	Co. DHEC/SC	
Phone #	Phone # 803-898-0652	
Fax #	Fax # 0651	

Mills/Jarrett Complex
Box 101106
Columbia, SC 29211-0106

COMMISSIONER:
Douglas E. Bryant

BOARD:
John H. Burriss
Chairman

William M. Hull, Jr., MD
Vice Chairman

Roger Leaks, Jr.
Secretary

Mark B. Kent

Cindi C. Moseller

Brian K. Smith

Rodney L. Grandy

January 15, 1999

MEMORANDUM

TO: Scott McInnes
Underground Storage Tank Management Bureau

FROM: John F. Brown, DVM, PhD
State Toxicologist
Division of Health Hazard Evaluation

RE: Safety Evaluation of Micro-Bac International Bioremediation Product for Hydrocarbon-based Soil Contamination

1. I have reviewed the responses to DHEC Guidelines of Health Hazard Evaluation of Bioremediation Procedures for Contaminated Soil relating to the product noted above. The responses were submitted by Dennis R. Schneider, Ph.D. of Micro-Bac International, inc. of Round Rock, Texas. All proprietary information will be secured and kept confidential, as requested.

2. If the above product noted is used in the approved application procedure, I find no significant threat to the public health and environmental integrity of South Carolina and have no objection to it being used on approved designated sites.

3. This review does not address the effectiveness of the proposed procedure. Efficacy evaluation must be made by other parties, if required.

cc: George Flores; fax (803) 957-4086
Dennis R. Schneider, Ph.D.; fax (512) 310-8800

/bl

APPENDIX B

Underground Injection Control Permit Application

Class V.A. Type I

Attachments A-F only. No injection of fluid whose chemical constituents exceeds any drinking water standard or may otherwise adversely affect the health of persons is proposed.

GW

Form 1 UIC	D H E C **Underground Injection Control Permit Application** **Ground-Water Protection Division** (Collected under the Authority of Title 48 Chapter 1 of the 1976 South Carolina Code of Laws)	**I. EPA ID NUMBER** T/A:	C:

Read attached instructions before starting.

For Offical Use Only

Application Approved month day year	Date Received month day year	Permit/Well Number

Comments

II. Facility Name and Address	**III. Owner/Operator and Address**
Facility Name: Smiths Grocery	Owner/Operator Name: Lois B. Smith
Street Address: 3176 Charlotte Hwy	Street Address: 3176 Charlotte Hwy
City: York State: SC Zip Code: 29745	City: York State: SC Zip Code: 29745

IV. Ownership Status (Mark "x")

☐ A. Federal ☐ B. State ☒ C. Private ☐ D. Public ☐ E. Other (Explain)

V. SIC Codes

VI. Well Status (Mark "x")

☐ A. Operating | Date Started month day year | ☐ B. Modification/Conversion ☒ C. Proposed

VII. Type of Permit Requested - Class and Type of Well (see reverse)

A. Class(es) enter code(s)	B. Type(s) enter code(s)	C. If class is "other" or type is code "x", explain	D. Number of Wells per type
			18

VIII. Location of Wells or Approximate Center of field or Project

C	A. Latitude				B. Longitude			
I		Deg	Min	Sec		Deg	Min	Sec
		35	02	30		81	08	48

IX. Attachments

Complete the following questions on a separate sheet(s) and number accordingly; see instructions for Classes II, III, and V, complete and submit on a separate sheet(s) attachments A-U as appropriate. Attach maps where required. List attachments by letter which are applicable and include with your application.

X. Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

A. Name and Title (Type or Print)	B. Phone No.
Lois B. Smith	(803) 684-6289
C. Signature (X) Lois B. Smith	D. Date Signed 5/16/01

DHEC 2502 (08/1997)

Attachment A – Activity for Review

The permit application is in support of the remedial activities proposed for Smith's Grocery in York, SC (SCDHEC Site ID# 09322). Remedial activities proposed the installation and operation of injection wells for remediation of dissolved phase hydrocarbons. The operation of the injection wells does not require the injection of air as the oxygen delivery system since the biomass to be injected is anaerobic.

Attachment C – Operating Data

For each in situ bioreactor:

1. MiroBac International Inc material will be poured into each injection well. No routine recovery of ground water is anticipated. No air permeability data is available.

2. Average and maximum injection pressure will not exceed pressure head from the top of the casing to the water table.

3. Injection will be on an as needed basis.

4. No contaminant constituents will be in the injected fluid.

5. Based on calculations in the Corrective Action Plan estimated length of clean up will be less than 36 months. It is requested that the permit be valid for an initial period of three years.

Attachment D – Monitoring Program

1. At startup of the injection wells and at 90 days after startup dissolved oxygen, pH, nitrates, and gasoline range organics will be monitored. In addition, prior to system startup a ground water sample will be collected from each of the existing monitoring wells. Prior to sample collection the water level in each well will be measured. The volume of water standing in the well will be calculated. A volume equal to or greater than three times the calculated volume will be purged from the well before a sample is collected. Field measurements of pH, temperature, and specific conductance will be made and recorded after each single volume purge. Purge water will be containerized and temporarily stored onsite in labeled containers for subsequent off site disposal through an approved facility. Samples will be placed in laboratory supplied containers, maintained at 4^0 C, in a cooler and shipped to a SC certified laboratory for analysis. The ground water samples will be analyzed for the BTEX components, Naphthalene, and MTBE. Analytical methodologies shall be as specified in SCDHEC DUSTM guidance documents (or equivalent). Proper field notes and chain of custody documentation will be maintained.

   Sampling and reporting will be conducted on a quarterly basis. Quarterly sampling will be conducted on all monitor wells.

2. No contaminant constituents will be present in the injectate.

3. No hydraulic impact on the contaminant plume is anticipated. Water level measurements will be collected and potentiometric maps at intervals specified above to confirm that the existing ground water flow direction is not affected.

Attachment E – Existing or Pending State/Federal Permits

The site is identified by SCDHEC as having active underground storage tanks. No other known permits exist.

Attachment F – Description of Business

This facility is a convenience store.

APPENDIX C
Performance Bond

THE AMERICAN INSTITUTE OF ARCHITECTS

AI2676924

AIA Document A311

Performance Bond

KNOW ALL MEN BY THESE PRESENTS: that

(Here insert full name and address or legal title of Contractor)

SEI Environmental, Inc., 2506 Grandview AVenue, Nashville, TN 37211

as Principal, hereinafter called Contractor, and,

(Here insert full name and address or legal title of Surety)

Gulf Insurance Company, 5 Forest Park Drive, Farmington, CT 06032

as Surety, hereinafter called Surety, are held and firmly bound unto

(Here insert full name and address or legal title of Owner)

South CArolina Superb Account, c/o SC Dept. of Health & Environmental Control, 2600 Bull Street, Columt

as Obligee, hereinafter called Owner, in the amount of **********
One Hundred Ninety-Nine Thousand Three Hundred Fifty-Nine And 00/100********
********** Dollars ($ 199,359.00*********),

for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Contractor has by written agreement dated , entered into a contract with Owner for

(Here insert full name, address and description of project)

Soil & Ground Water Redmediation @ Smith's Grocery, 3516 Charlotte Highway, York, SC

in accordance with Drawings and Specifications prepared by

(Here insert full name and address or legal title of Architect)

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

PERFORMANCE BOND

NOW, THERFFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the Owner.

Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly

1) Complete the Contract in accordance with its terms and conditions, or

2) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the Owner elects, upon determination by the Owner and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Owner, and make available as Work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price," as used in this paragraph, shall mean the total amount payable by Owner to Contractor under the Contract and any amendments thereto, less the amount properly paid by Owner to Contractor.

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors of the Owner.

Signed and sealed this **1st** day of **June, 2001**

(Witness)

SEI Environmental, Inc.

(Principal) (Seal)

Mar Finley, President & Chief Operating Officer

(Title)

(Witness)

Gulf Insurance Company

(Surety) (Seal)

Rita M. Abbott

Rita M. Abbott **Attorney-In-Fact** (Title)

THE AMERICAN INSTITUTE OF ARCHITECTS

AI2676924

AIA Document A311

Labor and Material Payment Bond

THIS BOND IS ISSUED SIMULTANEOUSLY WITH PERFORMANCE BOND IN FAVOR OF THE OWNER CONDITIONED ON THE FULL AND FAITHFUL PERFORMANCE OF THE CONTRACT

KNOW ALL MEN BY THESE PRESENTS: that

(Here insert full name and address or legal title of Contractor)

SEI Environmental, Inc., 2506 Grandview AVenue, Nashville, TN 37211

as Principal, hereinafter called Principal, and,

(Here insert full name and address or legal title of Surety)

Gulf Insurance Company, 5 Forest Park Drive, Farmington, CT 06032

as Surety, hereinafter called Surety, are held and firmly bound unto

(Here insert full name and address or legal title of Owner)

South CArolina Superb Account, c/o SC Dept. of Health & Environmental Control, 2600 Bull Street, Columt

as Obligee, hereinafter called Owner, for the use and benefit of claimants as hereinbelow defined, in the amount of **One Hundred Ninety-Nine Thousand Three Hundred Fifty-Nine And 00/100**********:

(Here insert a sum equal to at least one-half of the contract price)

Dollars ($ **199,359.00**********), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Principal has by written agreement dated , entered into a contract with Owner for

(Here insert full name, address and description of project)

Soil & Ground Water Redmediation @ Smith's Grocery, 3516 Charlotte Highway, York, SC

in accordance with Drawings and Specifications prepared by

(Here insert full name and address or legal title of Architect)

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

LABOR AND MATERIAL PAYMENT BOND

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Principal or with a Subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.

2. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.

3. No suit or action shall be commenced hereunder by any claimant:

a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: the Principal, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.

b) After the expiration of one (1) year following the date on which Principal ceased Work on said Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.

4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this **1st** day of **June, 2001**

(Witness)

SEI Environmental, Inc.

(Principal) (Seal)

Max Finley, President & Chief Operating Officer

(Title)

(Witness)

Gulf Insurance Company

(Surety) (Seal)

Rita M. Abbott

Rita M. Abbott Attorney-In-Fact (Title)

RIDER TO BOND INVOLVING TOXIC MATERIAL

BOND NO. AI 2676924

This bond is being issued subject to the following express conditions which shall survive the release and discharge of Surety from any further liability of its performance and payment obligations required under it's bond:

FIRST: The bond issued by Surety shall not be considered to be a substitute for or in any other way satisfy the requirement for any type of insurance that may be contained in the contract documents between the Principal, Obligee, and/or Owner.

SECOND: No suit shall be commenced against the Principal or Surety for any default in performance or for labor performed or material supplied, after tow years from the date of the contract between the Principal and Obligee, or one year after substantial completion, or within one year of actual discovery by Obligee of breach by Principal, whichever occurs last.

THIRD: No right of action against Surety shall inure to the benefit of any person, firm or corporation other than the Obligee, or for the use or benefit of the Obligee.

FOURTH: Notwithstanding any provision contained to the contrary in the contract documents between the Principal, Obligee, and/or Owner, Surety shall not be held liable or in any other respect be responsible to the Obligee or to any other person, firm or corporation for nay act(s) of negligence by the Principal, its agents, servants or employees or by any contractor employed by Surety to complete the contract in the event of the Principal's default, while performing the contract, which results in personal injuries or property damage.

This is 1st day of **June, 2001**

SURETY: Gulf Insurance Company

Rita M. Abbott

Rita M. Abbott - Attorney in Fact

GULF INSURANCE COMPANY
HAZELWOOD, MISSOURI
POWER OF ATTORNEY

ORIGINALS OF THIS POWER OF ATTORNEY ARE PRINTED ON BLUE SAFETY PAPER WITH TEAL INK. DUPLICATES SHALL HAVE THE SAME FORCE AND EFFECT AS AN ORIGINAL ONLY WHEN ISSUED IN CONJUNCTION WITH THE ORIGINAL.

KNOW ALL MEN BY THESE PRESENTS: That the Gulf Insurance Company, a corporation duly organized under the laws of the State of Missouri, having its principal office in the city of Irving, Texas, pursuant to the following resolution, adopted by the Finance & Executive Committee of the Board of Directors of the said Company on the 10th day of August, 1993, to wit:

"RESOLVED, that the President, Executive Vice President or any Senior Vice President of the Company shall have authority to make, execute and deliver a Power of Attorney constituting as Attorney-in-Fact, such persons, firms, or corporations as may be selected from time to time; and any such Attorney-in-Fact may be removed and the authority granted him revoked by the President, or any Executive Vice President, or any Senior Vice President, or by the Board of Directors or by the Finance and Executive Committee of the Board of Directors.

RESOLVED, that nothing in this Power of Attorney shall be construed as a grant of authority to the attorney(s)-in-fact to sign, execute, acknowledge, deliver or otherwise issue a policy or policies of insurance on behalf of Gulf Insurance Company.

RESOLVED, that the signature of the President, Executive Vice President or any Senior Vice President, and the Seal of the Company may be affixed to any such Power of Attorney or any certificate relating thereto by facsimile, and any such powers so executed and certified by facsimile signature and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond and documents relating to such bonds to which they are attached."

Gulf Insurance Company does hereby make, constitute and appoint

BOND NUMBER AI 2676924

PRINCIPAL: NAME, ADDRESS CITY, STATE, ZIP
SEI Environmental, Inc. 2506 Grandview Avenue Nashville, TN 37211
EFFECTIVE DATE
June 1, 2001
CONTRACT AMOUNT
$ 199,359.00
BOND AMOUNT
$ 199,359.00

~~~~ Rita M. Abbott, Elizabeth Carley, Geraldine L. Longo, Saverio J. Longo, Linda Soneson, John Wagner ~~~~

its true and lawful attorney(s)-in-fact, with full power and authority hereby conferred in its name, place and stead, to sign, execute, acknowledge and deliver in its behalf, as surety, any and all bonds and undertakings of suretyship, and to bind Gulf Insurance Company thereby as fully and to the same extent as if any bonds, undertakings and documents relating to such bonds and/or undertakings were signed by the duly authorized officer of the Gulf Insurance Company and all the acts of said attorney(s)-in-fact, pursuant to the authority herein given, are hereby ratified and confirmed.

The obligation of the Company shall not exceed three million (3,000,000) dollars.

IN WITNESS WHEREOF, the Gulf Insurance Company has caused these presents to be signed by any officer of the Company and its Corporate Seal to be hereto affixed.

GULF INSURANCE COMPANY CORPORATE SEAL MISSOURI

GULF INSURANCE COMPANY

Lawrence P. Miniter

Lawrence P. Miniter
Executive Vice President

STATE OF NEW YORK)
) SS
COUNTY OF NEW YORK)

On the 13th day of April, 2000 A.D., before me came Lawrence P. Miniter, known to me personally who being by me duly sworn, did depose and say; that he resides in the County of Bergen, State of New Jersey; that he is the Executive Vice President of the Gulf Insurance Company, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instruments is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that he signed his name, thereto by like order.

DAVID JAFFA NOTARY PUBLIC STATE OF NEW YORK

David Jaffa

DAVID JAFFA
Notary Public, State of New York
No. 02JA4958634
Qualified in Kings County
Commission Expires December 30, 2001

STATE OF NEW YORK)
) SS
COUNTY OF NEW YORK)

I, the undersigned, Senior Vice President of the Gulf Insurance Company, a Missouri Corporation, DO HEREBY CERTIFY that the foregoing and attached POWER OF ATTORNEY remains in full force.

Signed and Sealed at the City of New York.

AI2676924 *1328169*

GULF INSURANCE COMPANY CORPORATE SEAL MISSOURI

Dated the 1st **day of** June **, 20** 01

George Biancardi

George Biancardi
Senior Vice President

APPENDIX D

Tax Map Information

1. Hemphill Frontis Tyree & Etta L
2146 old McKinney Rd
York S.C. 29745
456-00-00-003

2. Smith, Lois B
3176 Charlotte Hwy
York S.C. 29745
456-00-00-005

Smith Lois B
3176 Charlotte Hwy
York S.C. 29745
456-00-00-043

3. Hemphill frontis Tyree & Etta L
2146 old McKinney Rd
York S.C. 29745
456-00-00-041

4. Norris JB & Miranda S
2239 old McKinney Rd
York S.C. 29745
456-00-00-056

Norris JB & Miranda
2239 old McKinney Rd
York S.C. 29745
456-00-00-057

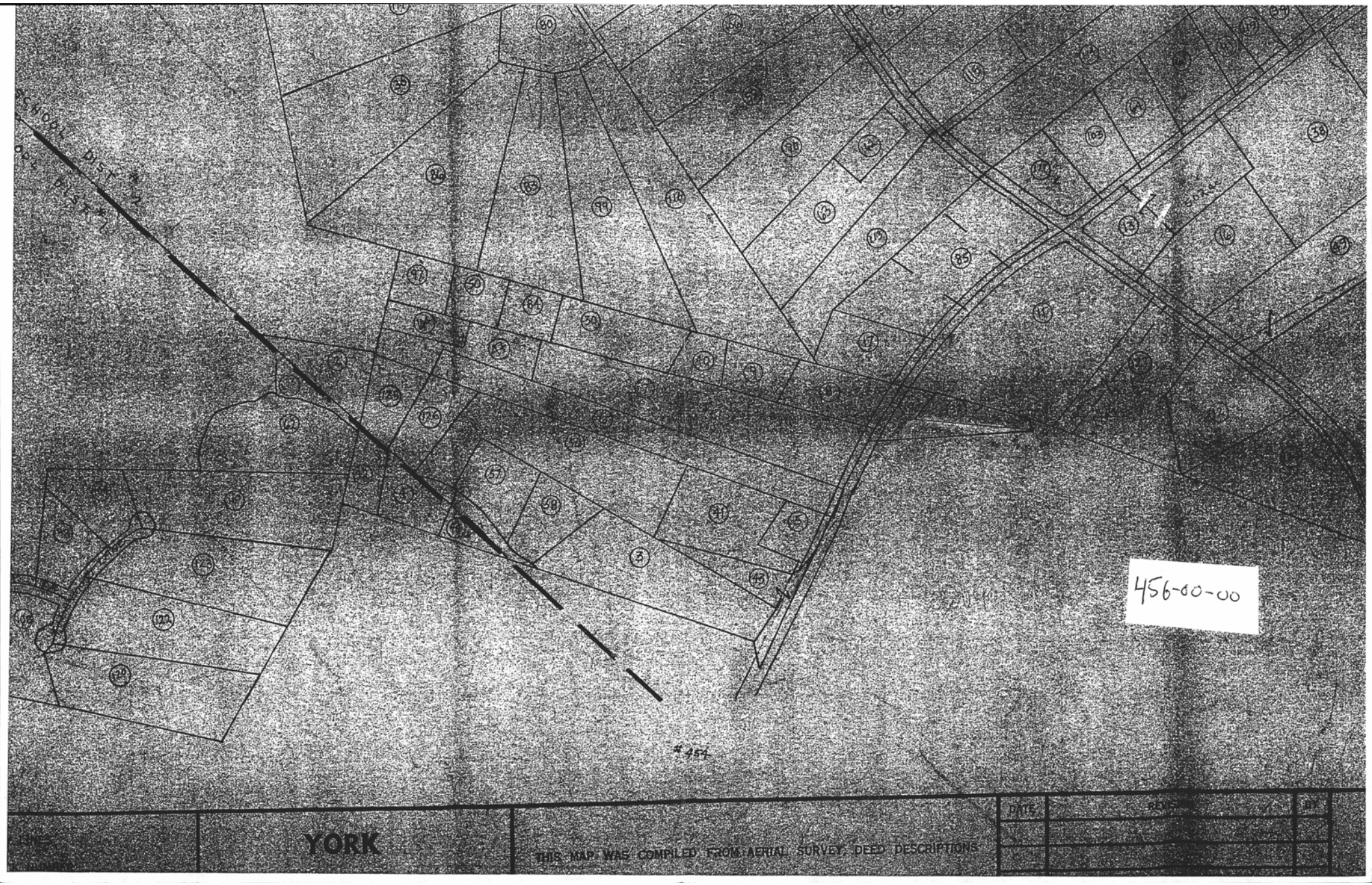
5. Norris JB & Miranda
2239 old McKinney Rd
York S.C. 29745
456-00-00-058

6 Foster Roger R. JR. & Kelly B
2102 pinewild court
York S.C. 29745
489-4-1-22

7. Hill Tony H & Susan W
3049 Clover circle
York S.C. 29745

489-4-1-23

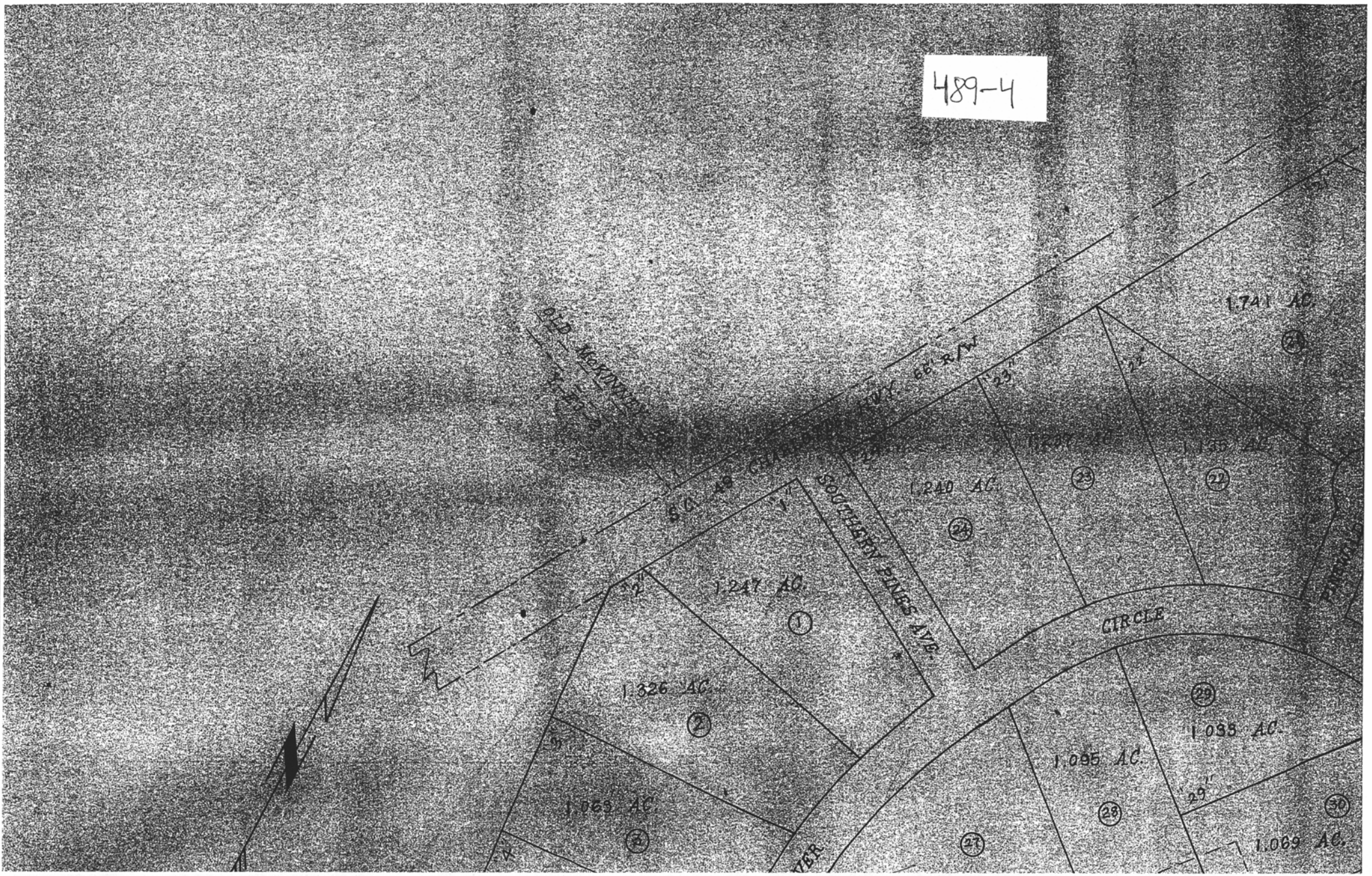
8. Vickery Jeffery D & Tonya E.
3043 Clover circle
York S.C. 29745
489-4-1-24



YORK

THIS MAP WAS COMPILED FROM AERIAL SURVEY, DEED DESCRIPTIONS

DATE	REVISIONS	BY


489-4
OLD MCKINNEY
S.C. 49
S.C. 49
66' R/W
SOUTHERN PINES AVE.
CIRCLE
1.741 AC.
1.247 AC.
1.326 AC.
1.069 AC.
1.249 AC.
1.095 AC.
1.035 AC.
1.069 AC.
1
2
3
24
23
22
29
28
27
30

CBM

ENVIRONMENTAL SERVICES, INC.

April 3, 2001

5-4-01

Mr. Sriram Madabhushi
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

RECEIVED
APR 0 9 2001
Underground Storage
Tank Program

RE: Water Supply Well Analytical Data
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. Madabhushi:

The purpose of this correspondence is to present information associated with the sampling of two water supply wells located near the above referenced site. The water supply wells located at the Vickery residence and the Hill residence were sampled on March 22, 2001. Granular activated carbon (GAC) units have been installed on each of the wells to treat groundwater affected by petroleum hydrocarbons. Post-treatment samples were collected from each of the water supply wells. The samples were submitted for analyses of BTEX, MTBE and naphthalene using Method 8260. No detectable concentrations of the requested method constituents were reported in the samples. The complete analytical reports for the groundwater samples collected from the water supply wells are attached.

The wells are tentatively scheduled to be sampled again in late April as part of a monthly monitoring plan. There have been no funds approved by the SCDHEC to continue the monthly monitoring of the two water supply wells after March 2001. If you wish to continue the monitoring activities, please contact the undersigned and an ACCA requesting approval of the necessary funds will be submitted to the SCDHEC.

If you have any questions or require additional information concerning this matter, please contact the undersigned at (803) 548-5989.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: file

P. O. Box 411387
Charlotte, NC 28241
704 527-4391

101 West 14th Street, #107
Greenville, NC 27834
252 752-0200

377 Carowinds Boulevard, #118
Fort Mill, SC 29708
803 548-5989

730 East Main Street
Frankfort, KY 40601
502 223-2701

302 Knights Run Avenue
Tampa, FL 33602
813 224-9680

231082

TestAmerica INCORPORATED Division/Laboratory Name: Charlotte

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes? Compliance Monitoring

RECEIVED MAR 28 2001

Client Name: CBM ENVIRON. Client #: 2175

Address: 377 CAROLINDS BLVD #118

City/State/Zip Code: #ETmill SC 29708

Project Manager: SCOTT BALL

Telephone Number: 800-743-1220 Fax: 803-548-5892

Sampler Name: (Print Name) TOLER RONALD J.

Sampler Signature: Ronald J Toler

Project Name: SMITH'S GROCERY

Project #: 10629

Site/Location ID: 09322 State: SC

Report To: SCOTT BALL

Invoice To: CBM ENVIRON.

Quote #: PO#: 14511

TAT: ✓ Standard; ___ Rush (surcharges may apply)

Date Needed: 29MAR01

Fax Results: (Y) N

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix: SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other	Preservation & # of Containers: HNO3	HCl	NaOH	H2SO4	Methanol	None	Other (Specify)	Analyze For: BTEX MTBE NAPH 8260	QC Deliverables	REMARKS
WSW - HILL	22MAR		G	N	DW		3						✓		38842
WSW VICKERY	22MAR		G	N	DW		3						✓		38843

QC Deliverables: ___ None; ___ Level 2 (Batch QC); ___ Level 3; ___ Level 4; Other: ____

max TAT to Charlotte office FAX # (704) 392-9073

Special Instructions:

Relinquished By:	22MAR01 Date:	Time:	Received By:	Date: 3/28/01	Time: 1600
Relinquished By: C Patterson	Date: 3/22	Time: 1630	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By: C. Wall	Date: 3.23.01	Time: 0900

LABORATORY COMMENTS:
Init Lab Temp:
Rec Lab Temp:
Custody Seals: Y N N/A
Bottles Supplied by TestAmerica: Y N
Method of Shipment:

TESTAMERICA, INC.-NASHVILLE

RECEIVED
MAR 3 0 2001

COOLER RECEIPT FORM

Client: CBM Environmental BC# 231082

Cooler Received On: 3.23.01 And Opened On: 3.23.01 By: Chris Wilmoth

C. Wilt
(Signature)

1. Temperature of Cooler when opened 2° Degrees Celsius
2. Were custody seals on outside of cooler?.....(YES)...NO
   a. If yes, how many, what kind and where: 1 Front
3. Were custody seals on containers and intact?.....NO...YES
4. Were the seals intact, signed, and dated correctly?.....(YES)...NO
5. Were custody papers inside cooler?.....(YES)...NO
6. Were custody papers properly filled out (ink,signed,etc)?.....(YES)...NO
7. Did you sign the custody papers in the appropriate place?.....(YES)...NO
8. What kind of packing material used? (Bubblewrap) Peanuts Vermiculite Other None
9. Was sufficient ice used (if appropriate)?.....(YES)..NO
10. Did all bottles arrive in good condition(unbroken)?.....(YES) (NO) CW — 1 VOA for each sample was B.I.S.
11. Were all bottle labels complete (#,date,signed,pres,etc)?.....(YES)..NO
12. Did all bottle labels and tags agree with custody papers?.....(YES)..NO
13. Were correct bottles used for the analysis requested?.....(YES)..NO
14. a. Were VOA vials received?.....(YES)...NO
    b. Was there any observable head space present in any VOA vial?.....(NO)..YES
15. Was sufficient amount of sample sent in each bottle?.....(YES)..NO
16. Were correct preservatives used?.....YES...NO
17. Was residual chlorine present?.....NO...YES
18. Corrective action taken, if necessary:

    See attached for resolution

TestAmerica
INCORPORATED

RECEIVED
MAR 3 0 2001

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
377 CAROWINDS BLVD, STE. 118
FORT MILL, SC 29708

Lab Number: 01-A38842
Sample ID: WSW-HILL
Sample Type: Water
Site ID: 09322

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: RONALD J. TOOLE

Date Collected: 3/22/01
Time Collected:
Date Received: 3/23/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	1.0	1.0	1	3/29/01	8:59	M.Himelick	8260B	183
Toluene	ND	ug/l	1.0	1.0	1	3/29/01	8:59	M.Himelick	8260B	183
Ethylbenzene	ND	ug/l	1.0	1.0	1	3/29/01	8:59	M.Himelick	8260B	183
Xylenes, Total	ND	ug/l	1.0	1.0	1	3/29/01	8:59	M.Himelick	8260B	183
Methyl-t-butyl ether	ND	ug/l	5.0	2.0	1	3/29/01	8:59	M.Himelick	8260B	183
Naphthalene	ND	ug/l	5.0	5.0	1	3/29/01	8:59	M.Himelick	8260B	183

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	104.	71. - 136.
VOA Surr, Toluene d8	101.	69. - 129.
VOA Surr, 4-BFB	98.	65. - 122.
VOA Surr, DBFM	100.	61. - 139.

= Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica
INCORPORATED

RECEIVED
MAR 3 0 2001

ANALYTICAL REPORT

Laboratory Number: 01-A38842
Sample ID: WSW-HILL
Project: 10629

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 3/29/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica INCORPORATED

RECEIVED
MAR 3 0 2001

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
377 CAROWINDS BLVD, STE. 118
FORT MILL, SC 29708

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: RONALD J. TOOLE

Lab Number: 01-A38843
Sample ID: WSW-VICKERY
Sample Type: Water
Site ID: 09322

Date Collected: 3/22/01
Time Collected:
Date Received: 3/23/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	1.0	1.0	1	3/29/01	9:33	M.Himelick	8260B	183
Toluene	ND	ug/l	1.0	1.0	1	3/29/01	9:33	M.Himelick	8260B	183
Ethylbenzene	ND	ug/l	1.0	1.0	1	3/29/01	9:33	M.Himelick	8260B	183
Xylenes, Total	ND	ug/l	1.0	1.0	1	3/29/01	9:33	M.Himelick	8260B	183
Methyl-t-butyl ether	ND	ug/l	5.0	2.0	1	3/29/01	9:33	M.Himelick	8260B	183
Naphthalene	ND	ug/l	5.0	5.0	1	3/29/01	9:33	M.Himelick	8260B	183

ND - Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	101.	71. - 136.
VOA Surr, Toluene d8	100.	69. - 129.
VOA Surr, 4-BFB	96.	65. - 122.
VOA Surr, DBFM	98.	61. - 139.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica
INCORPORATED

RECEIVED
MAR 3 0 2001

ANALYTICAL REPORT

Laboratory Number: 01-A38843
Sample ID: WSW-VICKERY
Project: 10629

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 3/29/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

RECEIVED
MAR 3 0 2001

PROJECT QUALITY CONTROL DATA
Project Number: 10629

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
VOA PARAMETERS								
Benzene	mg/l	< 0.00100	0.04590	0.05000	92	53. - 134.	183	blank
Toluene	mg/l	< 0.00100	0.04820	0.05000	96	54. - 135.	183	blank

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.04590	0.04750	3.43	25.	183
Toluene	mg/l	0.04820	0.04900	1.65	29.	183

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.1000	0.09880	99	73 - 113	183
Ethylbenzene	mg/l	0.1000	0.1069	107	78 - 119	183
Naphthalene	mg/l	0.1000	0.1038	104	62 - 149	183
Toluene	mg/l	0.1000	0.09910	99	70 - 119	183
Xylenes, Total	mg/l	0.2000	0.2079	104	62 - 137	183
Methyl-t-butyl ether	mg/l	0.1000	0.1014	101	68 - 129	183

Project QC continued . . .

TestAmerica INCORPORATED

RECEIVED
MAR 3 0 2001

PROJECT QUALITY CONTROL DATA
Project Number: 10629

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
VOA PARAMETERS					
Benzene	< 0.00100	mg/l	183	3/28/01	22:19
Ethylbenzene	< 0.00100	mg/l	183	3/28/01	22:19
Naphthalene	< 0.0050	mg/l	183	3/28/01	22:19
Toluene	< 0.00100	mg/l	183	3/28/01	22:19
Xylenes, Total	< 0.00100	mg/l	183	3/28/01	22:19
Methyl-t-butyl ether	< 0.0050	mg/l	183	3/28/01	22:19
VOA Surr, 1,2-DCA, d4	103.	% Rec	183	3/28/01	22:19
VOA Surr, Toluene d8	101.	% Rec	183	3/28/01	22:19
VOA Surr, 4-BFB	98.	% Rec	183	3/28/01	22:19

- Value outside Laboratory historical QC limits.

End of Report for Project 231082

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia, South Carolina 29201
Phone (800) 826-5435 Fax (803) 898-4330

LOIS B. SMITH
3176 CHARLOTTE HWY
YORK, SC 29745-9802

MAR 26 2001

Re: Smith's Grocery; S.C. Highway 49
UST Permit # 09322; CP # 13099
Release Reported June 30, 1993
Corrective Action Solicitation Response Summary Form received March 19, 2001
York County

Dear Ms. Smith:

The Underground Storage Tank Program of the South Carolina Department of Health and Environmental Control has received your Corrective Action Solicitation Response Summary Form and understands that you have no preference as your site rehabilitation contractor for corrective action. Therefore, SEI, as the company submitting the most competitive price quotation, is hereby provided financial approval for the associated activities. Therefore, SEI is hereby provided financial approval for the associated activities.

A Corrective Action Plan (CAP) (3 copies), Engineering Report (4 copies), Underground Injection Control Permit Application (4 copies), Wastewater discharge permit application (3 copies), and Bureau of Air Quality Control Modeling Forms (3 copies), should be submitted to the Department within 30 days of receipt of this letter. All Corrective Actions are subject to the conditions and specifications as outlined in the Request for Corrective Action Price Quotation. This includes a performance bond or irrevocable standby letter of credit, equal to the financial approval amount of $199,359.00, which must be submitted with the CAP and must specify that the State Underground Petroleum Environmental Response Bank (SUPERB) Account will be the recipient in case of any forfeiture. Since SCDHEC is responsible for the disbursement of funds from the SUPERB Account, the financial responsibility mechanism will be held by the Bureau until all work is successfully completed.

A cost proposal has been established in the amount of $199,359.00. Compensation will be in accordance with the pay for performance schedule outlined below. Future invoices and/or other criteria included therein must comply with current SUPERB criteria per Section 44-2-20(2) and the referenced bid special conditions. The accepted price quotation is considered final and will not be increased for any reason (e.g., unanticipated iron fouling of a system, wells clogging because of biological activity or sediments, increased subcontractor costs, loss of utilities, modification to the system to meet the remediation goals, etc.) with the exception of unforeseen geologic circumstances or identification of additional CoC from another release. Per the referenced price quotation specification, two invoices (one for each site) will be submitted at each payment milestone using the enclosed invoice form as follows:

- $ 79,743.60 within 90 days of operation or issuance of a permit to operate for the remediation system corrective action as described in the approved CAP and;

- $19,935.90 once one-quarter of the initial BTEX and MTBE concentration is removed as compared to the initial sampling data and SSTL presented in the Corrective Action Solicitation;

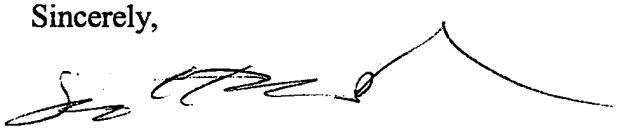
- $ 19,935.90 once one-half of the initial BTEX and MTBE concentration is removed as compared to the initial sampling data and SSTL presented in the Request for Corrective Action Price Quotation;

- $ 29,903.85 once three-quarters of the initial BTEX and MTBE concentration is removed as compared to the initial sampling data and SSTL presented in the Request for Corrective Action Price Quotation; and

- $ 49,839.75 once the concentration in and around all monitoring wells is at or below the SSTL goals for each CoC (see specifications item 11 in the Request for Corrective Action Price Quotation for the method of verification), and all remediation equipment, wells, and trenches installed by SEI are removed from the site or properly abandoned.

On all correspondence regarding this site, please reference UST Permit # 09322. If you have any questions, please contact me at (800) 826-5435 (within South Carolina only) or (803) 898-4365.

Sincerely,



W. A. (Scotty) McInnis, III, P.G., Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

cc: SEI, 3021 McNaughton, Suite 9 B, Columbia, SC 29223
Technical / Read Files
Financial File
Pat Holland, Financial Section

SCDHEC/UST/032001

SUPERB :: Money Calculator version WIN

Site ID: 09322 03/20/2001 CP No. : 13099

Total Price Quoted for ACA : $199359.00
Base Concentration : 10000 ug/l
SSTL Concnetration : 100 ug/l

Initial Money:	$ 79743.60	for system startup	
25% Reduction Money:	$ 19935.90	for reaching	7525 ug/L
50% Reduction Money:	$ 19935.90	for reaching	5050 ug/L
75% Reduction Money:	$ 29903.85	for reaching	2575 ug/L
For finishing the CA:	$ 49839.75	for reaching	100 ug/L
Total Money:	$ 199359.00		

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

CBM

ENVIRONMENTAL SERVICES, INC.

RECEIVED
MAR 2 0 2001
Underground Storage
Tank Program

March 15, 2001

Mr. Sriram Madabhushi
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

RE: Water Supply Well Analytical Data
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. Madabhushi:

The purpose of this correspondence is to present information associated with the sampling of two water supply wells located near the above referenced site. The water supply wells located at the Vickery residence and the Hill residence were sampled on February 23, 2001. Granular activated carbon (GAC) units have been installed on each of the wells to treat groundwater affected by petroleum hydrocarbons. Post-treatment samples were collected from each of the water supply wells. The samples were submitted for analyses of BTEX, MTBE and naphthalene using Method 8260. No detectable concentrations of the requested method constituents were reported in the samples. The wells are scheduled to be sampled again in late March as part of a monthly monitoring plan. The complete analytical reports for the groundwater samples collected from the water supply wells are attached.

If you have any questions or require additional information concerning this matter, please contact the undersigned at (803) 548-5989.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: file

P. O. Box 411387
Charlotte, NC 28241
704 527-4391

101 West 14th Street, #107
Greenville, NC 27834
252 752-0200

377 Carowinds Boulevard, #118
Fort Mill, SC 29708
803 548-5989

730 East Main Street
Frankfort, KY 40601
502 223-2701

302 Knights Run Avenue
Tampa, FL 33602
813 224-9680

TestAmerica INCORPORATED Division/Laboratory Name: Charlotte

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
Compliance Monitoring _____

Client Name: CRM ENVIR. Client #: 2175 227826
Address: 377 CROSWINDS BLVD, SUITE 110
City/State/Zip Code: FT. MILL, SC
Project Manager: SCOTT BALL
Telephone Number: 803-548-5989 Fax: 803-548-5892
Sampler Name: (Print Name) J. Campisi
Sampler Signature:

Project Name: SMITH GROCERY
Project #: 10629
Site/Location ID: YORK State: SC
Report To: S. BALL
Invoice To:
Quote #: PO#: 14425

TAT
X Standard
___ Rush (surcharges may apply)
Date Needed: 5 MARCH 01
Fax Results: Y N

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix: SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other	Preservation & # of Containers: HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	Analyze For: 8260 BTEX, MTBE EDB NAPH	REMARKS
VICKERY WSW	2/23/01	1545	G	-	GW		3						X	25297
HILL WSW	2/23/01	1605	G	-	GW		3						X	25298
TRIP BLANK													X	25299

QC Deliverables
___ None
___ Level 2 (Batch QC)
___ Level 3
___ Level 4
Other: _____

Special Instructions:

LABORATORY COMMENTS:
Init Lab Temp:
Rec Lab Temp:
Custody Seals: Y N N/A
Bottles Supplied by TestAmerica: Y N
Method of Shipment:

	Date	Time		Date	Time
Relinquished By:	2/26/01		Received By: C. Patterson	2/26	1400
Relinquished By: C. Patterson	2/26	1700	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	2-27-01	900

TESTAMERICA, INC.

RECEIVED
MAR 0 5 2001

COOLER RECEIPT FORM

Client: CBM BC# 227826

Cooler Received On: 2-27-01 And Opened On: 2-27-01 By: Craig Cothron

(Signature)

1. Temperature of Cooler when opened 2.0 DEGREES CELSIUS
2. Were custody seals on outside of cooler and intact? ..... YES NO
   a. If yes, what kind and where: TAPE / Front
   b. Were the signature and date correct? ..... YES NO
3. Were custody seals on containers intact? ..... YES NO
4. Were custody papers inside cooler? ..... YES NO
5. Were custody papers properly filled out (ink, signed, etc)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. What kind of packing material was used? Bubblewrap Peanuts Other None
8. Was sufficient ice used (if appropriate)? ..... YES NO
9. Did all bottles arrive in good condition (unbroken)? ..... YES NO
10. Were all bottle labels complete (#, date, signed, pres, etc)? ..... YES NO
11. Did all bottle labels and tags agree with custody papers? ..... YES NO
12. Were correct bottles used for the analysis requested? ..... YES NO
13. If present, was any observable VOA headspace present? ..... YES NO
14. If present, were VOA vials checked for absence of air bubbles and noted if found? ..... YES NO
15. Was sufficient amount of sample sent in each bottle? ..... YES NO
16. Were correct preservatives used? ..... YES NO
17. Was residual chlorine present (if appropriate?) ..... YES NO
18. Corrective action taken, if necessary:
    a. Name of person contacted: SEE ATTACHED FOR RESOLUTION IF NEEDED
    b. Date: _____

TestAmerica
INCORPORATED

RECEIVED
MAR 0 5 2001

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
377 CAROWINDS BLVD, STE. 118
FORT MILL, SC 29708

Lab Number: 01-A25297
Sample ID: VICKERY WSW
Sample Type: Ground water
Site ID:

Project: 10629
Project Name: SMITH GROCERY
Sampler: J CAMPITI

Date Collected: 2/23/01
Time Collected: 15:45
Date Received: 2/27/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	2/28/01	22:52	C.Bates	8260B	440
1,2-Dibromoethane	ND	ug/l	2.0	2.0	1	2/28/01	22:52	C.Bates	8260B	440
Ethylbenzene	ND	ug/l	2.0	2.0	1	2/28/01	22:52	C.Bates	8260B	440
Naphthalene	ND	ug/l	5.0	5.0	1	2/28/01	22:52	C.Bates	8260B	440
Toluene	ND	ug/l	2.0	2.0	1	2/28/01	22:52	C.Bates	8260B	440
Xylenes, Total	ND	ug/l	2.0	2.0	1	2/28/01	22:52	C.Bates	8260B	440
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	2/28/01	22:52	C.Bates	8260B	440

ND - Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	123.	71. - 136.
VOA Surr, Toluene d8	103.	69. - 129.
VOA Surr, 4-BFB	92.	65. - 122.
VOA Surr, DBFM	111.	61. - 139.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica
INCORPORATED

RECEIVED
MAR 0 5 2001

ANALYTICAL REPORT

Laboratory Number: 01-A25297
Sample ID: VICKERY WSW
Project: 10629

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: Michael H. Dunn Report Date: 3/ 1/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica INCORPORATED

RECEIVED
MAR 05 2001

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
377 CAROWINDS BLVD, STE. 118
FORT MILL, SC 29708

Project: 10629
Project Name: SMITH GROCERY
Sampler: J CAMPITI

Lab Number: 01-A25298
Sample ID: HILL WSW
Sample Type: Ground water
Site ID:

Date Collected: 2/23/01
Time Collected: 16:05
Date Received: 2/27/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	3/ 1/01	3:42	C.Bates	8260B	440
1,2-Dibromoethane	ND	ug/l	2.0	2.0	1	3/ 1/01	3:42	C.Bates	8260B	440
Ethylbenzene	ND	ug/l	2.0	2.0	1	3/ 1/01	3:42	C.Bates	8260B	440
Naphthalene	ND	ug/l	5.0	5.0	1	3/ 1/01	3:42	C.Bates	8260B	440
Toluene	ND	ug/l	2.0	2.0	1	3/ 1/01	3:42	C.Bates	8260B	440
Xylenes, Total	ND	ug/l	2.0	2.0	1	3/ 1/01	3:42	C.Bates	8260B	440
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	3/ 1/01	3:42	C.Bates	8260B	440

ND - Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	130.	71. - 136.
VOA Surr, Toluene d8	108.	69. - 129.
VOA Surr, 4-BFB	94.	65. - 122.
VOA Surr, DBFM	116.	61. - 139.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica
INCORPORATED

RECEIVED
MAR 0 5 2001

ANALYTICAL REPORT

Laboratory Number: 01-A25298
Sample ID: HILL WSW
Project: 10629

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 3/ 1/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica
INCORPORATED

RECEIVED
MAR 0 5 2001

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
377 CAROWINDS BLVD, STE. 118
FORT MILL, SC 29708

Project: 10629
Project Name: SMITH GROCERY
Sampler: J CAMPITI

Lab Number: 01-A25299
Sample ID: TRIP BLANK
Sample Type: Ground water
Site ID:

Date Collected:
Time Collected:
Date Received: 2/27/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	3/ 1/01	4:18	C.Bates	8260B	440
1,2-Dibromoethane	ND	ug/l	2.0	2.0	1	3/ 1/01	4:18	C.Bates	8260B	440
Ethylbenzene	ND	ug/l	2.0	2.0	1	3/ 1/01	4:18	C.Bates	8260B	440
Naphthalene	ND	ug/l	5.0	5.0	1	3/ 1/01	4:18	C.Bates	8260B	440
Toluene	ND	ug/l	2.0	2.0	1	3/ 1/01	4:18	C.Bates	8260B	440
Xylenes, Total	ND	ug/l	2.0	2.0	1	3/ 1/01	4:18	C.Bates	8260B	440
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	3/ 1/01	4:18	C.Bates	8260B	440

ND - Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	134.	71. - 136.
VOA Surr, Toluene d8	98.	69. - 129.
VOA Surr, 4-BFB	91.	65. - 122.
VOA Surr, DBFM	123.	61. - 139.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica INCORPORATED

RECEIVED
MAR 0 5 2001

ANALYTICAL REPORT

Laboratory Number: 01-A25299
Sample ID: TRIP BLANK
Project: 10629

These results relate only to the items tested.
This report shall not be reproduced except in full and with
permission of the laboratory.

Report Approved By: _____ Report Date: 3/ 1/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica
INCORPORATED

RECEIVED
MAR 05 2001

PROJECT QUALITY CONTROL DATA
Project Number: 10629

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
VOA PARAMETERS								
Benzene	mg/l	< 0.00060	0.04860	0.05000	97	53. - 134.	440	blank
Toluene	mg/l	< 0.00050	0.04820	0.05000	96	54. - 135.	440	blank
VOA Surr, 1,2-DCA, d4	% Rec				121	71. - 136.	440	
VOA Surr, Toluene d8	% Rec				95	69. - 129.	440	
VOA Surr, 4-BFB	% Rec				109	65. - 122.	440	
VOA Surr, DBFM	% Rec				114	61. - 139.	440	

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.04860	0.04860	0.00	25.	440
Toluene	mg/l	0.04820	0.04840	0.41	29.	440
VOA Surr, 1,2-DCA, d4	% Rec		127.			440
VOA Surr, Toluene d8	% Rec		102.			440
VOA Surr, 4-BFB	% Rec		106.			440
VOA Surr, DBFM	% Rec		112.			440

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.05000	0.04900	98	73 - 113	440
1,2-Dibromoethane	mg/l	0.0500	0.0528	106	78 - 122	440
Ethylbenzene	mg/l	0.05000	0.04760	95	78 - 119	440
Naphthalene	mg/l	0.0500	0.0446	89	62 - 149	440

Project QC continued . . .

TestAmerica
INCORPORATED

RECEIVED
MAR 0 5 2001

PROJECT QUALITY CONTROL DATA
Project Number: 10629

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Toluene	mg/l	0.05000	0.04960	99	70 - 119	440
Xylenes, Total	mg/l	0.1500	0.1445	96	62 - 137	440
Methyl-t-butyl ether	mg/l	0.0500	0.0539	108	68 - 129	440
VOA Surr, 1,2-DCA, d4	% Rec			117	68 - 129	440
VOA Surr, Toluene d8	% Rec			103	68 - 129	440
VOA Surr, 4-BFB	% Rec			103	68 - 129	440
VOA Surr, DBFM	% Rec			109	68 - 129	440

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
VOA PARAMETERS					
Benzene	< 0.00060	mg/l	440	2/28/01	1:44
1,2-Dibromoethane	< 0.0003	mg/l	440	2/28/01	1:44
Ethylbenzene	< 0.00070	mg/l	440	2/28/01	1:44
Naphthalene	< 0.0006	mg/l	440	2/28/01	1:44
Toluene	< 0.00050	mg/l	440	2/28/01	1:44
Xylenes, Total	< 0.00080	mg/l	440	2/28/01	1:44
Methyl-t-butyl ether	< 0.0003	mg/l	440	2/28/01	1:44
VOA Surr, 1,2-DCA, d4	130.	% Rec	440	2/28/01	1:44
VOA Surr, Toluene d8	99.	% Rec	440	2/28/01	1:44
VOA Surr, 4-BFB	104.	% Rec	440	2/28/01	1:44
VOA Surr, DBFM	114.	% Rec	440	2/28/01	1:44

- Value outside Laboratory historical QC limits.

End of Report for Project 227826

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

BUREAU OF LAND AND WASTE MANAGEMENT
UNDERGROUND STORAGE TANK PROGRAM
2600 Bull Street, Columbia, SC 29201
Phone (800) 826-5435 Fax (803) 898-4330

March 12, 2001

Lois B. Smith
3176 Charlotte Highway
York, SC 29745-9802

Re: Smith's Grocery
UST Permit #09322
Corrective Action Price Quotations received March 9, 2001
York County

Dear Mrs. Smith:

The Underground Storage Tank Program of the South Carolina Department of Health and Environmental Control has reviewed the Corrective Action Price Quotations resulting from the Corrective Action Solicitation. The cost for active corrective action activities will be established in the amount of $199,359.00. Copies of the corrective action price quotations are enclosed for your review. A "Corrective Action Price Quotation Proposal Summary" form is also enclosed for you to specify your choice of contractor, if you have a preference. Any Class I Certified Underground Storage Tank Contractor may perform the necessary activities at the established price. Please return the "Corrective Action Price Quotation Proposal - Summary" form by March 19, 2001 in order for the necessary financial approval to be made.

On all correspondence regarding this site, please reference UST Permit #09322. If you have any questions, please contact me at (800) 826-5435 (within South Carolina only) or (803) 898-4318.

Sincerely,

Sriram Madabhushi

Sriram Madabhushi, Hydrologist
Owner/Operator Assistance Section

enc: Corrective Action Price Quotation Proposal - Summary form
Corrective Action Price Quotation Proposals received from three contractors

cc: Technical File
Financial File

SCDHEC/UST/sm/012901/09322CA_summ_cov

CBM

ENVIRONMENTAL SERVICES, INC.

February 28, 2001

Mr. Sriram Madabhushi
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

RECEIVED
MAR 0 2 2001
Bureau of Underground
Storage Tank Management

RE: Water Supply Well Analytical Data
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. Madabhushi:

The purpose of this correspondence is to present information associated with the sampling of two water supply wells located near the above referenced site. The water supply wells located at the Vickery residence and the Hill residence were sampled on February 1, 2001. Granular activated carbon (GAC) units have been installed on each of the wells to treat groundwater affected by petroleum hydrocarbons. Post-treatment samples were collected from each of the water supply wells. The samples were submitted for analyses of BTEX, MTBE and naphthalene using Method 8260. No detectable concentrations of the requested method constituents were reported in the samples. The wells are scheduled to be sampled again in late February as part of a monthly monitoring plan. The complete analytical reports for the groundwater samples collected from the water supply wells are attached.

If you have any questions or require additional information concerning this matter, please contact the undersigned at (803) 548-5989.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: file

P. O. Box 411387
Charlotte, NC 28241
704 527-4391

101 West 14th Street, #107
Greenville, NC 27834
252 752-0200

377 Carowinds Boulevard, #118
Fort Mill, SC 29708
803 548-5989

730 East Main Street
Frankfort, KY 40601
502 223-2701

302 Knights Run Avenue
Tampa, FL 33602
813 224-9680

RECEIVED
FEB 09 2001

TestAmerica INCORPORATED

Division/Laboratory Name: Charlotte

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes? Compliance Monitoring

Client Name: CBM Client #: 3175 2251666

Address: 377 Executive Ctr. Blvd, Suite 118

City/State/Zip Code: Ft. Mill, SC

Project Manager: S. Ball

Telephone Number: 803-548-5589 Fax: 803-548-5892

Sampler Name: (Print Name) S. Campiti

Sampler Signature:

Project Name: Smiths Crossing

Project #: 10629

Site/Location ID: Yorkville State: SC

Report To: S. Ball

Invoice To:

Quote #: PO#: 14321

TAT: X Standard; ___ Rush (surcharges may apply) (2/8/01)

Date Needed: 8 FEB. 01

Fax Results: Y N

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix: SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other	Preservation & # of Containers: HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	Analyze For: 8260B BTEX, MTBE, Naph, EDB									QC Deliverables: ___ None, X Level 2 (Batch QC), ___ Level 3, ___ Level 4, Other: ___	REMARKS
Vickery WSW	2/1/01	0930	G		GW		3						X										14003
Hill WSW	2/1/01	0945	G		GW		3						X										14004

Special Instructions:

LABORATORY COMMENTS: Init Lab Temp: Rec Lab Temp:

Custody Seals: Y N N/A Bottles Supplied by TestAmerica: Y N

Method of Shipment:

	Date	Time		Date	Time
Relinquished By:	2/1/01		Received By:	2/1/01	1350
Relinquished By:	2/1/01	1600	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	2-2-01	900

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

BID NUMBER: #09322

Requested By: Brendon Bradley
Company Name: QORE
Address: 281 Fair Forest Way
City: Greenville
State & Zip: SC 29607
Phone: (864) 297-9944
Fax: (864) 297-0462

Date Requested: 2/1/01
Date Sent: FEB 02 2001

_____ Phone _____ Mail
_____ Hand _____ Hand
_____ Other (Specify)
_____

Requested By: Matt Brambletti
Company Name: Sumner Hart & Huckma
Address: 501 Minuteman Lane suite 101
City: Charlotte
State & Zip: NC 28217
Phone: (704) 586-0007
Fax: (704) 586-0373

Date Requested: 2/1/01
Date Sent: FEB 02 2001

_____ Phone _____ Mail
_____ Hand _____ Hand
_____ Other (Specify)
_____

Requested By: Helen Backlund
Company Name: Value Env.
Address: 123 Wateredge Rd.
City: Greenwood
State & Zip: SC 29644
Phone: _____
Fax: _____

Date Requested: 2/9/01
Date Sent: FEB 12 2001

_____ Phone _____ Mail
_____ Hand _____ Hand
_____ Other (Specify)
_____

Requested By: _____
Company Name: _____
Address: _____
City: _____
State & Zip: _____
Phone: _____
Fax: _____

Date Requested _____ Date Sent _____

_____ Phone _____ Mail
_____ Hand _____ Hand
_____ Other (Specify)
_____

BID NUMBER: #09322

Requested By: Laurie Goodale ✓
Company Name: Priester & Assoc.
Address: 1345 Garner Lane
City: Columbia
State & Zip: SC, 29210
Phone: 798-4377
Fax: 798-4378
Date Requested: 1/25/01 Date Sent: JAN 26 2001
____ Phone ____ Mail
____ Hand ____ Hand
____ Other (Specify)
Marguerite

Requested By: SEI Environmental ✓
Company Name: Dr. DeBeary (2)
Address: 3021 McNaughton Suite 9
City: Cola.
State & Zip: SC. 29223
Phone: 788-2535
Fax: 788-2399
Date Requested: 1/24/01 Date Sent: JAN 29 2001
____ Phone ____ Mail
____ Hand ____ Hand
____ Other (Specify)
Marguerite

Requested By: Chris Sims (1) ✓
Company Name: Consultec Environmental
Address: 1800 MacLeod Dr. Suite F
City: ~~Col~~ Lawrenceville Ga
State & Zip: 30043-5736
Phone: 678 377-0400 Ext 211
Fax: ____
Date Requested: 1/24/01 Date Sent: JAN 29 2001
X Phone X Mail
____ Hand ____ Hand
____ Other (Specify)
Marguerite

Requested By: Robert Hodges (1)
Company Name: Earth Managment Syst
Address: 3023 McNaughton Dr.
City: Cola.
State & Zip: SC. 29223
Phone: 736-3800
Fax: 736-3050
Date Requested: 1/29/01 Date Sent: JAN 29 2001
____ Phone X Mail
____ Hand ____ Hand
____ Other (Specify)
Marguerite

BID NUMBER: #09322

Requested By: Matthew Bares
Company Name: S&ME
Address: 134 Suber Rd
City: Cola., SC 29290
State & Zip: SC, 29290
Phone: (803) 561-9024
Fax: (803) 561-9177
Date Requested: 1/29/01
Date Sent: JAN 30 2001
____ Phone X Mail
____ Hand ____ Hand
____ Other (Specify)
Marguerite

(2)
Requested By: VE Arnick & Assoc.
Company Name: _____
Address: 220 Stoneridge Dr. Suite 405
City: _____
State & Zip: SC, 29210
Phone: (803) 929-1181
Fax: (803) 929-7225
Date Requested: 1/30/01
Date Sent: JAN 30 2001
____ Phone ____ Mail
____ Hand ____ Hand
____ Other (Specify)
Marguerite

Requested By: John Atkins
Company Name: WBS
Address: 475 Park North Blvd Bldg F Suite 100
City: Clarkston Ga
State & Zip: 30021
Phone: (404) 298-7101
Fax: (404) 296-9752
Date Requested: 2/1/01
Date Sent: FEB 02 2001
____ Phone ____ Mail
____ Hand ____ Hand
____ Other (Specify)
Marguerite

✓
Requested By: Smith Monitoring & Maintenance
Company Name: Rick Smith
Address: 145 Merrill Avenue
City: Decatur
State & Zip: GA, 30030
Phone: (404) 371-9332
Fax: (404) 373-3296
Date Requested: 2/01/01
Date Sent: FEB 02 2001
____ Phone ____ Mail
____ Hand ____ Hand
____ Other (Specify)
Marguerite

BID NUMBER: #09322

Requested By: Brian Lierre ✓
Company Name: Clark Env. Ser.
Address: PO Box 10136
City: Willmington, N.C
State & Zip: 28404
Phone: (910) 602-3900
Fax: (910) 602-3975
Date Requested 1/25/01 Date Sent JAN 26 2001
____ Phone ____ Mail
____ Hand ____ Hand
____ Other (Specify)
Marquis

Requested By: Natalie James ✓
Company Name: H2O
Address: 121 Centrum Dr. Suite 2
City: Elmo
State & Zip: SC, 29063
Phone: 749-4080
Fax: 749-9911
Date Requested 1/25/01 JAN 26 2001
____ Phone ____ Mail
____ Hand ____ Hand
____ Other (Specify)
Marquis

Requested By: Raymond Knox
Company Name: Schnabel Eng Suite 420
Address: 104 Corporate Blvd.
City: Columbia
State & Zip: SC 29169
Phone: 796-6240
Fax: 796-6250
Date Requested 1/25/01 Date Sent (Pickedup) JAN 26 2001
____ Phone ____ Mail
____ Hand ____ Hand
____ Other (Specify)
Marquis

Requested By: Margaret Rice ✓
Company Name: Construction Data
Address: 111 Corning Road
City: Cary
State & Zip: NC 27511
Phone: (888) 232-2850 ext 23
Fax: ~~X~~ Returned insufficent address on 2/12/01 Resending 2/12/01
Date Requested 1/25/01 Date Sent JAN 26 2001
____ Phone ____ Mail
____ Hand ____ Hand
____ Other (Specify)
Marquis

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

CLARK ENV. BRIAN LIEVRE (910)602-3975

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:29

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1755	TX	01	919106023975	MAR.02	13:28	002	00H00'53"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

RICK SMITH SMITH MONITORING (404) 373 3296

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:28

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1754	TX	01	4043733296	MAR.02	13:27	002	00H00'54"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

WRS JOHN ATKINS (404) 296-9752

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:25

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1752	TX	01	4042969752	MAR.02	13:24	002	00H00'54"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

SEI Env. – Lee DeBerry 788-2399

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:14

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1747	TX	01	8037882399	MAR.02	13:13	002	00H01'09"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

PRIESTER & ASSOC. LAURIE GOODALE 798-4378

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:15

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1748	TX	01	8037984378	MAR.02	13:14	002	00H00'55"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

TURNER, HART + HICKMAN MATT BRAMBLETT (704) 586-0373

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:16

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1749	TX	01	917045860373	MAR.02	13:16	002	00H00'55"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

CORE BRENDON BRODIE (864)297-0462

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:18

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1750	TX	01	8642970462	MAR.02	13:17	002	00H00'55"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

SAME, MATTHEW BARES (803) 561-9177

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:19

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1751	TX	01	8035619177	MAR.02	13:18	002	00H00'31"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

(888) 232-285[illegible] x23

CONSTRUCTION DATA – MARGARET RICE (8887232 -285

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:12

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1746	TX	01	18882322850	MAR.02	13:11	002	00H01'12"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

CONSULTEH CHRIS SIMMS (678)377-0400 X211
678 377 0051

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:10

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1745	TX	01	6783770051	MAR.02	13:09	002	00H00'55"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

EMS- Robert Hodges 736-3050

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:06

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1743	TX	01	8037363800	MAR.02	13:06	002	00H00'42"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

EMS- Robert Hodges 736-3050

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:09

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1744	TX	01	8037363800	MAR.02	13:08	002	00H00'54"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

RAYMOND KNOX SCHNABEL ENGR. 796-6250

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:33

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1757	TX	01	8037966240	MAR.02	13:32	002	00H00'57"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

CBM- SCOTT BALL (803) 548 5892

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

Scott

Please forward this to the 3 Contractors you are Coordinating with.

Sriram

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:35

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1758	TX	01	8035485892	MAR.02	13:34	002	00H01'33"	G3	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

H_2O NATALIE JAMES 749-9911

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:30

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1756	TX	01	8037499911	MAR.02	13:30	002	00H00'45"	ECM	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

VALUE ENV. HELEN BACKLUND fax

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

EMS- Robert Hodges 736-3050

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

CONSULTEH CHRIS SIMMS (678)377-0400 x211
678 377 0051

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330
(888) 232-2850 x123

CONSTRUCTION DATA – MARGARET RICE (888)232-2856

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

SEI Env. – Lee DeBerry 788-2399

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

PRIESTER & ASSOC. LAURIE GOODALE 798-4378

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

TURNER, HART
+ HICKMAN MATT BRAMBLETT (704) 586-0373

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

ORE BRENDON BRODIE (864)297-0462

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

SAME, MATTHEW BARES (803) 561-9177

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

WRS JOHN ATKINS (404) 296-9752

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

Rick Smith Smith Monitoring (404) 373 3296

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

CLARK ENV. BRIAN LIEVRE (910)602-3975

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

H2O NATALIE JAMES 749-9911

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

RAYMOND KNOX SCHNABEL ENGR. 796-6250

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

CBM- SCOTT BALL (803) 548 5892

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

Scott

Please forward this to the 3 Contractors you are Coordinating with.

Sriram

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

V. E. AMICK 929-7625

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

TX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAR.02'2001 13:44

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
1759	TX	01	99297625	MAR.02	13:42	002	00H01'31"	G3	OK

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

V. E. AMICK 929-7625

TO: Certified Contractors who requested Solicitation Package SP09322-O/O

FROM: LAM Lee A. Monts, Manager
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

SUBJECT: Smith's Grocery
UST Permit #09322
York County

DATE: March 2, 2001

As an incorrect submittal deadline was listed on the Corrective Action Solicitation Response form for the referenced solicitation, the deadline for submittal is being extended to 5:00 PM on March 9, 2001. A corrected form is provided. If you plan to participate, the completed form may be faxed to my attention at (803) 898-4330. This memorandum is being provided to each contractor that requested the solicitation package and the UST Owner/Operator. Thank you for your interest.

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

BUREAU OF LAND AND WASTE MANAGEMENT
UNDERGROUND STORAGE TANK PROGRAM

Submit the following by March 9, 2001

CORRECTIVE ACTION SOLICITATION RESPONSE

Please respond to the following questions:

1. The corrective action method(s) or technology (ies) that will be proposed in the CAP will be (list all active and/or intrinsic methods or technologies for remediation of the aquifer; attach additional pages(s) as required): _____
_____
_____
_____

2. The estimated time in months to complete the corrective action from the date of financial approval, corrective action goals are met, and all corrective action items are removed from the site or properly abandoned is approximately _____ months. This time assumes all submitted plans and reports will be reviewed by DHEC within 30 days of receipt.

3. The total cost in dollars, regardless of the type, quantity or duration of the permitted technology applied, to treat the area of concern (see Figure 2) such that the thickness of free product does not exceed 0.01 foot and levels of CoCs do not exceed the site-specific target levels (SSTLs) defined in item 11.C. at any point, complete all associated monitoring and post-remediation verification, prepare all plans, reports, and correspondence; obtain and meet all terms and conditions of all required permits and licenses; design, install, monitor, operate, maintain, and when completed, properly abandon or remove all assessment and remediation items installed as part of corrective action; provide evidence of performance bond; and other items outlined in this request for solicitation response for Smith's Grocery (UST Permit #09322), 3176 Charlotte Highway, York, SC 29745, York County is: $ _____

ACCEPTANCE and DELIVERY STATEMENT

In compliance with the request for solicitation response and subject to all conditions thereof, the contractor offers and agrees, if selected by the UST owner/operator within _____ days from the final solicitation response submittal date, to furnish any or all items/services quoted at the prices set forth once financial approval has been issued by the Department.

For the purpose of this submittal and acceptance of financial approval should it occur, I certify that this company understands the nature of the release and the geological conditions at this facility as documented in the technical file and this solicitation. Additionally, I certify that this company understands that acceptance is based on total cost to treat the area of concern.

_____ _____
Contractor (Print) Certification Number

_____ _____
Authorized Representative (Print) Signature

_____
Date Signed

RECEIVED
FEB 0 9 2001

TESTAMERICA, INC.-NASHVILLE

COOLER RECEIPT FORM

Client: CBM BC# 225166

Cooler Received On: 2-2-01 And Opened On: 2-2-01 By: Craig Cothron

(Signature)

1. Temperature of Cooler when opened 4.0 Degrees Celsius
2. Were custody seals on outside of cooler? ..... NO Yes
   a. If yes, how many, what kind and where: 1 Front
3. Were custody seals on containers and intact? ..... NO
4. Were the seals intact, signed, and dated correctly? ..... N/A Yes
5. Were custody papers inside cooler? ..... YES
6. Were custody papers properly filled out (ink,signed,etc)? ..... YES
7. Did you sign the custody papers in the appropriate place? ..... YES
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Other None
9. Was sufficient ice used (if appropriate)? ..... YES
10. Did all bottles arrive in good condition(unbroken)? ..... YES
11. Were all bottle labels complete (#,date,signed,pres,etc)? ..... YES
12. Did all bottle labels and tags agree with custody papers? ..... YES
13. Were correct bottles used for the analysis requested? ..... YES
14. a. Were VOA vials received? ..... YES
    b. Was there any observable head space present in any VOA vial? ..... NO
15. Was sufficient amount of sample sent in each bottle? ..... YES
16. Were correct preservatives used? ..... YES
17. Was residual chlorine present? ..... NO
18. Corrective action taken, if necessary:

    See attached for resolution

TestAmerica
INCORPORATED

RECEIVED
FEB 0 9 2001

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
377 CAROWINDS BLVD, STE. 118
FORT MILL, SC 29708

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: J.C.

Lab Number: 01-A14003
Sample ID: VICKERY WSW
Sample Type: Water
Site ID:

Date Collected: 2/ 1/01
Time Collected: 9:30
Date Received: 2/ 2/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	2/ 5/01	17:58	N. Hurt	8260B	5475
1,2-Dibromoethane	ND	ug/l	2.0	2.0	1	2/ 5/01	17:58	N. Hurt	8260B	5475
Ethylbenzene	ND	ug/l	2.0	2.0	1	2/ 5/01	17:58	N. Hurt	8260B	5475
Naphthalene	ND	ug/l	5.0	5.0	1	2/ 5/01	17:58	N. Hurt	8260B	5475
Toluene	ND	ug/l	2.0	2.0	1	2/ 5/01	17:58	N. Hurt	8260B	5475
Xylenes, Total	ND	ug/l	2.0	2.0	1	2/ 5/01	17:58	N. Hurt	8260B	5475
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	2/ 5/01	17:58	N. Hurt	8260B	5475

ND - Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	99.	71. - 136.
VOA Surr, Toluene d8	97.	69. - 129.
VOA Surr, 4-BFB	101.	65. - 122.
VOA Surr, DBFM	96.	61. - 139.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica
INCORPORATED

RECEIVED
FEB 0 9 2001

ANALYTICAL REPORT

Laboratory Number: 01-A14003
Sample ID: VICKERY WSW
Project: 10629

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: E S Smith Report Date: 2/ 8/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

2960 Foster Creighton Drive / Nashville,TN 37204 / 615-726-0177 / Fax: 615-726-0954 / 800-765-0980

TestAmerica INCORPORATED

RECEIVED
FEB 0 9 2001

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
377 CAROWINDS BLVD, STE. 118
FORT MILL, SC 29708

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: J.C.

Lab Number: 01-A14004
Sample ID: HILL WSW
Sample Type: Water
Site ID:

Date Collected: 2/ 1/01
Time Collected: 9:45
Date Received: 2/ 2/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	2/ 5/01	18:34	N. Hurt	8260B	5475
1,2-Dibromoethane	ND	ug/l	2.0	2.0	1	2/ 5/01	18:34	N. Hurt	8260B	5475
Ethylbenzene	ND	ug/l	2.0	2.0	1	2/ 5/01	18:34	N. Hurt	8260B	5475
Naphthalene	ND	ug/l	5.0	5.0	1	2/ 5/01	18:34	N. Hurt	8260B	5475
Toluene	ND	ug/l	2.0	2.0	1	2/ 5/01	18:34	N. Hurt	8260B	5475
Xylenes, Total	ND	ug/l	2.0	2.0	1	2/ 5/01	18:34	N. Hurt	8260B	5475
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	2/ 5/01	18:34	N. Hurt	8260B	5475

ND - Not detected at the report limit.

Surrogate -	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	97.	71. - 136.
VOA Surr, Toluene d8	100.	69. - 129.
VOA Surr, 4-BFB	103.	65. - 122.
VOA Surr, DBFM	93.	61. - 139.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica INCORPORATED

RECEIVED
FEB 0 9 2001

ANALYTICAL REPORT

Laboratory Number: 01-A14004
Sample ID: HILL WSW
Project: 10629

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: E S Smith Report Date: 2/ 8/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

RECEIVED
FEB 0 9 2001

PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
VOA PARAMETERS								
Benzene	mg/l	< 0.00200	0.06840	0.05000	137#	53. - 134.	5475	blank
Toluene	mg/l	< 0.00200	0.07060	0.05000	141#	54. - 135.	5475	blank

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.06840	0.04570	39.79#	25.	5475
Toluene	mg/l	0.07060	0.04850	37.11#	29.	5475

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.05000	0.04960	99	73 - 113	5475
1,2-Dibromoethane	mg/l	0.0500	0.0488	98	78 - 122	5475
Ethylbenzene	mg/l	0.05000	0.05380	108	78 - 119	5475
Naphthalene	mg/l	0.0500	0.0604	121	62 - 149	5475
Toluene	mg/l	0.05000	0.05140	103	70 - 119	5475
Xylenes, Total	mg/l	0.1500	0.1690	113	62 - 137	5475
Methyl-t-butyl ether	mg/l	0.0500	0.0474	95	68 - 129	5475

Project QC continued . . .

TestAmerica INCORPORATED

RECEIVED
FEB 0 9 2001

PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
VOA PARAMETERS					
Benzene	< 0.00200	mg/l	5475	2/ 5/01	11:47
1,2-Dibromoethane	< 0.0020	mg/l	5475	2/ 5/01	11:47
Ethylbenzene	< 0.00200	mg/l	5475	2/ 5/01	11:47
Naphthalene	< 0.0050	mg/l	5475	2/ 5/01	11:47
Toluene	< 0.00200	mg/l	5475	2/ 5/01	11:47
Xylenes, Total	< 0.00200	mg/l	5475	2/ 5/01	11:47
Methyl-t-butyl ether	< 0.0020	mg/l	5475	2/ 5/01	11:47
VOA Surr, 1,2-DCA, d4	92.	% Rec	5475	2/ 5/01	11:47
VOA Surr, Toluene d8	104.	% Rec	5475	2/ 5/01	11:47
VOA Surr, 4-BFB	103.	% Rec	5475	2/ 5/01	11:47
VOA Surr, DBFM	96.	% Rec	5475	2/ 5/01	11:47

- Value outside Laboratory historical QC limits.

End of Report for Project 225166

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

BUREAU OF LAND AND WASTE MANAGEMENT
UNDERGROUND STORAGE TANK PROGRAM
2600 Bull Street, Columbia, SC 29201
Phone (803) 898-4350 Fax (803) 898-4330

Corrective Action Solicitation Package
Smith's Grocery - UST Permit #09322

PURPOSE and SCOPE OF WORK

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (DHEC) has determined that active corrective action of the petroleum release from a regulated underground storage tank site is required, and Mrs. Lois Smith, the owner/operator responsible for the release, has opted to seek the services of a certified contractor to perform corrective action in accordance with defined rehabilitation goals. The objective is to maintain potable water for, reduce the levels of chemicals of concern (CoC) in the soil and in the ground-water to below defined site specific target levels (SSTLs). **In this request for solicitation response, DHEC is acting not as an agent, but as a coordinator between site rehabilitation contractors and the UST owner/operator. As payment will be from the State Underground Petroleum Environmental Response Bank (SUPERB) Account, requirements outlined in this technical specifications package, the SUPERB Act, and R.61-98 apply. All contractors submitting a solicitation response must be South Carolina Certified Class I Site Rehabilitation Contractors.** The scope of work defined in this solicitation is to be implemented at Smith's Grocery, 3176 Charlotte Highway, York, SC 29745, York County for the release reported on June 30, 1993.

SPECIAL CONDITIONS

1. CONTRACT PERIOD: The corrective action pay for performance will be effective from date of financial approval until the corrective action, as described in this technical specification package, is completed by a SCDHEC Class I Site Rehabilitation Contractor.

2. This technical specification package is for corrective action at only one (1) site in South Carolina. **Compensation from the SUPERB Account is not considered a state contract for purposes of procurement or subject to state bid requirements in accordance with Section 44-2-130(D) of the State Underground Petroleum Response Bank (SUPERB) Act**. A signed corrective action solicitation response form should be returned (via mail or fax) to Mr. Lee Monts of the UST Program by the date specified to be forwarded to Mrs. Lois Smith.

3. FINANCIAL APPROVAL: **The owner/operator will select the contractor to perform this active corrective action in accordance with the SUPERB Act (Title 44, Chapter 2 of the Code of Laws of South Carolina). Therefore, financial approval may not be to any of the contractors that submit a solicitation response or to the contractor who submits the lowest price.** When the UST owner/operator selects the rehabilitation contractor, a contractual agreement will be made between the owner/operator and the environmental contractor. If the work is performed in an acceptable manner, DHEC will make payment from the SUPERB Account in accordance with the payment instructions from the UST owner/operator. The proposed implementation schedule to achieve the remediation goals, the removal of all equipment and abandonment of wells, (including pre-existing wells), trenches, etc. installed by the contractor, and the proposed remediation technology(ies) or method(s) must protect public health and the environment and be eligible for permitting by DHEC. The total cost, methods, and estimated time to complete the contract must also be advantageous to the State of South Carolina.

4. REASONABLE COST: The low price submitted to the UST Program (as the coordinator) or as obtained by the UST owner/operator, will be considered the allowable cost by the SUPERB program to complete the corrective action as described in this technical specification package as long as the price is within reason. DHEC reserves the right to reject any and all corrective action solicitation responses that appear to be out of line with the customary and reasonable cost for the same scope of work in a similar geologic setting.

5. Contractor must agree to make positive efforts to use women and minority owned businesses and individuals.

6. AMENDMENTS: All amendments to this solicitation response will be in writing from the UST Program. The UST owner/operator or DHEC will not be legally bound by any amendment or interpretation, which is not in writing.

7. QUESTIONS: Questions or requests for information must be submitted in writing and received by 5:00p.m., February 12, 2000. After this date, no further questions will be addressed. A written response will be provided to all requestors of this technical specification package. The questions may be faxed to Lee Monts (fax number (803) 898-4330).

8. **NOTE . . . THE ONLY OFFICIAL CONTACT PERSON AT DHEC DURING THE SOLICITATION RESPONSE SUBMITTAL AND FINANCIAL APPROVAL PROCESS IS LEE MONTS. CONTRACTORS ARE NOT TO CONTACT ANY OTHER UST PROGRAM PERSONNEL OR OTHER CONTRACTORS.**

9. The certified contractor selected by the UST owner/operator will be required to treat the area where the dissolved petroleum chemicals of concern are above site specific target levels (see Figure 2). Please note that there are temporary granular activated carbon filters installed on the Vickery and Hill drinking water wells and the corrective action process should include maintaining/providing potable water supply to the effected residences. Verification that interim corrective action goals have been met will be based upon ground-water quality samples collected from monitoring wells *MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 thru MW-15, MW-17, MW-18, MW-19, TW-2 and TW-3*. Verification that final corrective goals have been met will be based upon ground-water quality samples collected from all existing monitoring wells, and additional verification wells to be installed at locations designated by DHEC (see specification #10 for more detail).

10. REPORTS: Deliver the reports to: SCDHEC, UST Program, Attn.: Sriram Madabhushi, 2600 Bull Street, Columbia, SC 29201 or other location as specified. A minimum of two (2) copies of each plan and two (2) copies of each report must be delivered to the above address. Based on permitting and other requirements, engineering report, UIC permits, air modeling forms or NPDES Permits may be required. Please contact the Department for the exact number of copies of each document to be submitted.

11. INVOICING: Invoices will be submitted to: SCDHEC, UST Program, Attn.: Financial Section, 2600 Bull Street, Columbia, SC 29201, using the Department's Corrective Action (CA) Invoice form. The initial invoice must be received at the above address within 120 days from the date of the letter directing Corrective Action Plan (CAP) implementation or funds will be uncommitted as required by the Section 44-2-40(B) of the SUPERB Act. If funds are uncommitted, any submitted invoices will be held until funding is available. Payment to the contractor will be a pay-for-performance system as follows:

    A. Payment of forty percent (40%) of the total price approved will be made within 90 days of operation of the remediation system or implementation of corrective action as described in the approved corrective action plan (CAP), subject to the limitations of Section 44-2-40 of the

SUPERB Act. This will be documented in the initial monitoring report. The CoC concentrations requiring reduction is as follows:

CoC concentrations in parts per billion (µg/l) based on August 23 & October 10, 2000 sampling: (CoC may increase or decrease in the future)

Well	Benzene	Toluene	Ethyl-benzene	Xylenes	M*t*BE	Lead	EDB	Naph-thalene	Total Conc.
Vickery WSW	5	2.	2	26	2	5	5	5	52
Hill WSW	2	2	2	2	5	5	5	5	28
Smith WSW	2	2	2	2	2	5	5	5	25
Strife WSW	5	5	5	15	5	5	5	5	50
MW-1	1100	19000	2700	10000	80	2	0.32	770	33652.32
MW-2	25000	39000	3500	15000	200	1300	179	200	84379
MW-6	3400	14000	1900	8000	80	39	4.83	700	28123.83
MW-7	2000	4100	3100	15000	200	110	0.66	1400	25910.66
MW-8	9500	56000	5300	16000	200	4	0.48	820	87824.48
MW-10	5800	26000	3200	19000	800	21	95.3	800	55716.3
MW-11	5	5	5	10	5	6	0.02	5	41.02
MW-12	390	5	68	730	5	7	20.8	52	1277.8
MW-13	5	5	5	10	75	5	0.02	5	110.02
MW-14	5	5	5	10	5	37	0.51	5	72.51
MW-15	5	5	5	10	5	39	0.05	5	74.05
MW-17	5	5	5	10	5	29	0.02	5	64.02
MW-18	5	5	5	10	5	42	0.12	5	77.12
MW-19	5	5	5	10	5	51	0.02	5	86.02
TW-2	400	8	5.0	180	5.0	2	0.05	18	618.05
TW-3	5	5	5	10	5	2	0.23	5	37.23
Initial Conc.*	47644	158164	19824	84035	1694	1716	322.43	4820	318219.43
SSTL Conc.	120	10975	7772	80343	490	199	53.33	391	100343.33
Initial Conc. above SSTL	47524	147189	12052	3692	1204	1517	269.1	4429	217876.1

* Laboratory analysis is less than calculated SSTLs; therefore, SSTL concentration is set equal to laboratory concentration.
** CoC concentration may change due to seasonal fluctuations in the groundwater.

B. Payment of thirty-five percent (35%) of the total price approved will be made based on achieving interim CoC concentration reduction goals at the site as verified in monitoring *MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 thru MW-15, MW-17, MW-18, MW-19, TW-2 and TW-3*. Payment will be made for interim goals of 25, 50, and 75 percent reduction of total CoC concentration by the implementation of corrective action.

NOTE: Payment cannot be based on laboratory analyses for any well that has been used for injection unless that well has returned to ambient conditions.

(1) 25 percent total concentration reduction will be achieved when one-quarter of the initial BTEX, M*t*BE, Lead, EDB and Naphthalene concentrations from monitoring *MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 thru MW-15, MW-17, MW-18, MW-19, TW-2 and TW-3* is removed as compared to the SSTLs. The following formula will be used to calculate the percent total concentration reduction: total concentration above SSTLs from initial sampling less total concentration above SSTLs from subsequent sampling divided by total concentration above SSTLs from initial sampling. Payment of 10 percent (10%) of the total price approved will be made upon verification (see Specifications item 10 for the method of verification) of at least one-quarter of the total CoC concentration above SSTLs is removed.

The following example demonstrates the CoC Concentration Reduction Calculation:

Well		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	Conc. above SSTL
MW-1	Initial Conc. [A]	7,500	4,000	2,000	15,000	3,000	1,000	32,500
	SSTL [B]	10	2,000	1,400	10,000	80	50	13,540
	Initial Conc. above SSTL [C]	7,490	2,000	600	5,000	2,920	950	18,960
	Subsequent Concentration [D]	3,000	1,000	900	13,000	2,000	5	19,905
	SSTL [E]	10	2,000	1,400	10,000	80	50	13,540
	Subseq. Conc. above SSTL [F]	2,990	0	0	3,000	1,920	0	7,910
MW-4	Initial [G]	150	400	50	250	300	25	1175
	SSTL [H]	5	400	50	250	40	25	770
	Initial Conc. above SSTL [I]	145	0	0	0	260	0	405
	Subsequent Concentration [J]	100	100	1	1	100	1	303
	SSTL [K]	5	400	50	250	40	25	770
	Subseq. Conc. above SSTL [L]	95	0	0	0	60	0	155
Totals	Initial Conc. above SSTL [M]	(sum of initial concentration above SSTL for all wells) (C+I)						19,365
	Subseq. Conc. above SSTL [N]	(sum of subsequent concentration above SSTL for all wells) (F+L)						8,065

Notes: **If subsequent sampling indicates a CoC concentration at or below the SSTL and/or a CoC concentration at BDL but the reporting limit is at/or below the SSTL value for any constituent, the value for the concentration reduction will be 0 (no negative numbers).**

If subsequent sampling indicates a CoC concentration at BDL but the reporting limit is above the SSTL, the value for any constituent will be the analytical reporting limit.

Concentration Reduction Calculation

CoC Concentration Reduction = $\frac{(M-N)}{(M)} = \frac{(19{,}365-8{,}065)}{19{,}365} = 0.5835 * 100 = 58.35\%$ CoC Reduction

(2) 50 percent total concentration reduction will be achieved when one-half of the initial BTEX, M*t*BE, Lead, EDB, and Naphthalene concentration from monitoring monitoring *MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 thru MW-15, MW-17, MW-18, MW-19, TW-2 and TW-3* is removed as compared to the SSTLs. The formula outlined in item 11. B. (1) will be used. Payment of 10 percent (10%) of the total price approved will be made upon verification (see Specifications item 10 for the method of verification) of at least one-half of the total CoC concentration above SSTLs is removed.

(3) 75 percent total concentration reduction will be achieved when three-quarters of the initial BTEX, M*t*BE, Lead, EDB, and Naphthalene concentration from monitoring wells *MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11 thru MW-15, MW-17, MW-18, MW-19, TW-2 and TW-3* is removed as compared to the SSTLs. The formula outlined in item 11 B (1) will be used. Payment of 15 percent (15%) of the total price approved will be made upon verification (see Specifications item 10 for the method of verification) of at least three-quarters of the total CoC concentration above SSTLs is removed.

C. **The final 25 percent (25%) of the total price approved will be paid upon: 1) verification that the levels of CoC do not exceed the site-specific target levels (SSTLs) defined in item 11.C. at any point in the area of concern (see Figure 2). Verification that the SSTLs have been met will be based upon ground-water quality samples collected from all existing monitoring wells, and additional verification wells to be installed at locations designated by DHEC (see specification #10 for more detail); and 2) all remediation and assessment items installed by the contractor (e.g., wells [including preexisting wells], trenches, etc.) are removed from the site or properly abandoned.** The SSTLs are as follows:

In the source area, near SB-4, SB-5 and MW-1 (Figure 3 – Appendix B), the following SSTLs for soil should be met.

Site specific target levels (SSTLs) in parts per billion (µg/kg):

CoC	SSTLs (mg/Kg)
Benzene	0.005
Toluene	1.9
Ethylbenzene	1.456
Xylenes	56.072
Naphthalene	0.252

Groundwater Site specific target levels (SSTLs) in parts per billion (µg/l)

Well	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Lead	EDB	Naph-thalene	Total
Vickery	5	2*	2*	26*	2*	5*	5*	5*	52
Hill	2*	2*	2*	2*	5*	5*	5*	5*	28
Strife	2*	2*	2*	2*	2*	5*	5*	5*	25
Smith	5	5*	5*	15*	5*	5*	5*	5*	50
MW-1	11	2223	1558	10000	80	2*	0.32*	56	13930.32
MW-2	10	2021	1416	15000	81	30	10	51	18619
MW-6	6	1212	850	8000*	48	18	4.83*	31	10169.83
MW-7	6	1212	850	12123	48	18	0.66*	31	14288.66
MW-8	12	2424	1700	16000	96	4*	0.48*	62	20298.48
MW-10	9	1819	1274	18185	73	21	9	46	21436
MW-11	5*	5**	5**	10**	5**	5**	0.02*	5**	40.02
MW-12	7	5**	68	730	5**	7**	7	36	865
MW-13	5*	5**	5**	10**	5**	5**	0.02	5**	40.02
MW-14	5*	5**	5**	10**	5**	5**	0.51	5**	40.51
MW-15	5*	5**	5**	10**	5**	15	0.05	5**	50.05
MW-17	5*	5**	5**	10**	5**	15	0.02	5**	50.02
MW-18	5*	5**	5**	10**	5**	15	0.12	5**	50.12
MW-19	5*	5**	5**	10**	5**	15	0.02	5**	50.02
TW-2	5*	8	5**	180	5**	2**	0.05	18	223.05
TW-3	5*	5*	5**	10*	5**	2**	0.23	5**	37.23
Total	120	10975	7772	80343	490	199	53.33	391	100343.33

* Laboratory analysis is less than calculated SSTLs; therefore, SSTL concentration is set equal to laboratory concentration.
** Laboratory analysis is below detection limits; therefore, SSTL concentration is set equal to detection limits.

12. NOTIFICATION FOR FAILURE TO PERFORM: If the contractor fails to meet any specification of corrective action as outlined in this document, DHEC will notify the contractor by certified letter of the deficiency(ies). If the contractor does not correct the deficiency(ies) within 30 days, the contractor will be in breach of contract and the financial approval may be voided by DHEC. DHEC will notify the contractor by certified letter that the financial approval is void and if any invoices are payable upon review and approval of DHEC. If the contractor corrects the deficiency(ies) within 30 days, the financial approval will continue. Please note contractor-owned items used on-site for the contract that are destroyed by acts of nature, improper maintenance or handling, theft or vandalism will not be replaced or reimbursed by the SUPERB Account. The amount of financial approval will be final and will not be increased or cancelled for any reason (e.g., unanticipated iron fouling of a system, wells clogging because of biological activity or sediments, increased subcontractor costs, loss of utilities, modification

to the system to meet the remediation goals, etc.) with the exception of unforeseen geologic circumstances or identification of additional CoC from another release.

13. SITE SPECIFIC DETAILS: A brief technical summary of the release, including a location map and specifics of existing wells, is attached. The detailed technical file will be available for review through the Freedom of Information (FOI) Office located on the third floor of the Sims Building, 2600 Bull Street, Columbia, SC. Review of the detailed technical file is not mandatory; however, contractors submitting a solicitation response are strongly encouraged to review the file to ensure a complete understanding of the contract requirements. The contractor given financial approval will be responsible for understanding the information in the technical file. Appointments to view the technical file may be scheduled on weekdays between the hours of 8:30 A.M. to 5:00 P.M. by calling the SCDHEC Freedom of Information Office at (803) 898-3882. Please request file for UST Permit#09322.

NOTE: Free-phase product may be present at this site. No free-phase product was detected during the base-line sampling event, however, application of corrective action technologies can result in the mobilization and possible appearance of free-phase product or elevated CoC concentrations in the monitoring wells.

14. **The contractor will submit a CAP within 30 days of notification of selection by the UST Owner/Operator Assistance Section.** The implementation of the CAP will be initiated immediately upon the Department's directive to implement the CAP and all associated permit(s) have been issued; implementation will be in accordance with the schedule presented in the CAP. **A performance bond or irrevocable standby letter of credit, equal to the financial approval amount, will be required by DHEC.** The issuing institution for an irrevocable standby letter of credit must be an entity that has the authority to issue letters of credit in South Carolina and whose letter-of-credit operations are regulated and examined by a federal or state agency. The original performance bond or irrevocable letter of credit will be submitted to the UST Program, Attn.: Lee Monts, within 30 days of financial approval. The performance bond or irrevocable standby letter of credit will specify that the SUPERB Account will be the recipient of any forfeiture. Since DHEC is responsible for the disbursement of funds from the SUPERB Account, the financial responsibility mechanism (i.e., bond or letter-of-credit) will be held by the UST Program until the work is successfully completed.

15. **MINIMUM REQUIREMENTS: Corrective action will be considered complete once the levels of CoC are verified to be below the SSTLs listed in item 11.C., and removal or abandonment of all remediation and assessment items installed by the contractor (e.g., wells [including preexisting wells], trenches, etc.). See Specification #10 for the method of verification.** All rehabilitation activities associated with a UST release must be performed by a SCDHEC certified Class I site rehabilitation contractor as required by R. 61-98. All corrective action plans and reports must be sealed by a Professional Engineer or Professional Geologist registered in the State of South Carolina. All engineering reports, drawings and plans must be sealed by a Professional Engineer registered in the State of South Carolina. All laboratory analysis for CoC must be performed by a SC certified laboratory. All monitoring, verification, injection, or recovery wells must be installed and abandoned by a SC certified well driller. All applicable certification, training, permits, applications, and fees associated with well installation; injection, discharge, treatment, or transportation of ground water, air, or soil; construction or operation of a remediation system; and any other action requiring a permit are the responsibility of the contractor. Any required business or occupation license and occupational safety and health training (e.g., OSHA) as defined by the laws and regulations of the United States of America, State of South Carolina, county or city is also the responsibility of the contractor. The terms and conditions of all applicable permits will be met. Any contaminated ground water, soil, or construction material must be properly transported and disposed of, or treated at an approved facility with prior approval from DHEC. Any

costs for utilities construction and service (electric, telephone, sewer, etc.) required by the corrective action are the responsibility of the contractor.

SPECIFICATIONS for CORRECTIVE ACTION

All corrective action solicitation responses submitted must meet the following specifications as required by the proposed treatment method(s) or corrective action technology(ies):

1. The solicitation response for active corrective action may be submitted by mail or by fax. The response will outline in general terms an approach to achieve the remediation goals (e.g., reduction of each CoC to SSTL). The response must outline the following:

   A. A description of the proposed treatment method(s) or technology(ies) for corrective action.

   B. The estimated amount of time in months to complete site rehabilitation to meet the remediation goals, install verification wells, and remove or abandon all assessment and remediation items installed as part of the corrective action.

   C. The total cost (in thousands of dollars) to complete site rehabilitation to meet the remediation goals and to remove or abandon all assessment and remediation items installed as part of the corrective action.

2. The contractor selected by the owner/operator to perform corrective action activities must complete and submit a detailed CAP (three copies) for the release at Smith's Grocery - UST Permit #09322), 3176 Charlotte Highway, York, SC 29745, York County, South Carolina **within 30 days of notification by the UST Program**. **NOTE:** ***Use of monitoring well(s) for injection purposes is not allowed.*** A condition of the plan may include installation of additional recovery, sparge, compliance, or injection wells. The plan must define all active (pump and treat, sparge, vapor extraction, excavation of impacted soils, bioremediation, etc.) and passive (intrinsic remediation, monitoring, etc.) corrective action method(s) proposed to reduce CoC to SSTLs. It must be shown, by use of scientific models, computations, or discussion, how each CoC will be reduced to the SSTL for each remediation method proposed for the release. Any assumptions used in a model will be listed or shown, as well as, appropriate references. Intrinsic corrective action will require monitoring to verify remediation. General construction details will be included (e.g., install four additional recovery wells, construct a compliance point, install four air injection wells, excavate 3,000 cubic yards of impacted soils, etc.) as well as details of well abandonment and equipment removal. A remediation time table including abandonment of wells and removal of equipment will be included with the CAP. The UST Program will review the CAP and initiate a public notice period for a maximum of 30 days. The contractor must obtain a copy of the applicable portion of the tax map. This map will depict the location of the facility, and all impacted properties, and all properties located adjacent to the impacted properties. The names and addresses of the owners of each of these properties will be provided. The contractor may be required to attend or provide input at a public meeting upon request by DHEC. Any CAP amendments and modifications arising from public notice must be submitted within 15 days of notification by DHEC. The CAP and any amendments or modifications must be sealed by a qualified Professional Engineer or Geologist registered in the State of South Carolina. The owner/operator, Mrs. Lois Smith, will be consulted and will approve the location of the corrective action system. If permanent, the system must be enclosed in a fenced area or small building. The initial invoice must be received at the above address within four months or funds will be uncommitted as required by the SUPERB Act. If funds are uncommitted this invoice will be held until funding is available.

An initial monitoring report documenting CoC concentrations in all wells and potentiometric conditions prior to start up (including verification of system operation or CAP implementation) must be submitted to the UST Program within 45 days after financial approval. Sampling for the initial monitoring report must occur prior to system startup.

Based on naturally occurring conditions, the dissolved concentration of petroleum chemicals of concern (CoC) will increase or decrease. For the purposes of this contract, the total CoC concentration for the wells included in the technical specification package may reasonably increase up to 150 percent or decrease as much as 50 percent. If the total CoC concentration in all wells listed in Special Condition 11.B. increases more than 150 percent based on this initial sampling or if measurable free product that has not been previously documented in any report is detected during the initial sampling event, the contractor may request in writing that the award be canceled. **If either of these conditions occurs, the contractor will contact the UST project manager within two days of problem identification and will submit written documentation within five days of notification.** The contractor will be reimbursed for one personnel mobilization to collect samples, one sample collection and one analytical fee each monitoring well sampled as outlined in SUPERB Allowable Costs, plus $6,000 for all other costs incurred (e.g., CAP preparation, obtaining performance bond, business license). The contract will be canceled and the performance bond will be returned to the company. If the total CoC concentration in all wells listed in Special Condition 11.B. decreases to less than 50 percent based on this initial sampling the DHEC may cancel the award. If the corrective action system is started or treatment is performed, the contractor will be required to complete the contract unless geological conditions change or another release is confirmed. See special condition 12. If the contract is canceled by DHEC, the contractor will be notified by certified letter and an invoice for the above outlined items shall be submitted within 20 days from the date of the certified letter canceling the contract.

3. Complete and submit all applications for permits (injection, NPDES, BAQC modeling form, thermal treatment, construction, etc. and an engineering report (2 copies each) with the CAP. Any required permit changes or corrections will be submitted within 15 days of notification by DHEC. The ER and any ER amendments and modifications, must be sealed by a Professional Engineer registered in the State of South Carolina. After review of the CAP and all permit applications by DHEC, the UST Program will issue a notice to proceed with CAP implementation.

   Implementation of the corrective action plan before the completion of the public notice process and approval of all permits by DHEC is not authorized. If premature implementation occurs, the Department will not reimburse those costs from the SUPERB Account, and the financial approval amount will be reduced by that amount. If the Department agrees with early implementation to better protect human health in an emergency and provides approval in writing, early implementation without any reduction to the financial approval amount will be authorized.

4. Implement the CAP within 30 days of receipt of notice to proceed and any required permit to construct. Disruption to the owner/operator's normal business will be kept to a minimum. The contractor will repair the site to the condition as it existed prior to installation of the corrective action system (e.g., asphalt paved areas will be repaved with asphalt, concrete areas will be replaced with concrete, grass areas will have soil replaced to the original grade and be reseeded or sodded with grass, etc.). Upon completion of any required construction, DHEC will inspect the system and issue a permit to operate. The contractor will, at all times, keep the site free from waste materials and rubbish related to the corrective action. Until completion of the corrective action, the contractor will keep the premises in a clean, neat and workmanlike condition satisfactory to DHEC. All generated soil and wastewater will be removed from the site promptly. Manifests documenting the proper disposal of the soil and wastewater must be included in the appropriate report.

5. Gain access to the adjacent property to sample monitoring wells and to install any corrective action equipment, as required. The contractor will repair the adjacent property to the condition as it existed prior to installation of the corrective action systems (e.g., asphalt paved areas will be repaved with asphalt, concrete areas will be replaced with concrete, grass areas will have soil replaced to the original grade and reseeded or sodded with grass, etc.)

6. Initiate system startup within 15 days of receipt of the permit to operate. Remediation as defined in the CAP and ER will begin upon system startup. An initial monitoring report documenting CoC concentrations in all wells and potentiometric conditions prior to start up (including verification of system operation or CAP implementation) must be submitted to the UST Program. **If any problem with CAP implementation occurs, the contractor will contact the UST project manager within 24 hours of problem identification and will submit written documentation within five days of notification.**

   NOTE: Free-phase product may be present at this site. No free-phase product was detected during the base-line sampling event, however, application of corrective action technologies can result in the mobilization and possible appearance of free-phase product or elevated CoC concentrations in the monitoring wells.

7. Complete and submit a corrective action monitoring report (3 copies plus one copy for any DHEC Bureau that issued a permit) on a quarterly basis. The corrective action monitoring reports must include:

   A. A narrative portion that documents current site conditions and system effectiveness in achieving the remediation goals (e.g., free product removal, reducing CoC to the SSTLs) as outlined in the CAP. Any system down time and the associated reason(s) will be included in the report.

   B. Conclusions and recommendations based on the reported data.

   C. Ground-water laboratory analytical data for all monitoring wells in the following format (additional parameters such as dissolved oxygen may be required; do not sample wells containing free product):

Analytical Data (µg/l)

Monitoring Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MtBE	Naphthalene
MW-1	07/15/99	145	200	146	1,000	170	47
	10/15/99	140	190	140	900	50	165
MW-2	07/15/99	580	800	300	1,000	60	20
	10/15/99	480	690	257	912	50	19

   D. Ground-water potentiometric data for all monitoring wells in the following format:

Ground-water Data (feet)

Monitoring Well	Date	TOC Elevation	TOC to GW	TOC to FP	FP Thickness	GW Elevation
MW-1	07/15/99	98.0	17.54			80.46
	10/15/99	98.0	17.90			80.10
MW-2	07/15/99	100.0	20.50	20.47	0.03	79.50
	10/15/99	100.0	21.50	21.48	0.02	78.50

   E. A ground-water elevation contour map of the site based on current ground-water potentiometric data.

F. A CoC map based upon current ground-water laboratory analytical data. The ground-water data should be adjacent to the relevant monitoring well using the following format (additional parameters such as dissolved oxygen may be required):

MW - Number
Benzene (µg/l)
Toluene (µg/l)
Ethylbenzene (µg/l)
Xylenes (µg/l)
MTBE (µg/l)
Lead (µg/l)
EDB (ng/l)
Naphthalene (µg/l)

G. A copy of the DHEC approval letter and manifests for any contaminated soil and ground-water removed from the site for treatment and/or disposal.

H. Additional data required by permits (e.g., air analyses, wastewater effluent analyses and amounts, etc.). The data should be reported on a form or in a format specified in the permits, and attached to the monitoring report as an addendum.

All rehabilitation activities associated with the UST release must be performed by a SCDHEC Certified Site Rehabilitation Contractor. All air, soil, and ground-water analyses must be performed by a South Carolina certified laboratory. The corrective action monitoring report must be sealed by a Professional Engineer or Geologist registered in the State of South Carolina. All monitoring wells associated with the release will be sampled on a quarterly basis for the first year. Thereafter, the number of wells sampled may be reduced and/or the interval between corrective action monitoring reports may be lengthened upon clear demonstration of CoC reduction, unless restricted by permit requirements. Any approval to reduce the number of wells sampled or the frequency of sampling must be in writing from the Bureau of Land and Waste Management UST Program. DHEC may require data to be reported on a form or in a specific format. The contractor will be provided with the proper report forms and format prior to system startup. The contractor will be notified of any revisions to the report forms or format 90 days prior to the due date for the corrective action monitoring report.

8. Collect one (1) ground-water sample per monitoring event for all monitoring wells associated with the release. Each well should be purged prior to sampling. Purging is considered complete once the ground-water temperature and pH have stabilized. Sampling logs should note all temperature and pH measurements, as well as the location and type of each sample submitted for laboratory analysis. Each ground-water sample will be collected in accordance with established QA/QC protocol and submitted to a certified laboratory for analysis. The samples must be analyzed for the following parameters:

Analyte	Analytical Method	Reporting Limit (µg/l)
BTEX, Naphthalene, M*t*BE	8260B	5
Lead	200.7	5
EDB	8260B	0.02
PAH	8270C	10

Additional samples (air, groundwater, effluent, soil) required by permits must be collected in accordance with established QA/QC protocol and submitted to a certified laboratory for analysis. The samples will be analyzed for parameters stipulated in the permits. Sampling and analytical data for each sample (e.g., field sampling logs, chain of custody forms, certificates of analysis, and the lab certification number) will be included in the corrective action monitoring report.

9. Properly dispose of all contaminated soil and ground water generated during the implementation of the CAP and installation of verification wells. DHEC must approve the disposal facility selected for treatment and disposal of the free product and contaminated soil and ground water. The owner/operator of the facility is considered the generator for any contaminated soil and ground water. The contractor must document all disposal of free product and contaminated soil and ground water in the quarterly corrective action monitoring report.

10. Verification for the removal of free product will be conducted by SCDHEC personnel with an interface probe. If the remediation technology is in-situ (e.g., pump and treat, air sparging, vapor extraction): suspend operation of the system once the remediation goals for all CoC have been maintained for a period of 30 days. Samples are to be taken after one (1) quarter or after all CoC levels have reached equilibrium and again after a second quarter. Along with the parameters listed in Specification #8, the ground-water samples should also be sampled for the following parameters:

Analyte	Analytical Method*	Reporting Limit
Dissolved Oxygen	SM4500-O G	500 µg/l
Ferrous Iron	SM3500-Fe D	30 µg/l
Methane	Kerr Method	1 mg/l
Nitrate	9056/9210	100 µg/l
Sulfate	9038/9056	1000 µg/l

*or EPA equivalent method that can achieve the same reporting level

If sample results indicate that the remediation goals are not sustained, the contractor must submit a corrective action status report (up to 3 copies) that outlines the deficiency(ies) and offers recommendations for achieving the remediation goals with a revised timetable. Modifying and restarting of the system will be directed by DHEC. The system will operate until all remediation goals are again maintained for a minimum period of 30 days. Operation of the system will then be suspended again and samples taken to verify that remediation goals are sustained. This cycle of activity, including status reports, will be repeated until all CoC levels remain below SSTLs for all wells listed in Special Conditions item 11 C for two (2) consecutive quarters. Up to three verification wells for soil and groundwater analyses may then be installed at locations designated by DHEC. Costs for verification well installation are considered part of the financial approval amount. Each well will be sampled in accordance with Specifications item 8 and the analyses compared to the calculated SSTLs for the CoC at that well location. If the laboratory analyses are at or below the SSTLs, corrective action will be considered complete. If any analysis is above the SSTL, the corrective action will not be considered complete, and the activity cycle described above must be repeated until all CoC levels remain below SSTLs for those wells listed in Special Conditions item 11 C. Split or duplicate samples may be collected by DHEC (or its subcontractors) to verify achievement of remediation goals. Split ground-water samples will be accomplished during quarterly monitoring events and during the final sampling of monitoring and verification wells to document that the cleanup goals have been met. A ground-water sample will be collected from each monitoring well to substantiate the ¼, ½, or ¾ concentration reduction has occurred. Once the site rehabilitation contractor indicates the final cleanup goals have been reached, a ground-water sample will be collected from each monitoring well plus the required verification wells. These two separate quality assurance events will consist of a representative ground-water sample being collected by the certified rehabilitation contractor. Part of the split sample will be analyzed by a SCDHEC certified laboratory selected by the contractor as part of the routine quarterly reporting process, and the second half of the sample will be analyzed by a SCDHEC laboratory selected

by the UST Program. In addition to the ground water collected from the monitoring wells, the UST Program may provide up to three prepared blanks for the contractor's laboratory to analyze. The laboratory analysis from the contractor's and the UST Program's laboratory will be compared. In the event of substantial variance (more than 15%), a second sampling event with field and prepared blanks will be sent to a SC certified laboratory by the UST Program for analysis. The contractor will be notified when the wells will be resampled, can observe this second sampling event, and will be provided analytical results for comment. Based on these results, DHEC Laboratory Certification will be contacted to assist the UST program in determining the cause of the laboratory variation. The Director of the Assessment and Corrective Action Division will make the final decision on which analytical values will be the basis for payment or closure based on the recommendation of the site rehabilitation contractor, DHEC Laboratory Certification, the UST Section Manager, and Project Manager. The site rehabilitation contractor will be provided a written record of any decision. **At least two weeks notice will be provided to the UST Project Manager prior to mobilizing to the site for sampling to verify attainment of remediation goals.** Costs for transportation and analysis of split or duplicate samples will be paid by DHEC.

or

If the remediation technology is a single event (e. g. excavation of impacted soils, vacuum enhanced recovery): collect sufficient samples as outlined in the CAP to verify the reduction of CoC to the remediation goals. The contractor may be required to install and sample soil and groundwater in up to three verification wells at locations designated by DHEC. If the levels of CoC in all samples are at or below SSTLs, corrective action will be considered complete. If the level of any CoC is above the SSTL, additional corrective action will be required. The contractor will submit one (1) corrective action status report to document the reduction of CoC to the remediation goals. Split or duplicate samples will be collected by DHEC (or its subcontractors) to verify achievement of remediation goals in the manner outlined above. **At least two weeks notice will be provided to UST Project Manager prior to mobilizing to the site for sampling to verify attainment of remediation goals.** Costs for transportation and analysis of split or duplicate samples will be paid by DHEC.

11. Disassemble and remove the remediation system and all associated remediation items including utilities from the site within 60 days of notification by DHEC that the remediation goal for the release associated with the UST(s) at the site has been achieved. Disruption to the owner/operator's normal business will be kept to a minimum.

12. Properly abandon all wells (including preexisting wells), borings, trenches, and piping/utility runs installed by the contractor as part of corrective action within 60 days of notification by DHEC that the remediation goal for the release associated with the UST(s) at the site has been achieved. The abandonment will be in accordance with South Carolina Well Standards and Regulations R. 61-71 and accepted industry standards for abandonment of trenches and piping/utility runs. Disruption to the property owner's normal business will be kept to a minimum. The contractor must notify DHEC of the method of well abandonment and final disposal of any free product and contaminated soil or ground water. The contractor will return the site to the condition prior to corrective action (e.g., asphalt paved areas will be repaved with asphalt, concrete areas will be replaced with concrete, grass areas will have soil replaced to the original grade and reseeded or sodded with grass, etc.)

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

BUREAU OF LAND AND WASTE MANAGEMENT
UNDERGROUND STORAGE TANK PROGRAM

Submit the following by February 12, 2001

CORRECTIVE ACTION SOLICITATION RESPONSE

Please respond to the following questions:

1. The corrective action method(s) or technology (ies) that will be proposed in the CAP will be (list all active and/or intrinsic methods or technologies for remediation of the aquifer; attach additional pages(s) as required): _____
_____
_____
_____

2. The estimated time in months to complete the corrective action from the date of financial approval, corrective action goals are met, and all corrective action items are removed from the site or properly abandoned is approximately _____ months. This time assumes all submitted plans and reports will be reviewed by DHEC within 30 days of receipt.

3. The total cost in dollars, regardless of the type, quantity or duration of the permitted technology applied, to treat the area of concern (see Figure 2) such that the thickness of free product does not exceed 0.01 foot and levels of CoCs do not exceed the site-specific target levels (SSTLs) defined in item 11.C. at any point, complete all associated monitoring and post-remediation verification, prepare all plans, reports, and correspondence; obtain and meet all terms and conditions of all required permits and licenses; design, install, monitor, operate, maintain, and when completed, properly abandon or remove all assessment and remediation items installed as part of corrective action; provide evidence of performance bond; and other items outlined in this request for solicitation response for Smith's Grocery (UST Permit #09322), 3176 Charlotte Highway, York, SC 29745, York County is: $ _____

ACCEPTANCE and DELIVERY STATEMENT

In compliance with the request for solicitation response and subject to all conditions thereof, the contractor offers and agrees, if selected by the UST owner/operator within _____ days from the final solicitation response submittal date, to furnish any or all items/services quoted at the prices set forth once financial approval has been issued by the Department.

For the purpose of this submittal and acceptance of financial approval should it occur, I certify that this company understands the nature of the release and the geological conditions at this facility as documented in the technical file and this solicitation. Additionally, I certify that this company understands that acceptance is based on total cost to treat the area of concern.

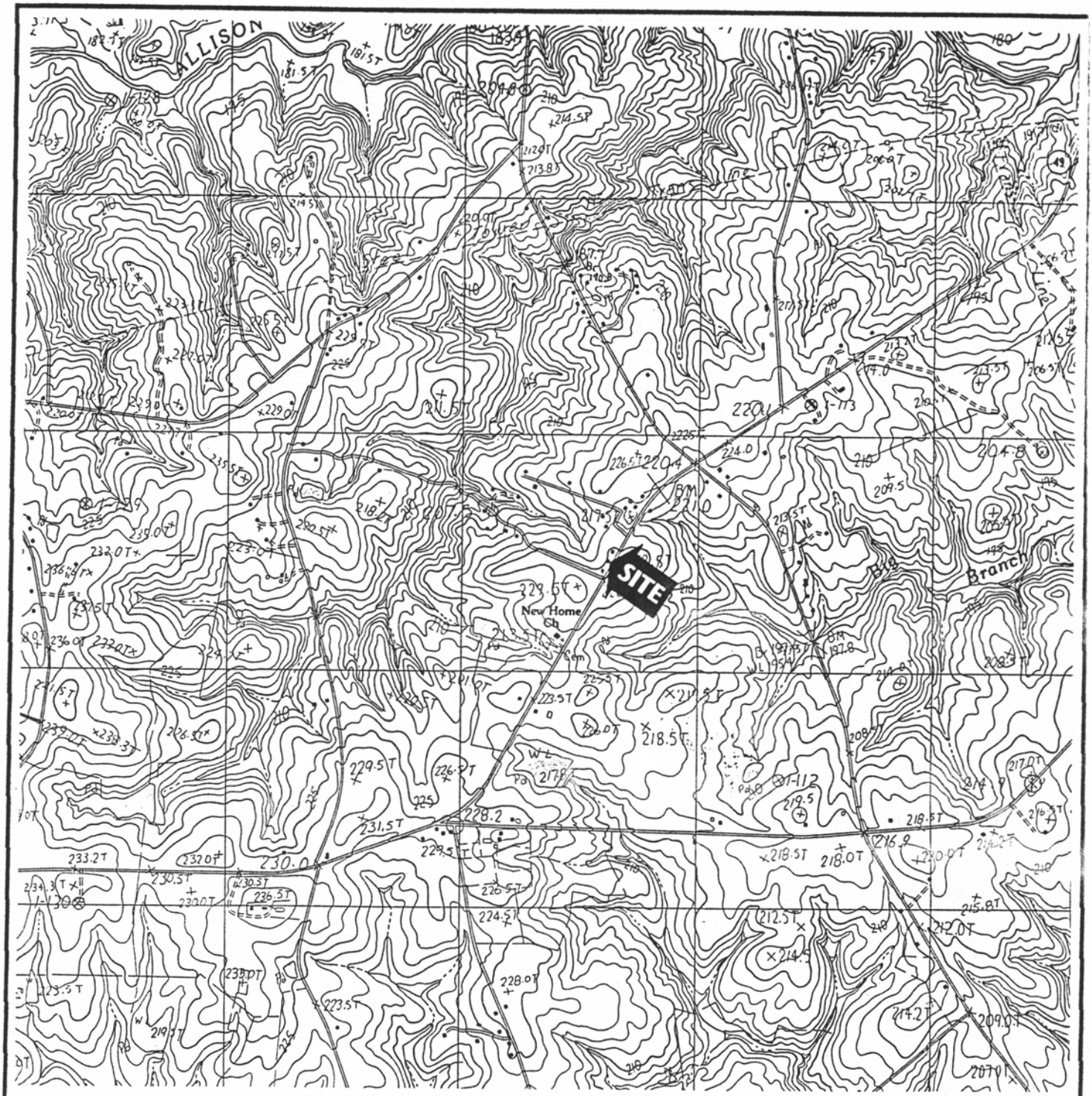
_____ _____
Contractor (Print) Certification Number

_____ _____
Authorized Representative (Print) Signature

_____
Date Signed

Attachment A

Groundwater Monitoring Report
October 2000



SCALE 1:24,000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

CONTOUR INTERVAL 3 METERS

QUADRANGLE LOCATION

CLOVER, SC QUADRANGLE

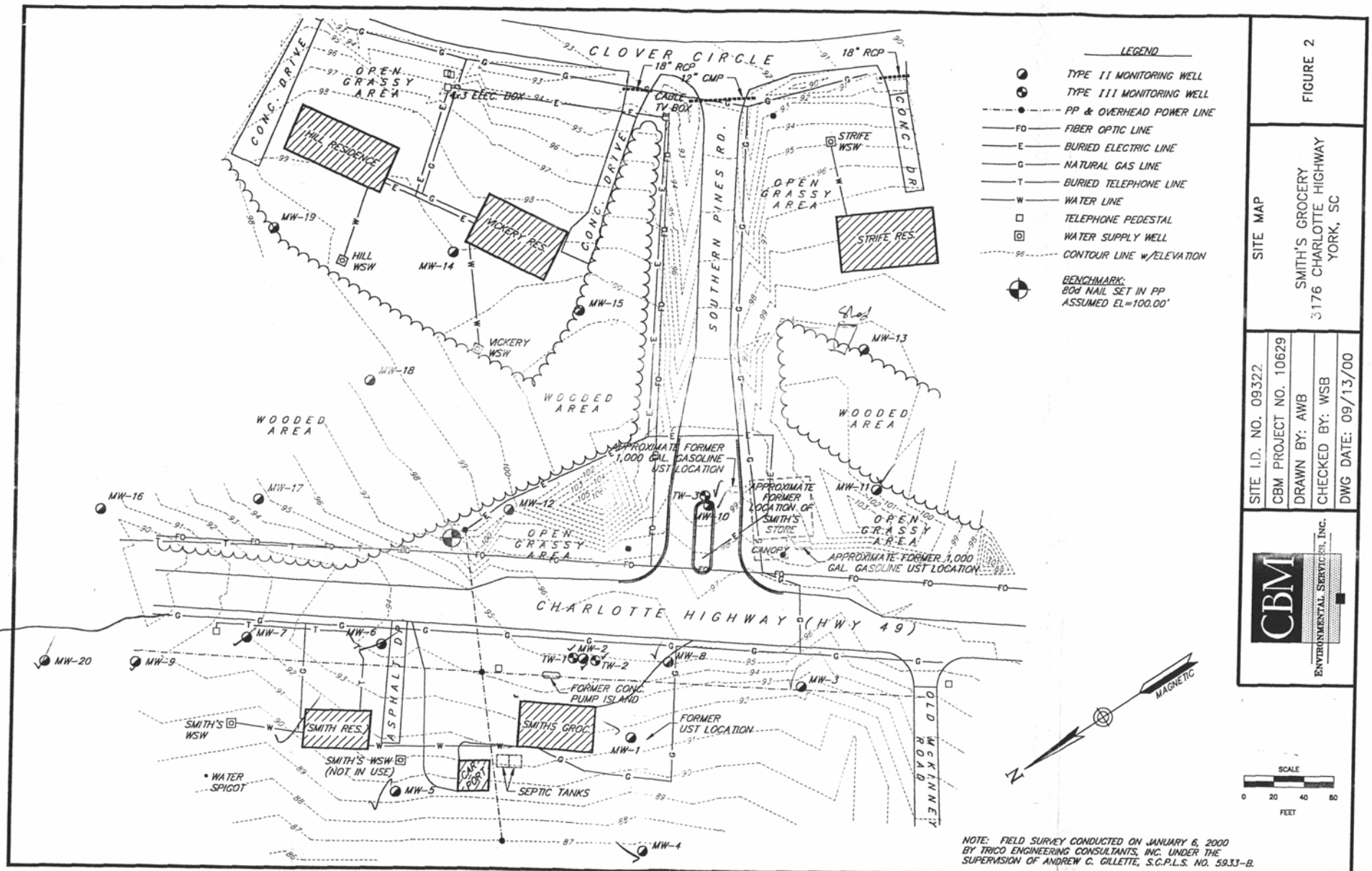
CBM ENVIRONMENTAL SERVICES, INC.

LATITUDE: 35° 02' 30" N	SMITH'S GROCERY 3176 CHARLOTTE HIGHWAY YORK, SOUTH CAROLINA
LONGITUDE: 81° 08' 48" W	
DATE: 02/11/99	
DRAWN BY: AWB	
CHECKED BY: JFH	SITE I.D. NO. 09322

FIGURE 1

USGS TOPOGRAPHIC MAP

CBM PROJECT NO. 10629



NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

FIGURE 2

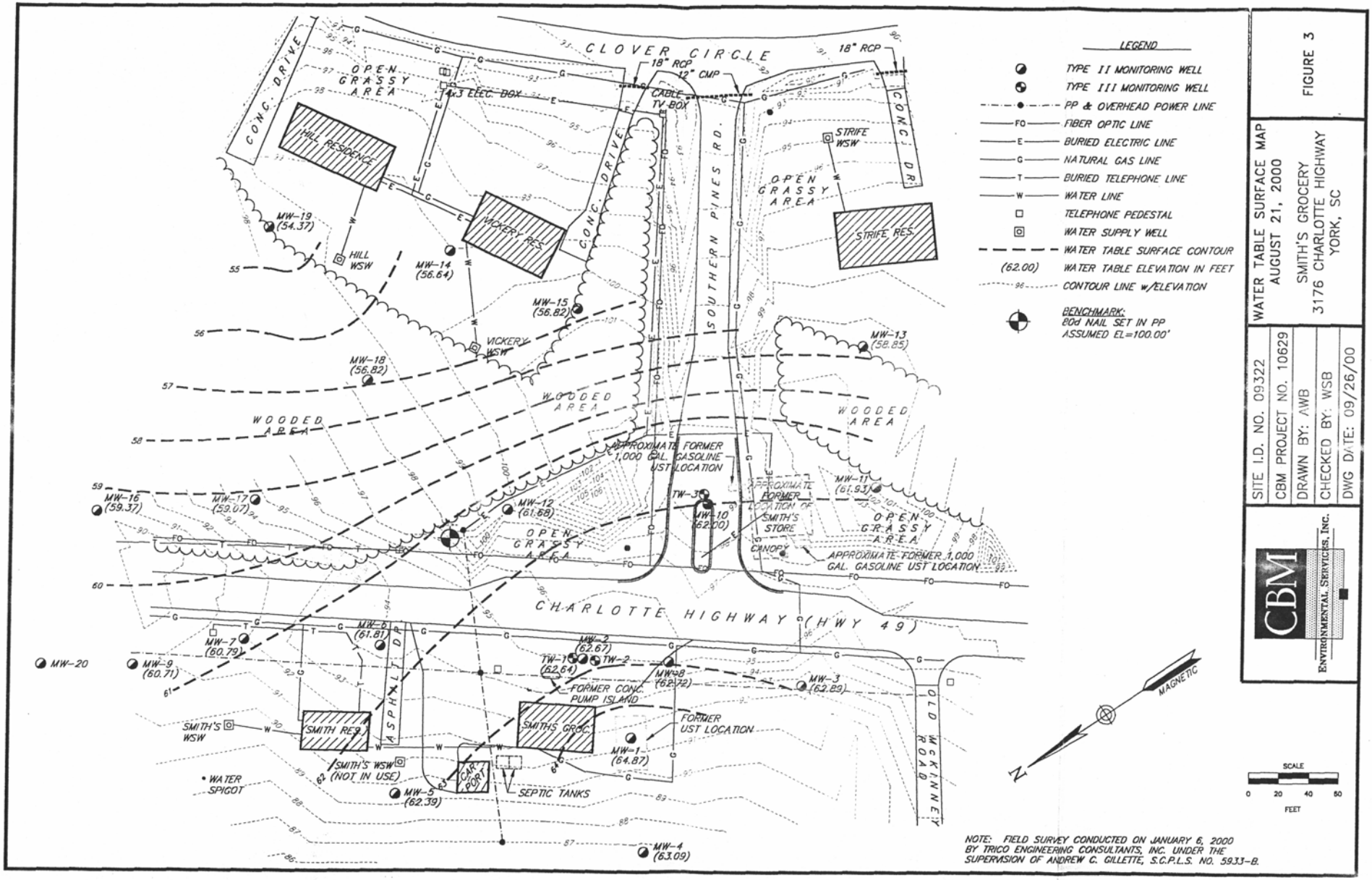
SITE MAP

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: WSB
DWG DATE: 09/13/00

CBM ENVIRONMENTAL SERVICES, INC.

Old Sow Mary Rd.


CLOVER CIRCLE
CONC. DRIVE
OPEN GRASSY AREA
4x3 ELEC. BOX
18" RCP
12" CMP
CABLE TV BOX
HILL RESIDENCE
VICKERY RES.
SOUTHERN PINES RD.
STRIFE WSW
STRIFE RES.
MW-19 (54.37)
HILL WSW
MW-14 (56.64)
MW-15 (56.82)
VICKERY WSW
MW-18 (56.82)
MW-13 (58.85)
WOODED AREA
APPROXIMATE FORMER 1,000 GAL. GASOLINE UST LOCATION
MW-16 (59.37)
MW-17 (59.07)
MW-12 (61.68)
TW-3
MW-10 (62.00)
APPROXIMATE FORMER LOCATION OF SMITH'S STORE
MW-11 (61.93)
CANOPY
APPROXIMATE FORMER 1,000 GAL. GASOLINE UST LOCATION
CHARLOTTE HIGHWAY (HWY 49)
MW-6 (61.81)
MW-2 (62.67)
MW-7 (60.79)
MW-20
MW-9 (60.71)
TW-1 (62.64)
TW-2
MW-8 (62.72)
MW-3 (62.89)
FORMER CONC. PUMP ISLAND
ASPHALT DR.
SMITH'S WSW
SMITH RES.
SMITHS GROC.
FORMER UST LOCATION
MW-1 (64.87)
OLD MCKINNEY ROAD
SMITH'S WSW (NOT IN USE)
CAR PORT
SEPTIC TANKS
WATER SPIGOT
MW-5 (62.39)
MW-4 (63.09)
LEGEND
TYPE II MONITORING WELL
TYPE III MONITORING WELL
PP & OVERHEAD POWER LINE
FIBER OPTIC LINE
BURIED ELECTRIC LINE
NATURAL GAS LINE
BURIED TELEPHONE LINE
WATER LINE
TELEPHONE PEDESTAL
WATER SUPPLY WELL
WATER TABLE SURFACE CONTOUR
(62.00) WATER TABLE ELEVATION IN FEET
CONTOUR LINE w/ELEVATION
BENCHMARK:
80d NAIL SET IN PP
ASSUMED EL=100.00'
MAGNETIC
SCALE
0 20 40 60
FEET
NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.
WATER TABLE SURFACE MAP
AUGUST 21, 2000
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC
FIGURE 3
SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: WSB
DWG DATE: 09/26/00
CBM
ENVIRONMENTAL SERVICES, INC.

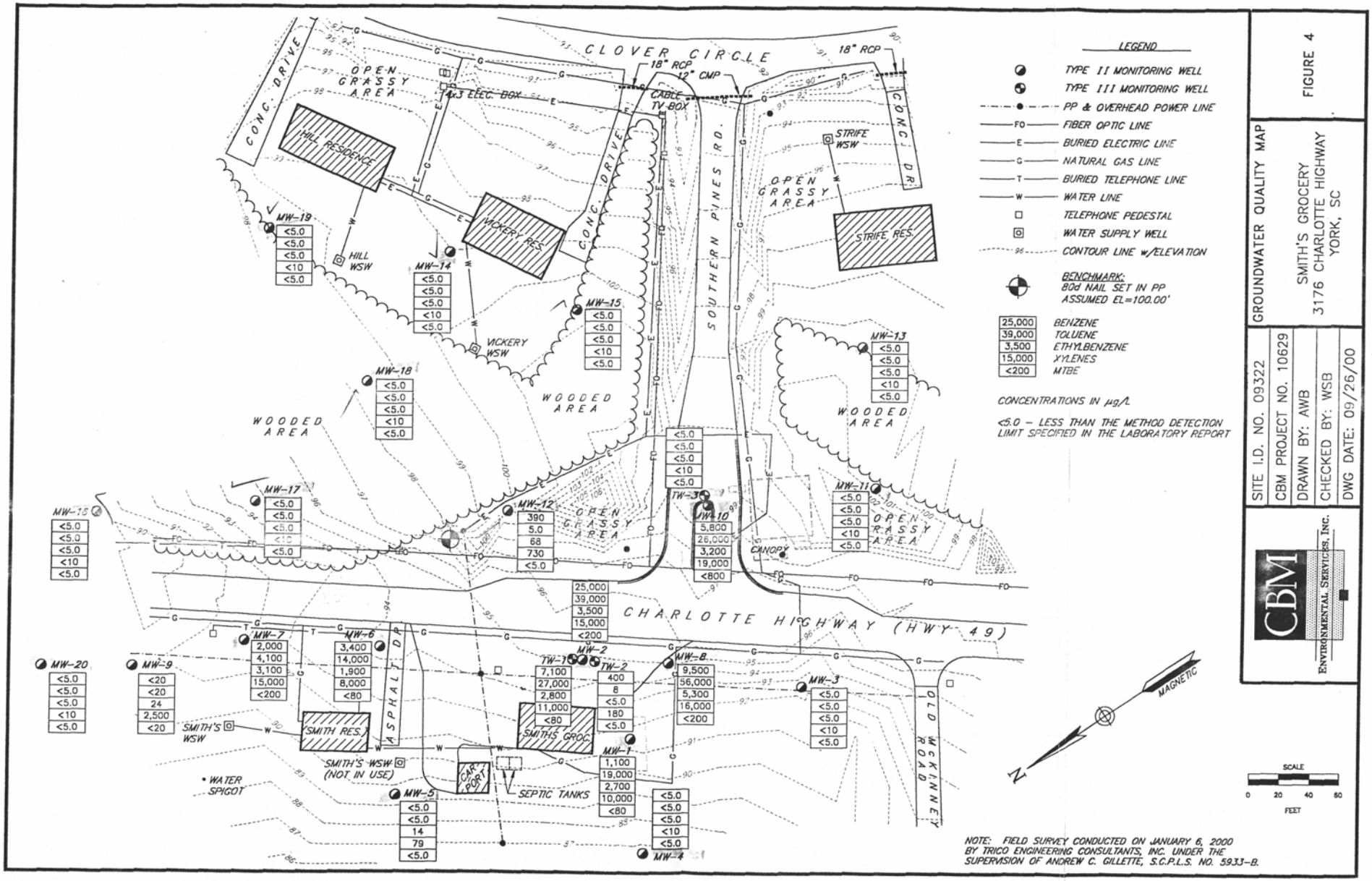


FIGURE 4

GROUNDWATER QUALITY MAP

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: WSB
DWG DATE: 09/26/00

CBM ENVIRONMENTAL SERVICES, INC.

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA[1]
SMITH'S GROCERY

Well No.	Date	Top of Casing Elevation	Depth to Water	Water Table Elevation	Well Depth	Screened Interval
MW-1	12/1/99	91.16	27.85	63.31	35	25-35
	8/21/00		26.29	64.87		
MW-2	12/1/99	94.57	31.58	62.99	38	23-38
	8/21/00		31.90	62.67		
MW-3	12/1/99	91.91	28.62	63.29	35	25-35
	8/21/00		29.02	62.89		
MW-4	12/1/99	86.20	22.76	63.44	27	17-27
	8/21/00		23.11	63.09		
MW-5	12/1/99	89.29	26.20	63.09	30	20-30
	8/21/00		26.90	62.39		
MW-6	12/1/99	93.91	31.60	62.31	37	27-37
	8/21/00		32.10	61.81		
MW-7	12/1/99	91.68	30.41	61.27	36	26-36
	8/21/00		30.89	60.79		
MW-8	12/1/99	94.72	31.65	63.07	38	23-38
	8/21/00		32.00	62.72		
MW-9	12/1/99	90.54	29.31	61.23	36	21-36
	8/21/00		29.83	60.71		
MW-10	12/1/99	99.77	37.30	62.47	44	29-44
	8/21/00		37.77	62.00		
MW-11	12/1/99	100.46	38.23	62.23	44	29-44
	8/21/00		38.53	61.93		
MW-12	12/1/99	99.61	37.53	62.08	44	29-44
	8/21/00		37.93	61.68		
MW-13	12/1/99	100.39	41.22	59.17	47	32-47
	8/21/00		41.54	58.85		
MW-14	12/1/99	98.89	41.85	57.04	50	35-50
	8/21/00		42.25	56.64		
MW-15	12/1/99	100.18	43.23	56.95	50	35-50
	8/21/00		43.36	56.82		
MW-16	12/1/99	89.91	30.00	59.91	37	22-37
	8/21/00		30.54	59.37		

TABLE 1 (cont'd)
SUMMARY OF GROUNDWATER ELEVATION DATA[1]
SMITH'S GROCERY

Well No.	Date	Top of Casing Elevation	Depth to Water	Water Table Elevation	Well Depth	Screened Interval
MW-17	12/1/99	94.46	34.67	59.79	40	25-40
	8/21/00		35.39	59.07		
MW-18	12/1/99	98.14	40.87	57.27	46	31-46
	8/21/00		41.32	56.82		
MW-19	12/1/99	98.27	43.51	54.76	50	35-50
	8/21/00		43.90	54.37		
MW-20	8/21/00	NS	27.58	----	35	20-35
TW-1	12/1/99	94.72	32.00	62.72	61	56-61
	8/21/00		32.08	62.64		
TW-2	8/21/00	NS	32.00	----	88	86-88
TW-3	8/21/00	NS	37.00	----	71	66-71

Notes:
1. Elevations relative to a temporary benchmark with an assumed datum of 100.00 feet; data reported in feet.
2. Not surveyed.

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA[1]
MONITORING WELLS
SMITH'S GROCERY

Well No.	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	EDB	Naphthalene	Total Lead
MW-1	12/1/99	**610**[2]	**11,000**	**3,200**	**18,500**	<5[3]	<5	**610**	7.3
	8/21/00	**1,100**	**19,000**	**2,700**	**10,000**	<80	0.32	**770**	2
MW-2	12/1/99	**36,000**	**49,000**	**2,800**	**14,200**	**1,600**	**260**	**890**	**1,300**
	8/21/00	**25,000**	**39,000**	**3,500**	**15,000**	<200	**179**	<200	**1,300**
MW-3	12/1/99	<5	<5	<5	<15	<5	<5	<5	<5
	8/21/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**33**
MW-4	12/2/99	<5	<5	<5	<15	<5	<5	<5	6.3
	8/22/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**40**
MW-5	12/2/99	<5	<5	20	77	<5	<5	<5	**18**
	8/22/00	<5.0	<5.0	14	79	<5.0	<0.02	8	2
MW-6	12/2/99	**3,300**	**11,000**	**1,300**	7,000	<5	**9.6**	**270**	**32**
	8/22/00	**3,400**	**14,000**	**1,900**	8,000	<80	4.83	**700**	**39**
MW-7	12/2/99	**1,800**	**3,100**	**2,000**	**11,200**	<5	<5	**780**	**59**
	8/22/00	**2,000**	4,100	**3,100**	**15,000**	<200	0.66	**1,400**	**110**
MW-8	12/1/99	**14,000**	**60,000**	**4,900**	**24,900**	<5	<5	**900**	14
	8/21/00	**9,500**	**56,000**	**5,300**	**16,000**	<200	0.48	**820**	4
MW-9	12/2/99	**18**	59	250	4,000	<5	<5	**260**	11
	8/22/00	<20	<20	24	2,500	<20	0.10	**140**	**16**
MW-10	12/2/99	**10,000**	**23,000**	**2,200**	**11,100**	<5	**290**	**320**	**22**
	8/23/00	**5,800**	**26,000**	**3,200**	**19,000**	<800	**95.3**	<800	**21**
MW-11	12/2/99	<5	<5	<5	<15	<5	<5	<5	**16**
	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	6.0
MW-12	12/2/99	**500**	9.8	130	880	<5	**30**	**37**	7.7
	8/23/00	**390**	5.0	68	730	<5.0	**20.8**	**52**	7
MW-13	12/2/99	<5	<5	<5	<15	<5	<5	<5	<5
	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**75**

TABLE 2 (cont'd)
SUMMARY OF GROUNDWATER ANALYTICAL DATA[1]
MONITORING WELLS
SMITH'S GROCERY

Well No.	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	EDB	Naphthalene	Total Lead
MW-14	12/2/99	<5	<5	<5	<15	<5	<5	<5	<5
	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	0.51	<5.0	**37**
MW-15	12/2/99	<5	<5	<5	<15	<5	<5	<5	**16**
	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	0.05	<5.0	**39**
MW-16	12/2/99	<5	<5	<5	<15	<5	<5	<5	7.9
	8/22/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**75**
MW-17	12/2/99	<5	<5	<5	<15	<5	<5	<5	15
	8/22/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**29**
MW-18	12/2/99	<5	<5	<5	<15	<5	<5	<5	**50**
	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	0.12	<5.0	**42**
MW-19	12/2/99	<5	<5	<5	<15	<5	<5	<5	**83**
	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**51**
MW-20	8/22/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**150**
TW-1	12/2/99	**5,800**	**13,000**	**1,000**	5,300	<5	<5	**190**	8
	8/21/00	**7,100**	**27,000**	**2,800**	**11,000**	<80	1.09	**160**	<2
TW-2	8/21/00	**400**	**8**	<5.0	180	<5.0	0.05	**18**	<2
TW-3	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	0.23	<5.0	<2
	RBSL[4]	5	1,000	700	10,000	40	5	10	15

Notes:

1. Analyses for BTEX constituents, MTBE, and naphthalene by Method 8260; analyses for EDB by 504.1; analyses for PAHs by Method 8270; analyses for total lead by EPA Method 200.7; all results reported in µg/L.
2. Concentrations in bold face type exceeded the RBSLs.
3. Less than the method detection limit specified in the laboratory report.
4. January 1998 Risk-Based Screening Levels.

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL DATA[1]
NATURAL ATTENUATION PARAMETERS
SMITH'S GROCERY

Well No.	Date Sampled	Dissolved Oxygen	Nitrate	Sulfate	Iron	Methane
MW-1	12/1/99	3.40	<0.050[2]	6.2	2.6	0.027
	8/21/00	0.87	<0.05	0.59	11	<0.026
MW-2	12/1/99	2.57	<0.050	20	8.2	<0.0086
	8/21/00	3.10	<0.05	1.1	3.3	<0.026
MW-3	12/1/99	5.86	1.0	6.6	1.2	<0.0086
	8/21/00	4.10	0.84	<0.05	10	<0.026
MW-4	12/2/99	5.83	2.1	<5.0	0.28	<0.0086
	8/22/00	4.55	2.3	<0.50	23	<0.026
MW-5	12/2/99	4.18	0.072	5.0	1.4	<0.0086
	8/22/00	2.57	0.98	<0.50	2.4	<0.026
MW-6	12/2/99	3.70	<0.050	<5.0	0.63	<0.0086
	8/22/00	0.86	<0.05	<0.50	7.8	<0.026
MW-7	12/2/99	1.87	0.052	6.7	0.70	<0.0086
	8/22/00	1.32	<0.05	<0.05	24	<0.026
MW-8	12/1/99	2.02	<0.050	<5.0	0.44	<0.0086
	8/21/00	0.70	<0.05	<0.50	2.0	<0.026
MW-9	12/2/99	4.60	<0.050	5.3	0.57	<0.0086
	8/22/00	1.91	<0.05	<0.050	7.6	<0.026
MW-10	12/2/99	4.80	<0.050	7.2	0.17	<0.0086
	8/23/00	1.48	<1.0	6.2	8.6	<0.026
MW-11	12/2/99	5.46	3.8	5.7	0.81	<0.0086
	8/23/00	3.05	4.2	6.0	0.84	<0.026
MW-12	12/2/99	2.93	0.62	<5.0	0.36	<0.0086
	8/23/00	1.50	<1.0	5.3	4.1	<0.026
MW-13	12/2/99	5.53	0.80	7.1	0.065	<0.0086
	8/23/00	5.50	1.4	5.4	26	<0.026
MW-14	12/2/99	5.41	0.80	35	0.23	<0.0086
	8/23/00	5.95	2.1	9.6	70	<0.026
MW-15	12/2/99	5.42	3.4	5.5	0.66	<0.0086
	8/23/00	5.24	4.3	5.3	17	<0.026
MW-16	12/2/99	4.88	0.059	10	0.79	<0.0086
	8/22/00	3.80	0.36	5.1	310	<0.026
MW-17	12/2/99	2.70	<0.050	12	0.90	<0.0086
	8/22/00	2.20	0.090	<0.050	20	<0.026
MW-18	12/2/99	5.93	1.9	<5.0	18	<0.0086
	8/23/00	5.10	2.4	11	64	<0.026

TABLE 3 (cont'd)
SUMMARY OF GROUNDWATER ANALYTICAL DATA[1]
NATURAL ATTENUATION PARAMETERS
SMITH'S GROCERY

Well No.	Date Sampled	Dissolved Oxygen	Nitrate	Sulfate	Iron	Methane
MW-19	12/2/99	6.00	2.6	<5.0	10	<0.0086
	8/23/00	6.03	2.7	5.2	83	<0.026
MW-20	8/22/00	5.54	0.64	<0.050	48	<0.026
TW-1	12/2/99	4.35	0.19	15	0.92	<0.0086
	8/21/00	1.4	<0.05	12	3.3	<0.026
TW-2	8/21/00	4.70	0.36	5.8	0.16	<0.026
TW-3	8/23/00	2.35	1.9	17	0.34	<0.026

Notes:
1. Results reported in mg/L.
2. Less than the method detection limit specified in the laboratory report.

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
SYSTEM NAME: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: 480' from HWY 49/Old Mckinney Rd

Street Address & City of Well Location: 3176 CHARLOTTE HIGHWAY, YORK

Sketch Map: See Figure 2

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish - Brown Micaceous Silty Clay (Friable)	16'	16'
Brown Micaceous Silty Clay (Friable)	3'	19'
Reddish - Brown Miceaceous Silt (Friable)	7'	26'
Tan Micaceous Silty Clay (Friable)	9'	35'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS

MW - 20 BENTONITE 18-19'

4. OWNER OF WELL: LOIS SMITH
Address: 3176 CHARLOTTE HIGHWAY
YORK, SOUTH CAROLINA 29745
Telephone No: (803) 684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: (803) 548-5989

5. WELL DEPTH (completed) 35 ft. Date Started: 3/28/00 Date Completed: 3/28/00

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐ Remediation

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 20 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15
Set Between: 20 ft. and 35 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET

Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
27.58 ft. below land surface after 24 hours
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 19 ft. to 35 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☐ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 18 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 350 ft. SW direction
Petroleum Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services, Inc. Date: 9/27/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Ernest Z Blackwell Cert. No.: 1331
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
SYSTEM NAME: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: 190' from HWY 49/Old McKinney Rd

Street Address & City of Well Location: 3176 CHARLOTTE HIGHWAY, YORK

Sketch Map: See Figure 2

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Light Tan Sandy Clay	74'	74'
Light Tan Clayey Sand (Loose)	5'	79'
Light Tan Sandy Clay (Firm)	6'	85'
Tan Clayey Sand (Loose)	3'	88'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS

TW - 2 BENTONITE 82 - 84'

4. OWNER OF WELL: LOIS SMITH
Address: 3176 CHARLOTTE HIGHWAY
YORK, SOUTH CAROLINA 29745
Telephone No: (803) 684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: (803) 548-5989

5. WELL DEPTH (completed) 88 ft. Date Started: 08/15/00 Date Completed: 08/17/00

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐ Remediation

8. CASING: ☒ Threaded ☐ Welded
Diam.: 4", 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
4 in. to 70 ft. depth
2 in. to 86 ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 2'
Set Between: 86 ft. and 88 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
32.00 ft. below land surface after 24 hours
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 84 ft. to 88 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 82 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 5 ft. N direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services, Inc. Date: 9/26/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: [signature] Authorized Representative Cert. No.: 1468

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

DHEC — PROMOTE PROTECT PROSPER

1. LOCATION OF WELL:

County: York
SYSTEM NAME: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: 35' from HWY 49/Southern Pines Rd

Street Address & City of Well Location: 3176 CHARLOTTE HIGHWAY, YORK

Sketch Map: See Figure 2

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish - Brown Micaceous Silty Clay (Friable)	3'	3'
Orangish - Brown Micaceous Silty Clay (Friable)	4'	7'
Light Brown To Tan Micaceous Silty Clay (Friable)	10'	17'
Brown Micaceous Silty Clay (Friable)	6'	23'
Reddish -Brown Micaceous Silty Clay (Friable)	4'	27'
Dark Brown Micaceous Silty Clay (Friable)	8'	35'
Dark Reddish-Brown Micaceous Silty Clay (Friable)	6'	41'
Dark Brown to Brown Micaceous Silty Clay	6'	47'
Reddish - Brown To Tan Silt With Weathered Rock	6'	53'
Brown Silts With Weathered Rock	18'	71'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS

TW - 3 BENTONITE 62 - 64'

4. OWNER OF WELL: LOIS SMITH
Address: 3176 CHARLOTTE HIGHWAY
YORK, SOUTH CAROLINA 29745
Telephone No: (803) 684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: (803) 548-5989

5. WELL DEPTH (completed) 71 ft. Date Started: 03/29/00 Date Completed: 08/18/00

6. ☒ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug
☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE:
☐ Domestic ☐ Public Supply-Permit No. ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☒ Monitor Well ☐ Remediation

8. CASING: ☒ Threaded ☐ Welded
Diam.: 6", 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
6" in. to 50 ft. depth
2" in. to 66 ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 5'
Set Between: 66 ft. and 71 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET

Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
37.00 ft. below land surface after 24 hours
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 64 ft. to 71 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 62' ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 135 ft. N direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

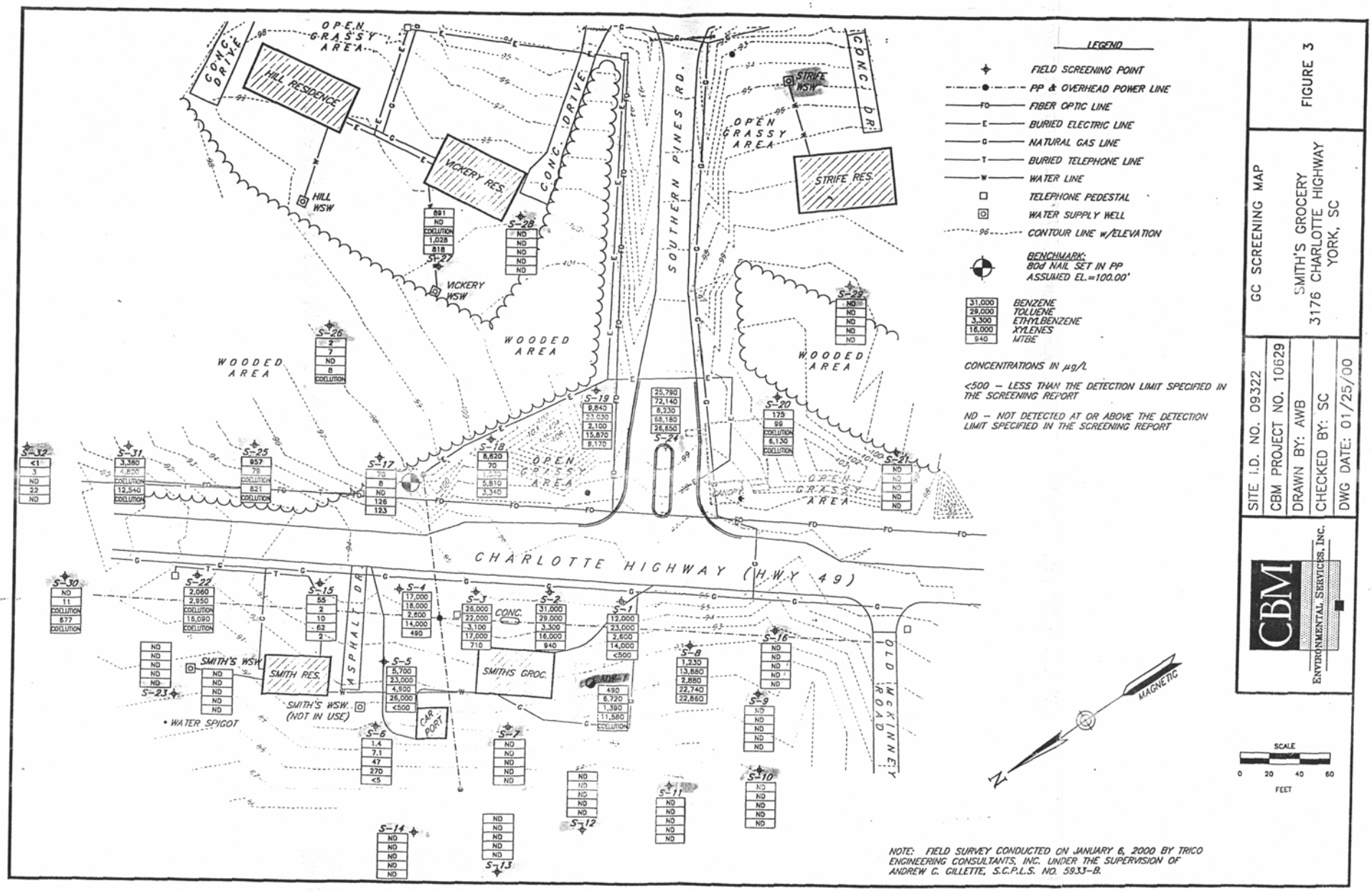
16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ___ft. Capacity_____gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services, Inc. Date: 9/27/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Ken Cyore Cert. No.: 1408
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Attachment B

From Rapid Assessment Report
February 2000



LEGEND

- FIELD SCREENING POINT
- PP & OVERHEAD POWER LINE
- FO — FIBER OPTIC LINE
- E — BURIED ELECTRIC LINE
- G — NATURAL GAS LINE
- T — BURIED TELEPHONE LINE
- W — WATER LINE
- TELEPHONE PEDESTAL
- WATER SUPPLY WELL
- 96 — CONTOUR LINE w/ELEVATION

BENCHMARK:
80d NAIL SET IN PP
ASSUMED EL.=100.00'

31,000	BENZENE
29,000	TOLUENE
3,300	ETHYLBENZENE
16,000	XYLENES
940	MTBE

CONCENTRATIONS IN µg/L

<500 – LESS THAN THE DETECTION LIMIT SPECIFIED IN THE SCREENING REPORT

ND – NOT DETECTED AT OR ABOVE THE DETECTION LIMIT SPECIFIED IN THE SCREENING REPORT

NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

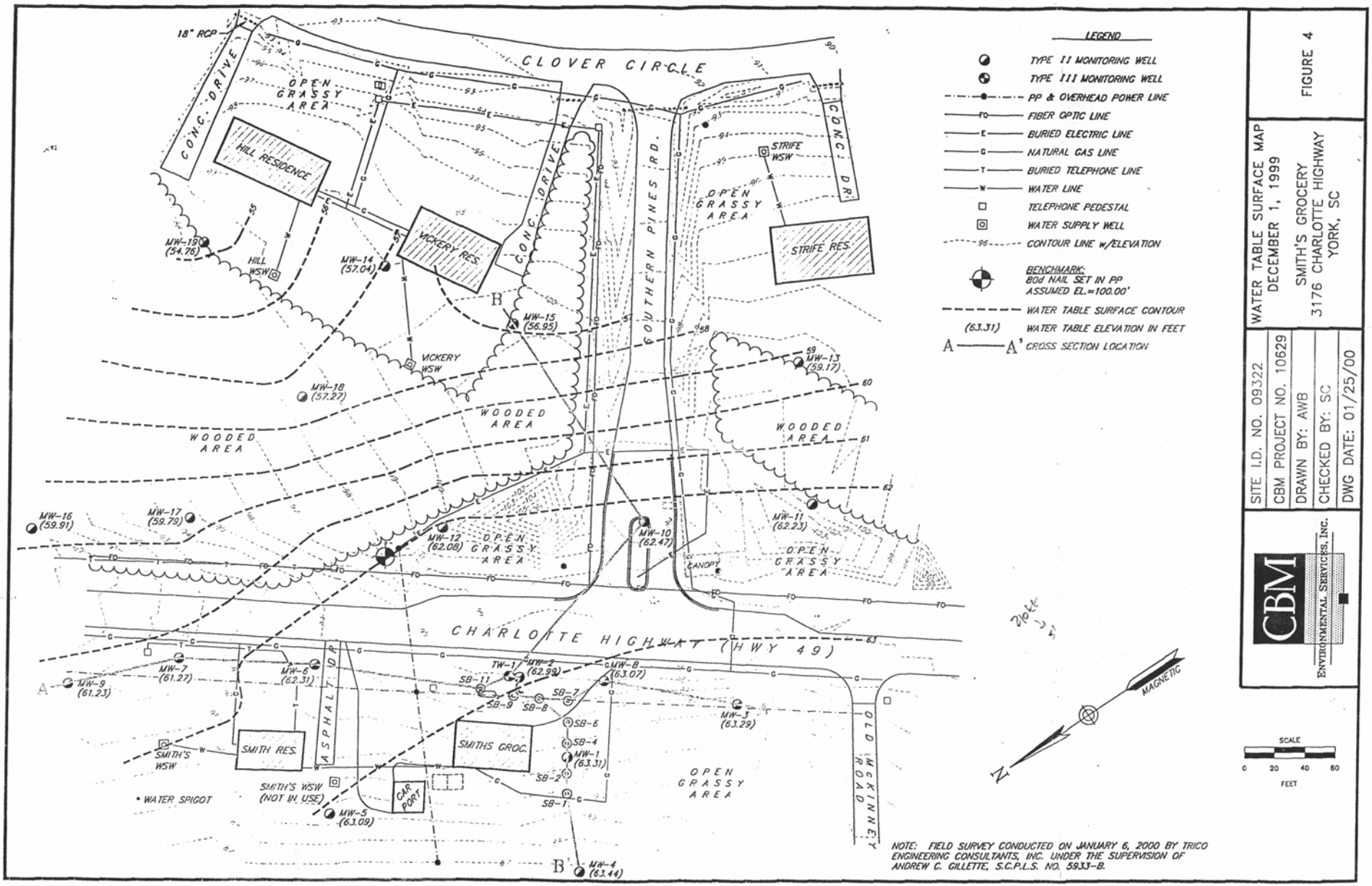
FIGURE 3

GC SCREENING MAP

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM ENVIRONMENTAL SERVICES, INC.



LEGEND

- TYPE II MONITORING WELL
- TYPE III MONITORING WELL
- PP & OVERHEAD POWER LINE
- FO — FIBER OPTIC LINE
- E — BURIED ELECTRIC LINE
- G — NATURAL GAS LINE
- T — BURIED TELEPHONE LINE
- W — WATER LINE
- TELEPHONE PEDESTAL
- WATER SUPPLY WELL
- 96 — CONTOUR LINE w/ELEVATION
- BENCHMARK: 80d NAIL SET IN PP ASSUMED EL.=100.00'
- WATER TABLE SURFACE CONTOUR
- (63.31) WATER TABLE ELEVATION IN FEET
- A — A' CROSS SECTION LOCATION

MAGNETIC

SCALE 0 20 40 60 FEET

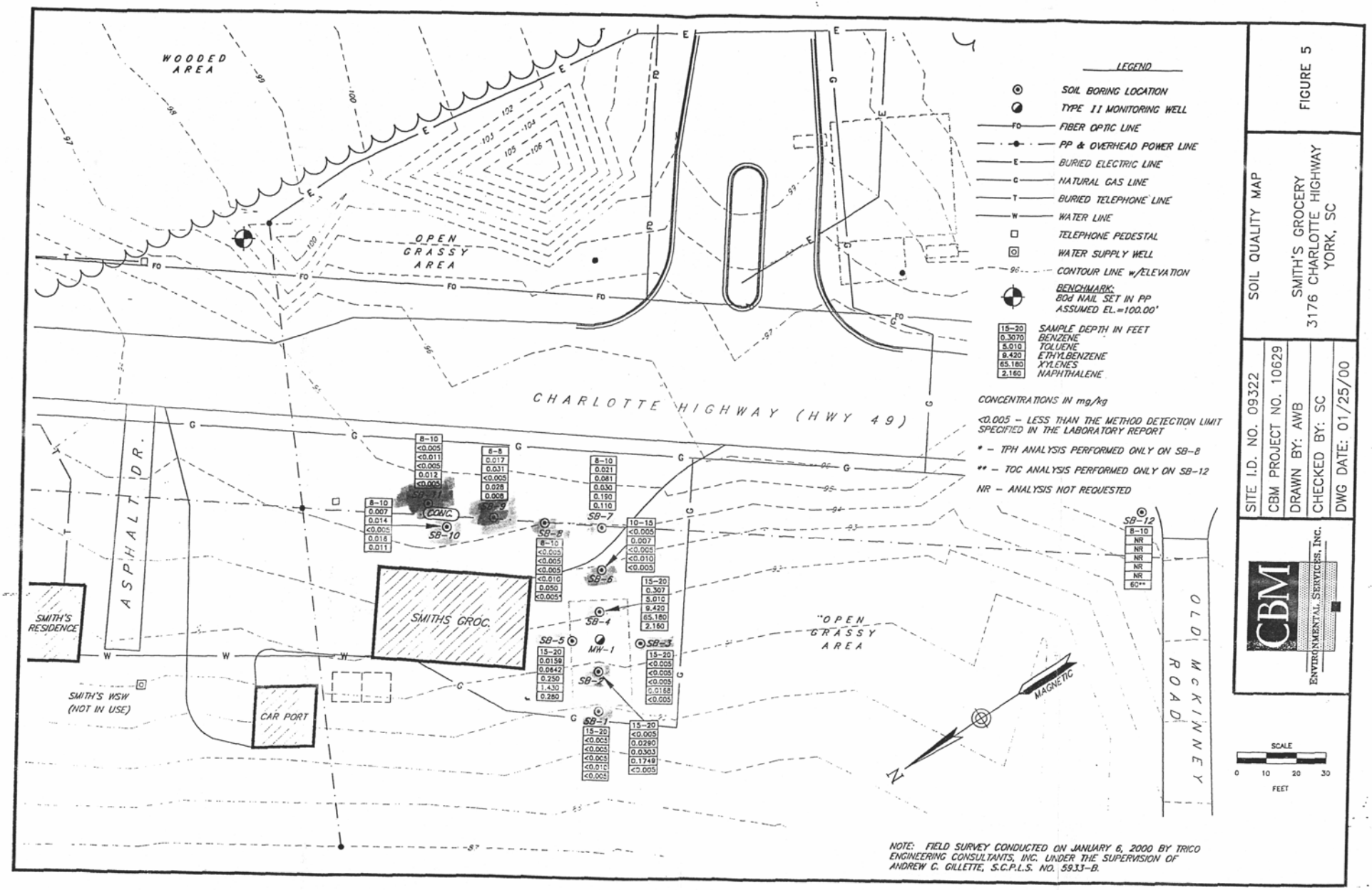
NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

FIGURE 4

WATER TABLE SURFACE MAP
DECEMBER 1, 1999
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM ENVIRONMENTAL SERVICES, INC.



NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

FIGURE 5

SOIL QUALITY MAP

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM ENVIRONMENTAL SERVICES, INC.

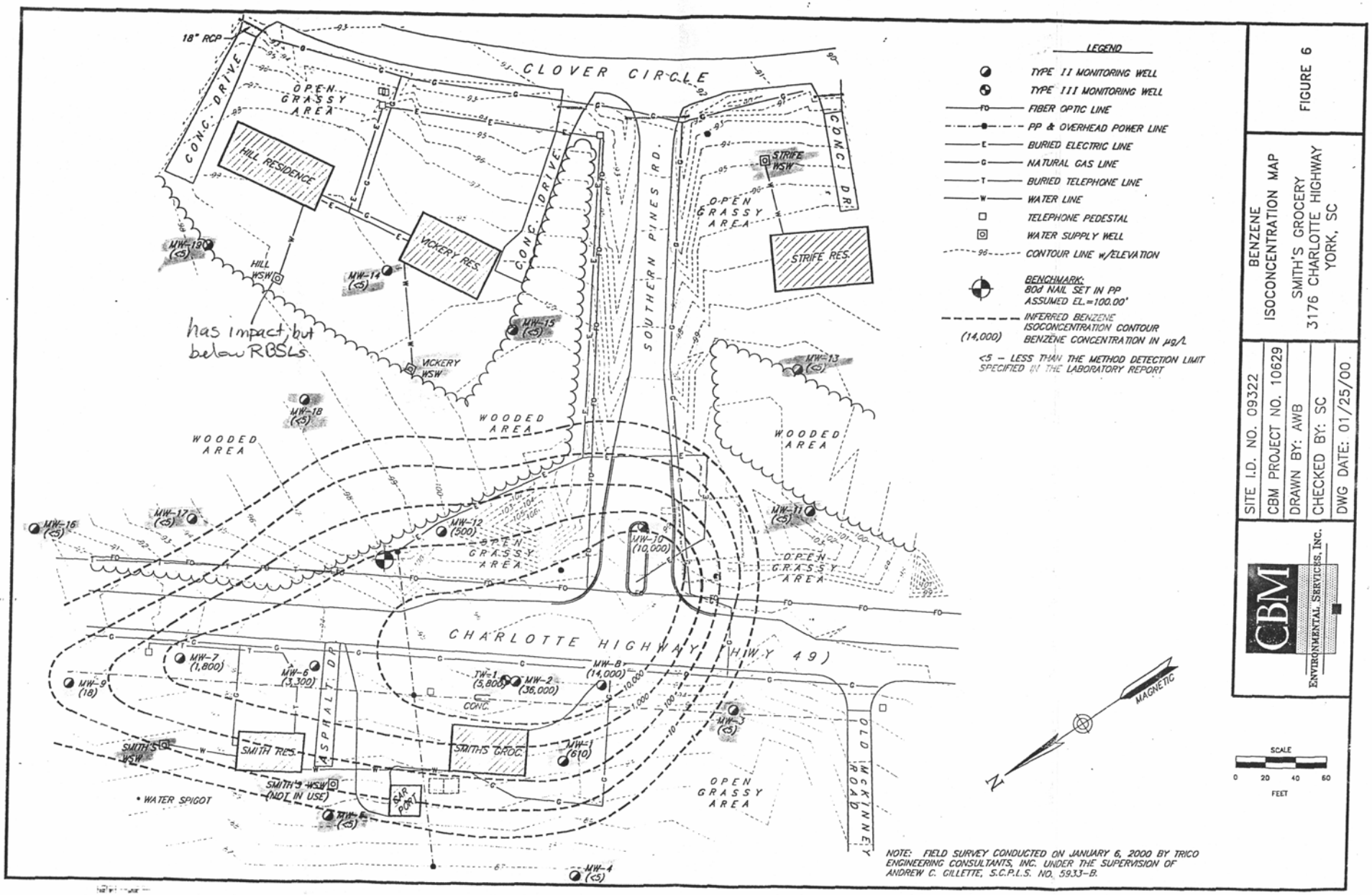

CLOVER CIRCLE
SOUTHERN PINES RD.
CONC. DRIVE
OPEN GRASSY AREA
HILL RESIDENCE
VICKERY RES.
STRIFE RES.
STRIFE WSW
HILL WSW
VICKERY WSW
MW-19 (<5)
MW-14 (<5)
MW-15 (<5)
MW-13 (<5)
MW-18 (<5)
MW-16 (<5)
MW-17 (<5)
MW-12 (500)
MW-10 (10,000)
MW-11 (<5)
WOODED AREA
has impact but below RBSLs
CHARLOTTE HIGHWAY (HWY 49)
MW-7 (1,800)
MW-6 (3,300)
MW-9 (18)
TW-1 (5,800)
MW-2 (36,000)
MW-8 (14,000)
MW-3 (<5)
ASPHALT DR.
SMITH RES.
SMITHS GROC.
MW-1 (610)
SMITH'S WSW
SMITH'S WSW (NOT IN USE)
WATER SPIGOT
SAP PORT
TW-2 (<5)
MW-4 (<5)
OLD MCKINNEY ROAD
MAGNETIC
SCALE
0 20 40 60
FEET
LEGEND
TYPE II MONITORING WELL
TYPE III MONITORING WELL
FIBER OPTIC LINE
PP & OVERHEAD POWER LINE
BURIED ELECTRIC LINE
NATURAL GAS LINE
BURIED TELEPHONE LINE
WATER LINE
TELEPHONE PEDESTAL
WATER SUPPLY WELL
CONTOUR LINE w/ELEVATION
BENCHMARK: 80d NAIL SET IN PP ASSUMED EL.=100.00'
INFERRED BENZENE ISOCONCENTRATION CONTOUR
(14,000) BENZENE CONCENTRATION IN µg/L
<5 - LESS THAN THE METHOD DETECTION LIMIT SPECIFIED IN THE LABORATORY REPORT
NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.
BENZENE ISOCONCENTRATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC
FIGURE 6
SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00
CBM
ENVIRONMENTAL SERVICES, INC.

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA[1]
SMITH'S GROCERY
DECEMBER 1, 1999

Well No.	Date Completed	Top of Casing Elevation	Depth to Water	Water Table Elevation	Well Depth	Screened Interval
MW-1	1/16/99	91.16	27.85	63.31	35	25-35
MW-2	11/15/99	94.57	31.58	62.99	38	23-38
MW-3	11/12/99	91.91	28.62	63.29	35	25-35
MW-4	11/11/99	86.20	22.76	63.44	27	17-27
MW-5	11/11/99	89.29	26.20	63.09	30	20-30
MW-6	11/12/99	93.91	31.60	62.31	37	27-37
MW-7	11/12/99	91.68	30.41	61.27	36	26-36
MW-8	11/16/99	94.72	31.65	63.07	38	23-38
MW-9	11/16/99	90.54	29.31	61.23	36	21-36
MW-10	11/16/99	99.77	37.30	62.47	44	29-44
MW-11	11/16/99	100.46	38.23	62.23	44	29-44
MW-12	11/17/99	99.61	37.53	62.08	44	29-44
MW-13	11/17/99	100.39	41.22	59.17	47	32-47
MW-14	11/18/99	98.89	41.85	57.04	50	35-50
MW-15	11/18/99	100.18	43.23	56.95	50	35-50
MW-16	11/18/99	89.91	30.00	59.91	37	22-37
MW-17	11/19/99	94.46	34.67	59.79	40	25-40
MW-18	11/19/99	98.14	40.87	57.27	46	31-46
MW-19	11/19/99	98.27	43.51	54.76	50	35-50
TW-1	11/15/99	94.72	32.00[2]	62.72	61	56-61

729

Notes:
1. Elevations relative to a temporary benchmark with an assumed datum of 100.00 feet; data reported in feet.
2. Depth to groundwater measured on January 24, 2000.

TABLE 3
SUMMARY OF RESULTS
SLUG TEST ANALYSES[1]
SMITH'S GROCERY

Well No.	Hydraulic Conductivity		Seepage Velocity[2]	
	ft/min	ft/day	ft/day	ft/year
MW-2	1.04×10^{-4}	0.15	0.006	2.19
MW-5	1.98×10^{-4}	0.29	0.012	4.38
MW-10	7.89×10^{-5}	0.11	0.004	1.46

Notes:
1. Slug tests conducted on December 1, 1999.
2. Seepage velocities calculated using the equation $V = K(dh/dl)/n_e$, where:
   K = hydraulic conductivity
   dh/dl = hydraulic gradient = 0.01 ft/ft.
   n_e = effective porosity = 0.25

TABLE 4
SUMMARY OF LABORATORY ANALYSES[1]
SOIL SAMPLES[2]
SMITH'S GROCERY

Soil Boring	Sample Depth	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	TPH 3550	TOC
SB-1	15 – 20'	<0.005	<0.005	<0.005	<0.010	<0.005	NR[3]	NR
SB-2	15 – 20'	<0.005	0.0290	0.0303	0.1749	<0.005	NR	NR
SB-3	15 – 20'	<0.005	<0.005	<0.005	0.0168	<0.005	NR	NR
SB-4	15 – 20'	**0.307**	**5.010**	**9.420**	**65.180**	**2.160**	NR	NR
SB-5	15 – 20'	**0.0159**	0.0642	0.250	1.430	**0.280**	NR	NR
SB-6	10 – 15'	<0.005	0.007	<0.005	<0.010	<0.005	NR	NR
SB-7	8 – 10'	**0.021**	0.081	0.030	0.190	0.110	NR	NR
SB-8	8 – 10'	<0.005	<0.005	<0.005	<0.010	0.050	<0.005	NR
SB-9	6 – 8'	**0.017**	0.031	<0.005	0.028	0.008	NR	NR
SB-10	8 – 10'	**0.007**	0.014	<0.005	0.016	0.011	NR	NR
SB-11	8 – 10'	<0.005	0.011	<0.005	0.012	<0.005	NR	NR
SB-12	8 – 10'	NR	NR	NR	NR	NR	NR	60
	RBSL[5]	0.005	1.666	1.337	43.503	0.213	----	----

173

Notes:

1. Analyses for BTEX constituents and naphthalene by Method 8260 with Method 5035 preparation; analyses for PAHs by Method 8270; analysis for TPH 3550 by Method 8015M; analysis for TOC by SW846 Method 9060M; all results reported in mg/kg.
2. Samples SB-1 through SB-5 were collected on November 19, 1999; samples SB-6 through SB-12 were collected on October 22, 1999.
3. Analysis not requested.
4. Concentrations in bold face type exceeded the RBSLs.
5. January 1998 Risk-Based Screening Levels for sandy soil where the vertical separation between the "worst case" soil sample and the water table is between 10 and 15 feet.

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

PROMOTE PROTECT PROSPER

1. LOCATION OF WELL:
County: York
System Name: Smith's Grocery
Latitude: 35° 03' 36" N
Longitude: 81° 07' 25" W
Distance and Direction from Road Intersections: Charlotte Hwy. & Old McKinney Rd.
Street Address & City of Well Location: 3176 Charlotte Hwy., York, SC
Sketch Map: See Attached

2. CUTTING SAMPLES: [ ] Yes [X] No
Geophysical Logs: [ ] Yes (please enclose) [X] No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
Red clay w/silt and some backfill	35'	35'
material consisting of trees, etc.		
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-1 Bentonite Seal 23' to 24'

4. OWNER OF WELL: Lois B. Smith
Address: 3176 Charlotte Hwy. York, SC 29745
Telephone No: (803) 684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118 Fort Mill, SC 29715
Telephone No: (803) 548-5989

5. WELL DEPTH (completed) 35 ft. Date Started: 1/16/99 Date Completed: 1/16/99

6. [ ] Mud Rotary [ ] Air Rotary [ ] Jetted [ ] Driven [X] Bored [ ] Cable tool [ ] Dug [ ] Other

7. USE: [ ] Domestic [ ] Irrigation [ ] Test Well [ ] Public Supply-Permit No. [ ] Air Conditioning [X] Monitor Well [ ] Industry [ ] Commercial [ ]

8. CASING: [X] Threaded [ ] Welded
Diam.: 2"
Type: [X] PVC [ ] Galvanized [ ] Steel [ ] Other
0 in. to 25 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0 ft.
Weight Sch 40 lb./ft.
Drive Shoe? [ ] Yes [X] No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 0.010" Length: 10'
Set Between: 25 ft. and 35 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis [ ] Yes (please enclose) [X] No

10. STATIC WATER LEVEL 27.32 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: [ ] Yes (please enclose) [X] No
Yield:

12. WATER QUALITY
Chemical Analysis [X] Yes [ ] No Bacterial Analysis [ ] Yes [X] No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) [X] Yes [ ] No
Installed from 24 ft. to 35 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? [X] Yes [ ] No
[X] Neat Cement [ ] Sand Cement [ ] Concrete [ ] Other
Depth: From 0 ft. to 23 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. direction
Hydrocarbon
Type well disinfected upon completion [ ] Yes [X] No Type: Amount: 0

16. PUMP: Date Installed: Not Installed [X]
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: [ ] Submersible [ ] Jet (deep) [ ] Jet (shallow) [ ] Reciprocating [ ] Turbine [ ] Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 2/9/99
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29715
Signed: Thomas Burkhalter Cert. No.: 1260
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections:
Charlotte Highway & Old McKinney Road

Street Address & City of Well Location:
3176 Charlotte Highway, York

Sketch Map:
See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	3'	3'
Reddish-brown silty micaceous clay	17'	20'
Tan micaceous silty clay	12'	32'
Light tan micaceous silty clay	3'	35'
Light tan micaceous silty sandy clay	3'	38'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-2
Bentonite Seal 20' - 21'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway
York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 38 ft.
Date Started: 11/15/99
Date Completed: 11/15/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE:
☐ Domestic ☐ Irrigation ☐ Test Well
☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well
☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 23 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC
Slot/Gauge: 10
Set Between: 23 ft. and 38 ft.
ft. and ft.
Diam.: 2"
Length: 15'
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
31.58 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 21 ft. to 38 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 20 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 63 ft. W direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cranmer/mm Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections:
Charlotte Highway & Old McKinney Road
Street Address & City of Well Location:
3176 Charlotte Highway, York

Sketch Map:
See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	4'	4'
Reddish-brown silty clay	5'	9'
Tan silty micaceous clay	6'	15'
Light tan silty micaceous clay	9'	24'
Light tan sandy clay	7'	31'
Light tan sandy silt	4'	35'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-3
Bentonite Seal 22' - 23'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway
York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 35 ft. Date Started: 11/12/99 Date Completed: 11/12/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 25 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 10'
Set Between: 25 ft. and 35 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
28.62 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 23 ft. to 35 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 22 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 120 ft. N direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cranmer /mtn Cert. No.: 1468
Authorized Representative

COPY MAIL TO S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections:
Charlotte Highway & Old McKinney Road

Street Address & City of Well Location:
3176 Charlotte Highway, York

Sketch Map:
See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	3'	3'
Reddish-brown sandy clay	5'	8'
Reddish-brown clayey silt	6'	14'
Brown to tan micaceous silty clay	5'	19'
Brown to tan silty sand	8'	27'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-4
Bentonite Seal 14' - 15'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 27 ft. Date Started: 11/11/99 Date Completed: 11/11/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 17 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 10'
Set Between: 17 ft. and 27 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
22.76 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 15 ft. to 27 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 14 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 78 ft. E direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/25/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cranmer / mfr Cert. No.: 1468
Authorized Representative

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:
County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W
Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road
Street Address & City of Well Location: 3176 Charlotte Highway, York
Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No
Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown micaceous silty clay	13'	13'
Light reddish-brown to tan micaceous clayey silt	12'	25'
Tan micaceous clayey silt	5'	30'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-5
Bentonite Seal 17' - 18'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289
Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 30 ft. Date Started: 11/11/99 Date Completed: 11/11/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 20 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 10'
Set Between: 20 ft. and 30 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 26.20 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 18 ft. to 30 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 17 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 164 ft. SW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cummings/mrn Cert. No.: 1468
Authorized Representative

... TO S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

DHEC — PROMOTE PROTECT PROSPER

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	4'	4'
Reddish-brown micaceous silty clay	5'	9'
Brown to tan micaceous silty clay	4'	13'
Purple-brown micaceous silty clay	12'	25'
Light brown to tan micaceous silty clay	8'	33'
Tan sandy clay	4'	37'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS: MW-6 Bentonite Seal 24' - 25'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed): 37 ft. Date Started: 11/12/99 Date Completed: 11/12/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 27 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 10'
Set Between: 27 ft. and 37 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL: 31.60 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 25 ft. to 37 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 24 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 180 ft. SSW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimmings Jr. for Authorized Representative Cert. No.: 1468

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections:
Charlotte Highway & Old McKinney Road

Street Address & City of Well Location:
3176 Charlotte Highway, York

Sketch Map:
See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	5'	5'
Reddish-brown micaceous silty clay	3'	8'
Light brown to tan micaceous silty clay	10'	18'
Dark reddish-brown micaceous silty clay	10'	28'
Light tan silty sand	8'	36'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-7
Bentonite Seal 23' - 24'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway
York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 36 ft. Date Started: 11/12/99 Date Completed: 11/12/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ____ ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐ ____

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 26 ft. depth
____ in. to ____ ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 10'
Set Between: 26 ft. and 36 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
30.41 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: ____

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 24 ft. to 36 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 23 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 268 ft. SW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type: ____ Amount: ____

16. PUMP: Date Installed: ____ Not Installed ☒
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimins /mkn Cert. No.: 1468
Authorized Representative

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County:	System Name:
York	Smith's Grocery
Latitude:	Longitude:
35° 02' 30" N	81° 08' 48" W

Distance and Direction from Road Intersections:
Charlotte Highway & Old McKinney Road
Street Address & City of Well Location:
3176 Charlotte Highway, York

Sketch Map:
See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No
Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	3'	3'
Reddish-brown micaceous silty clay	7'	10'
Tan micaceous silty clay	24'	34'
Tan micaceous silty sandy clay	4'	38'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-8
Bentonite Seal 20' - 21'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway
York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 38 ft. Date Started: 11/16/99 Date Completed: 11/16/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ____ ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐ ____

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 23 ft. depth
____ in. to ____ ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 23 ft. and 38 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
31.65 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: ____

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 21 ft. to 38 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 20 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 57 ft. NW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No Type: ____ Amount: ____

16. PUMP: Date Installed: ____ Not Installed ☒
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 12/8/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimmings / MSm Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 4 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

DHEC — PROMOTE PROTECT PROSPER

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections:
Charlotte Highway & Old McKinney Road

Street Address & City of Well Location:
3176 Charlotte Highway, York

Sketch Map:
See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown micaceous silty clay	13'	13'
Brown micaceous silty clay	5'	18'
Tan micaceous silty clay	11'	29'
Light tan micaceous silty sandy clay	7'	36'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-9
Bentonite Seal 18' - 19'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway
York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 36 ft. Date Started: 11/16/99 Date Completed: 11/16/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 21 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 21 ft. and 36 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
29.31 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 19 ft. to 36 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 18 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 337 ft. SW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimmings /MW Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

DHEC — PROMOTE PROTECT PROSPER

1. LOCATION OF WELL:

County:	System Name:
York	Smith's Grocery
Latitude:	Longitude:
35° 02' 30" N	81° 08' 48" W

Distance and Direction from Road Intersections:
Charlotte Highway & Old McKinney Road

Street Address & City of Well Location:
3176 Charlotte Highway, York

Sketch Map:
See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown silty clay	6'	6'
Brown to tan silty sand	7'	13'
Tan silty sand with quartz fragments	5'	18'
Tan micaceous silty clay	11'	29'
Tan micaceous clayey silt	9'	38'
Light tan sandy clay	6'	44'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-10
Bentonite Seal 26' - 27'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway
York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 44 ft. Date Started: 11/16/99 Date Completed: 11/16/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug
☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE:
☐ Domestic ☐ Public Supply-Permit No. ____ ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☒ Monitor Well ☐ ____

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 29 ft. depth
____ in. to ____ ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 29 ft. and 44 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
37.30 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: ____

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 27 ft. to 44 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 26 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 165 ft. NW direction
Petroleum Type well disinfected upon completion ☐ Yes ☒ No Type: ____ Amount: ____

16. PUMP: Date Installed: ____ Not Installed ☒
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cramer Jr. Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

DHEC — PROMOTE PROTECT PROSPER

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections:
Charlotte Highway & Old McKinney Road

Street Address & City of Well Location:
3176 Charlotte Highway, York

Sketch Map:
See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brown silty clay	3'	3'
Reddish-brown silty clay	2'	5'
Tan micaceous silty clay	7'	12'
Brown micaceous silty clay	12'	24'
Tan micaceous silty clay	13'	37'
Tan to brown silty sand	7'	44'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-11
Bentonite Seal 26' - 27'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 44 ft. Date Started: 11/16/99 Date Completed: 11/16/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug
☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE:
☐ Domestic ☐ Public Supply-Permit No. ____ ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☒ Monitor Well ☐ ____

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 29 ft. depth
____ in. to ____ ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 29 ft. and 44 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
38.23 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: ____

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 27 ft. to 44 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 26 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 232 ft. N direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No Type: ____ Amount: ____

16. PUMP: Date Installed: ____ Not Installed ☒
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimmins/mm Cert. No.: 1468
Authorized Representative

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

DHEC — PROMOTE PROTECT PROSPER

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed): 44 ft. Date Started: 11/17/99 Date Completed: 11/17/99

6. [ ] Mud Rotary [ ] Jetted [X] Bored [ ] Dug [ ] Air Rotary [ ] Driven [ ] Cable tool [ ] Other

7. USE: [ ] Domestic [ ] Public Supply-Permit No. ____ [ ] Industry [ ] Irrigation [ ] Air Conditioning [ ] Commercial [ ] Test Well [X] Monitor Well [ ] ____

8. CASING: [X] Threaded [ ] Welded
Diam.: 2"
Type: [X] PVC [ ] Galvanized [ ] Steel [ ] Other
2 in. to 29 ft. depth
____ in. to ____ ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? [ ] Yes [X] No

2. CUTTING SAMPLES: [ ] Yes [X] No
Geophysical Logs: [ ] Yes (please enclose) [X] No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown silty clay	4'	4'
Reddish-brown micaceous silty clay	4'	8'
Brown to tan micaceous silty clay	20'	28'
Tan micaceous silty clay	10'	38'
Light tan micaceous silty sandy clay	6'	44'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 29 ft. and 44 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis [ ] Yes (please enclose) [X] No

10. STATIC WATER LEVEL: 37.53 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: [ ] Yes (please enclose) [X] No
Yield: ____

12. WATER QUALITY
Chemical Analysis [X] Yes [ ] No Bacterial Analysis [ ] Yes [X] No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) [X] Yes [ ] No
Installed from 27 ft. to 44 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED? [X] Yes [ ] No
[X] Neat Cement [ ] Sand Cement [ ] Concrete [ ] Other
Depth: From 0 ft. to 26 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 175 ft. W direction
Petroleum
Type well disinfected upon completion [ ] Yes [X] No
Type: ____ Amount: ____

16. PUMP: Date Installed: ____ Not Installed [X]
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: [ ] Submersible [ ] Jet (shallow) [ ] Turbine [ ] Jet (deep) [ ] Reciprocating [ ] Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cummings/mfm Cert. No.: 1468
Authorized Representative

3. REMARKS MW-12
Bentonite Seal 26' - 27'

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

DHEC — PROMOTE PROTECT PROSPER

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown silty micaceous clay	8'	8'
Brown micaceous silty clay	10'	18'
Tan micaceous silty clay	5'	23'
Brown micaceous silty clay	8'	31'
Tan micaceous silty clay	9'	40'
Light tan micaceous silty sandy clay	7'	47'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-13
Bentonite Seal 28' - 29'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 47 ft. Date Started: 11/17/99 Date Completed: 11/17/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 32 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 32 ft. and 47 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 41.22 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 29 ft. to 47 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 28 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 340 ft. NNW direction
Petroleum Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimmins Jr. for Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/98) COPY 1 MAIL TO S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

DHEC — PROMOTE PROTECT PROSPER

1. LOCATION OF WELL:

County:	System Name:
York	Smith's Grocery
Latitude:	Longitude:
35° 02' 30" N	81° 08' 48" W

Distance and Direction from Road Intersections:
Charlotte Highway & Old McKinney Road

Street Address & City of Well Location:
3176 Charlotte Highway, York

Sketch Map:
See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
Brown to reddish-brown silty clay	13'	13'
Light tan micaceous silty clay	7'	20'
Brown micaceous silty clay	8'	28'
Tan micaceous silty clay	15'	43'
Brown silty sandy clay	7'	50'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-14
Bentonite Seal 32' - 33'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway
York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 50 ft. Date Started: 11/18/99 Date Completed: 11/18/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 35 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 35 ft. and 50 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
41.85 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 33 ft. to 50 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 32 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 350 ft. W direction
Petroleum Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cummings /mkn Cert. No.: 1468
Authorized Representative

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections:
Charlotte Highway & Old McKinney Road

Street Address & City of Well Location:
3176 Charlotte Highway, York

Sketch Map:

See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brown silty clay	2'	2'
Reddish-brown micaceous silty clay	11'	13'
Brown micaceous silty clay	11'	24'
Reddish-brown micaceous silty clay	8'	32'
Tan micaceous silty clay	12'	44'
Light tan silty sandy clay	6'	50'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-15
Bentonite Seal 32' - 33'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway
York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 50 ft. Date Started: 11/18/99 Date Completed: 11/18/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 35 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 35 ft. and 50 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
43.23 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 33 ft. to 50 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 32 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 290 ft. NW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cranmer /MFm Cert. No.: 1468
Authorized Representative

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 37 ft. Date Started: 11/18/99 Date Completed: 11/18/99

6. [ ] Mud Rotary [ ] Air Rotary [ ] Jetted [ ] Driven [X] Bored [ ] Cable tool [ ] Dug [ ] Other

7. USE: [ ] Domestic [ ] Irrigation [ ] Test Well [ ] Public Supply-Permit No. _____ [ ] Air Conditioning [X] Monitor Well [ ] Industry [ ] Commercial [ ] _____

8. CASING: [X] Threaded [ ] Welded
Diam.: 2"
Type: [X] PVC [ ] Galvanized [ ] Steel [ ] Other
2 in. to 22 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? [ ] Yes [X] No

2. CUTTING SAMPLES: [ ] Yes [X] No
Geophysical Logs: [ ] Yes (please enclose) [X] No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	5'	5'
Reddish-brown micaceous silty clay	9'	14'
Brown micaceous silty clay	5'	19'
Tan micaceous silty clay	10'	29'
Dark brown micaceous silty clay	8'	37'
"		
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 22 ft. and 37 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis [ ] Yes (please enclose) [X] No

10. STATIC WATER LEVEL 30.00 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: [ ] Yes (please enclose) [X] No
Yield: _____

12. WATER QUALITY
Chemical Analysis [X] Yes [ ] No Bacterial Analysis [ ] Yes [X] No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) [X] Yes [ ] No
Installed from 20 ft. to 37 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? [X] Yes [ ] No
[X] Neat Cement [ ] Sand Cement [ ] Concrete [ ] Other
Depth: From 0 ft. to 19 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 389 ft. SW direction
Petroleum
Type well disinfected upon completion [ ] Yes [X] No Type: _____ Amount: _____

16. PUMP: Date Installed: _____ Not Installed [X]
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity _____ gpm
TYPE: [ ] Submersible [ ] Jet (deep) [ ] Jet (shallow) [ ] Reciprocating [ ] Turbine [ ] Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/29/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pat Cummings Jr. Cert. No.: 1468
Authorized Representative

3. REMARKS MW-16
Bentonite Seal 19' - 20'

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown micaceous silty clay	13'	13'
Brown to tan micaceous silty clay	15'	28'
Light tan micaceous silty clay	7'	35'
Light tan silty sandy clay	5'	40'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-17
Bentonite Seal 22' - 23'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 40 ft. Date Started: 11/19/99 Date Completed: 11/19/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 25 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 25 ft. and 40 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 34.67 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 23 ft. to 40 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 22 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 297 ft. SW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cunningham Cert. No.: 1468
Authorized Representative

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
Tan micaceous silty clay	2'	2'
Reddish-brown micaceous silty clay	8'	10'
Light brown micaceous silty clay	5'	15'
Tan micaceous silty clay	10'	25'
Light tan micaceous silty clay	15'	40'
Tan micaceous silty sandy clay	6'	46'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-18
Bentonite Seal 28' - 29'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 46 ft. Date Started: 11/19/99 Date Completed: 11/19/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 31 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No.

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 31 ft. and 46 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 40.87 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 29 ft. to 46 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 28 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 297 ft. W direction
Petroleum Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/24/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cimino / mtn Cert. No.: 1468
Authorized Representative

D H E C

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York | System Name: Smith's Grocery

Latitude: 35° 02' 30" N | Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
Brown silty sand	3'	3'
Reddish-brown micaceous silty clay	4'	7'
Brown micaceous silty clay	7'	14'
Light tan micaceous clayey silt	9'	23'
Light brown micaceous silty clay	17'	40'
Dark brown micaceous silty clay	10'	50'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-19 Bentonite Seal 32' - 33'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 50 ft. Date Started: 11/19/99 Date Completed: 11/19/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 35 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 35 ft. and 50 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 43.51 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 33 ft. to 50 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 32 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 420 ft. W direction
Petroleum Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/24/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimmings/mtm Cert. No.: 1468
Authorized Representative

MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections:
Charlotte Highway & Old McKinney Road

Street Address & City of Well Location:
3176 Charlotte Highway, York

Sketch Map:
See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brown micaceous silty clay	3'	3'
Reddish-brown micaceous silty clay	19'	22'
Brown to tan micaceous silty clay	11'	33'
Light tan micaceous silty sandy clay	7'	40'
Light tan clayey sand	21'	61'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS TW-1
Bentonite Seal 53' - 54'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway
York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 61 ft.
Date Started: 11/15/99
Date Completed: 11/23/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug
☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE:
☐ Domestic ☐ Public Supply-Permit No. _____ ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☒ Monitor Well ☐ _____

8. CASING: ☒ Threaded ☐ Welded
Diam.: 6"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
6 in. to 40 ft. depth
2 in. to 61 ft. depth
Height: Above/Below
Surface 0.10 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 5'
Set Between: 56 ft. and 61 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
23.64 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 54 ft. to 61 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0/0 ft. to 40/53 ft.

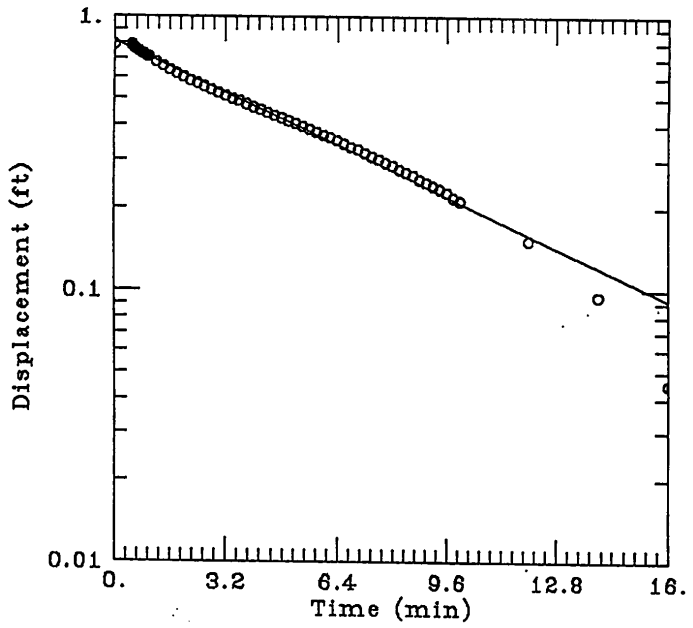
15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 67 ft. W direction
Petroleum Type well disinfected upon completion ☐ Yes ☒ No
Type: _____
Amount: _____

16. PUMP: Date Installed: _____ Not Installed ☒
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: _____ Cert. No.: 1468
Authorized Representative

CBM ENVIRONMENTAL SERVICES,INC	Client: LOIS SMITH
Project No.: 10629	Location: YORK, SOUTH CAROLINA

SMITH'S GROCERY - SLUG TEST - MW-2



DATA SET:
MW2.DAT
12/07/99

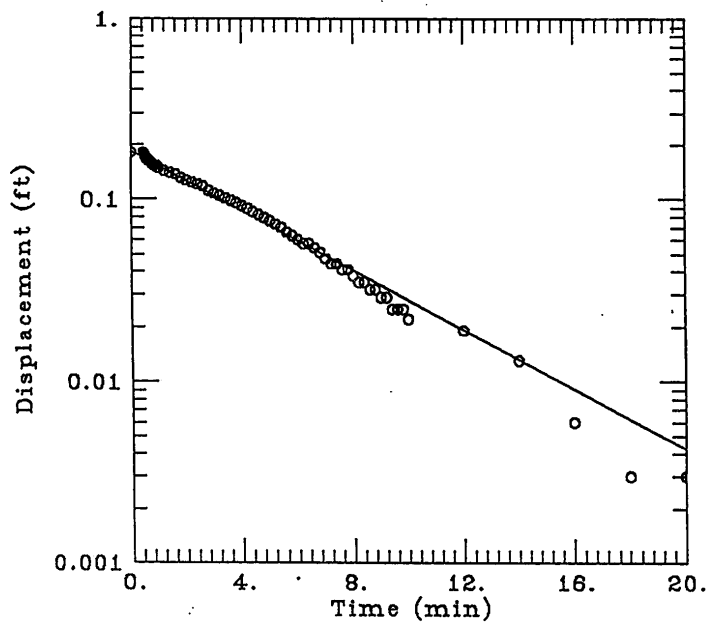
AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
12/1/1999
TEST WELL:
MW-2
OBS. WELL:
N/A

ESTIMATED PARAMETERS:
K = 0.0001038 ft/min
y0 = 0.814 ft

TEST DATA:
H0 = 0.787 ft
rc = 0.083 ft
rw = 0.354 ft
L = 15. ft
b = 6.38 ft
H = 31.62 ft

CBM ENVIRONMENTAL SERVICES,INC	Client: LOIS SMITH
Project No.: 10629	Location: YORK, SOUTH CAROLINA

SMITH'S GROCERY - SLUG TEST - MW-5



DATA SET:
MW5.DAT
12/07/99

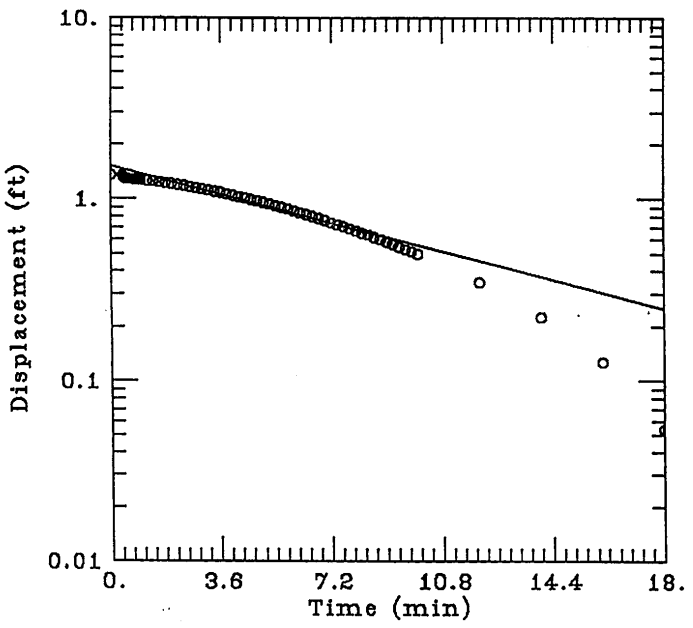
AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
12/1/1999
TEST WELL:
MW-5
OBS. WELL:
N/A

ESTIMATED PARAMETERS:
K = 0.0001975 ft/min
y0 = 0.1833 ft

TEST DATA:
H0 = 0.18 ft
rc = 0.083 ft
rw = 0.354 ft
L = 10. ft
b = 5.63 ft
H = 24.37 ft

CBM ENVIRONMENTAL SERVICES,INC	Client: LOIS SMITH
Project No.: 10629	Location: YORK, SOUTH CAROLINA

SMITH'S GROCERY – SLUG TEST – MW-10



DATA SET:
MW10.DAT
12/07/99

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
12/1/1999
TEST WELL:
MW-10
OBS. WELL:
N/A

ESTIMATED PARAMETERS:
K = 7.8891E-05 ft/min
y0 = 1.514 ft

TEST DATA:
H0 = 1.345 ft
rc = 0.083 ft
rw = 0.354 ft
L = 15. ft
b = 5.75 ft
H = 37.24 ft

CBM
ENVIRONMENTAL SERVICES, INC.

RECEIVED
JAN 19 2001
Bureau of Underground
Storage Tank Management

FAX COVER SHEET

To: SRIRAM MADABHUSHI
From: SCOTT BALL
Company: DHEC
Date: 1/19/01
Fax No.:
No. Pages: 24 (Including Cover)
Phone No.:
Regarding: SMITH'S GROCERY

____Urgent ___✓For Review ____Please Comment ____Please Call Me

Notes/Comments: SUMMARY OF ANALYTICAL RESULTS FOR HILL AND VICKERY WATER SUPPLY WELL SAMPLES OCTOBER, 2000 → DECEMBER 2000
COPIES OF ANALYTICAL REPORTS INCLUDED

Fax Number: 803 548-5892
P. O. Box 411387, Charlotte NC 28241
377 Carowinds Boulevard, Suite 118, Fort Mill SC 29715
Phone Number: 803 548-5989

SUMMARY OF GROUNDWATER ANALYTICAL DATA[1]
WATER SUPPLY WELLS
SMITH'S GROCERY
OCTOBER 2000 THROUGH DECEMBER 2000

Well ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
Vickery	10/19/00	<2	<2	<2	<2	<2	<5
	11/29/00	1.1	<1	<1	<1	<5	<5
	12/26/00	<1	<1	<1	<1	<5	<5
Hill	10/19/00	<2	<2	<2	<2	<2	<5
	11/29/00	<1	<1	<1	<1	<5	<5
	12/26/00	<1	<1	<1	<1	<5	<5

CBM ENVIRONMENTAL TEL:8035485892 Jan 19'01 15:10 No.011 P.03

NOV 0 2 2000

3946728923

TestAmerica INCORPORATED

Division/Laboratory Name:

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
Compliance Monitoring

Client Name: CBM ENVIRONMENTAL Client #: 2175
Address: 377 CAROWINDS BLVD, SUITE 118
City/State/Zip Code: FORT MILL, SC 29708
Project Manager: SCOTT BALL
Telephone Number: 803-548-5989 Fax: 803-548-5892
Sampler Name: (Print Name) SHANNON COTTRILL
Sampler Signature:

Project Name: SMITH'S GROCERY
Project #: 10629
Site/Location ID: State: SC
Report To: SCOTT BALL
Invoice To: CBM ENVIRONMENTAL SERVICES
Quote #: PO#: 13595

TAT
✓ Standard
___ Rush (surcharges may apply)
Date Needed: 10/27/00 (5-DAY TURN)
Fax Results: (Y) N

Matrix: SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other
Preservation & # of Containers: HNO_3, HCl, NaOH, H_2SO_4, Methanol, None, Other (Specify)
Analyze For: 8260B - BTEX + MTBE + NAP
BC 212783

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	HCl	8260B	QC Deliverables: None / Level 2 (Batch QC) / Level 3 / Level 4 / Other:	REMARKS
VICKERY (PRE)	10/19/00	17:35	G		DW	3	✓		151379
VICKERY (POST)	"	17:46	G		DW	3	✓		386
HILL (PRE)	"	18:00	G		DW	3	✓		381
HILL (POST)	"	18:15	G		DW	3	✓		382

Fax COC to Chariotte office FAX: (704) 399-2078

Special Instructions:

Relinquished By:	Date: 10/20/00	Time:	Received By:	Date: 10.20.00	Time: 1550	
Relinquished By:	Date: 10/20/00	Time: 1600	Received By:	Date:	Time:	
Relinquished By:	Date:	Time:	Received By: C. Allen	Date: 10-21-00	Time: 0900	

LABORATORY COMMENTS:
Init Lab Temp: 2°
Rec Lab Temp:
Custody Seals: Y (N) N/A
Bottles Supplied by TestAmerica: (Y) N
Method of Shipment:

SB, JH, file

RECEIVED NOV 0 2 2000

TEST AMERICA, INC.-NASHVILLE

COOLER RECEIPT FORM

Client: Com Env - 2175 BC# 212783

Cooler Received On: 10-21-00 And Opened On: 10-21-00 By: Cray Allen

Cray R. Allen
(Signature)

1. Temperature of Cooler when opened 2 Degrees Celsius
2. Were custody seals on outside of cooler?..... YES (NO)
   a. If yes, how many, what kind and where:_____
3. Were custody seals on containers and intact?..... (NO) YES
4. Were the seals intact, signed, and dated correctly?..... (YES) NO
5. Were custody papers inside cooler?..... (YES) NO
6. Were custody papers properly filled out (ink,signed,etc)?..... (YES) NO
7. Did you sign the custody papers in the appropriate place?..... (YES) NO
8. What kind of packing material used? (Bubblewrap) Peanuts Vermiculite Other None
9. Was sufficient ice used (if appropriate)?..... (YES) NO
10. Did all bottles arrive in good condition(unbroken)?..... (YES) NO
11. Were all bottle labels complete (#,date,signed,pres,etc)?..... (YES) NO
12. Did all bottle labels and tags agree with custody papers?..... (YES) NO
13. Were correct bottles used for the analysis requested?..... (YES) NO
14. a. Were VOA vials received?..... (YES) NO
    b. Was there any observable head space present in any VOA vial?..... (NO) YES
15. Was sufficient amount of sample sent in each bottle?..... (YES) NO
16. Were correct preservatives used?..... (YES) NO
17. Was residual chlorine present?..... (NO) YES
17. Corrective action taken, if necessary:

    See attached for resolution

TestAmerica INCORPORATED

RECEIVED NOV 0 2 2000

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
PO BOX 411387
CHARLOTTE, NC 28241

Lab Number: 00-A151379
Sample ID: VICKERY (PRE)
Sample Type: Ground water
Site ID:

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: SHANNON COTTRILL

Date Collected: 10/19/00
Time Collected: 17:35
Date Received: 10/21/00
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	83.8	ug/l	2.0	2.0	1	10/29/00	1:51	C.Bates	8260B	6360
Ethylbenzene	ND	ug/l	2.0	2.0	1	10/29/00	1:51	C.Bates	8260B	6360
Naphthalene	ND	ug/l	5.0	5.0	1	10/29/00	1:51	C.Bates	8260B	6360
Toluene	ND	ug/l	2.0	2.0	1	10/29/00	1:51	C.Bates	8260B	6360
Xylenes, Total	25.9	ug/l	2.0	2.0	1	10/29/00	1:51	C.Bates	8260B	6360
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	10/29/00	1:51	C.Bates	8260B	6360

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	83.	71. - 136.
VOA Surr, Toluene d8	109.	69. - 129.
VOA Surr, 4-BFB	93.	65. - 122.
VOA Surr, DBFM	91.	61. - 139.

= Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica INCORPORATED

RECEIVED NOV 0 2 2000

ANALYTICAL REPORT

Laboratory Number: 00-A151379
Sample ID: VICKERY (PRE)

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 10/30/00

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica INCORPORATED

RECEIVED NOV 0 2 2000

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
PO BOX 411387
CHARLOTTE, NC 28241

Lab Number: 00-A151380
Sample ID: VICKERY (POST)
Sample Type: Ground water
Site ID:

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: SHANNON COTTRILL

Date Collected: 10/19/00
Time Collected: 17:46
Date Received: 10/21/00
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	10/29/00	2:30	C.Bates	8260B	6360
Ethylbenzene	ND	ug/l	2.0	2.0	1	10/29/00	2:30	C.Bates	8260B	6360
Naphthalene	ND	ug/l	5.0	5.0	1	10/29/00	2:30	C.Bates	8260B	6360
Toluene	ND	ug/l	2.0	2.0	1	10/29/00	2:30	C.Bates	8260B	6360
Xylenes, Total	ND	ug/l	2.0	2.0	1	10/29/00	2:30	C.Bates	8260B	6360
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	10/29/00	2:30	C.Bates	8260B	6360

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	98.	71. - 136.
VOA Surr, Toluene d8	102.	69. - 129.
VOA Surr, 4-BFB	90.	65. - 122.
VOA Surr, DBFM	96.	61. - 139.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 00-A151380
Sample ID: VICKERY (POST)

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 10/30/00

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica INCORPORATED

RECEIVED NOV 0 2 2000

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
PO BOX 411387
CHARLOTTE, NC 28241

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: SHANNON COTTRILL

Lab Number: 00-A151381
Sample ID: HILL (PRE)
Sample Type: Ground water
Site ID:

Date Collected: 10/19/00
Time Collected: 18:00
Date Received: 10/21/00
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	10/29/00	3:09	C.Bates	8260B	6360
Ethylbenzene	ND	ug/l	2.0	2.0	1	10/29/00	3:09	C.Bates	8260B	6360
Naphthalene	ND	ug/l	5.0	5.0	1	10/29/00	3:09	C.Bates	8260B	6360
Toluene	ND	ug/l	2.0	2.0	1	10/29/00	3:09	C.Bates	8260B	6360
Xylenes, Total	ND	ug/l	2.0	2.0	1	10/29/00	3:09	C.Bates	8260B	6360
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	10/29/00	3:09	C.Bates	8260B	6360

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	104.	71. - 136.
VOA Surr, Toluene d8	97.	69. - 129.
VOA Surr, 4-BFB	89.	65. - 122.
VOA Surr, DBFM	99.	61. - 139.

= Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica INCORPORATED

RECEIVED NOV 02 2000

ANALYTICAL REPORT

Laboratory Number: 00-A151381
Sample ID: HILL (PRE)

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 10/30/00

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica INCORPORATED

RECEIVED
NOV 0 2 2000

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
PO BOX 411387
CHARLOTTE, NC 28241

Lab Number: 00-A151382
Sample ID: HILL (POST)
Sample Type: Ground water
Site ID:

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: SHANNON COTTRILL

Date Collected: 10/19/00
Time Collected: 18:15
Date Received: 10/21/00
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	10/29/00	3:48	C.Bates	8260B	6360
Ethylbenzene	ND	ug/l	2.0	2.0	1	10/29/00	3:48	C.Bates	8260B	6360
Naphthalene	ND	ug/l	5.0	5.0	1	10/29/00	3:48	C.Bates	8260B	6360
Toluene	ND	ug/l	2.0	2.0	1	10/29/00	3:48	C.Bates	8260B	6360
Xylenes, Total	ND	ug/l	2.0	2.0	1	10/29/00	3:48	C.Bates	8260B	6360
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	10/29/00	3:48	C.Bates	8260B	6360

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	102.	71. - 136.
VOA Surr, Toluene d8	101.	69. - 129.
VOA Surr, 4-BFB	90.	65. - 122.
VOA Surr, DBFM	99.	61. - 139.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica INCORPORATED

RECEIVED NOV 0 2 2000

ANALYTICAL REPORT

Laboratory Number: 00-A151382
Sample ID: HILL (POST)

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 10/30/00

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

21406

30636 RECEIVED

TestAmerica INCORPORATED

Division/Laboratory Name: Charlotte

RECEIVED JAN 19 2001 Bureau of Underground Storage Tank Management

RECEIVED FEB 22 2000 FILE COPY

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes? Compliance Monitoring

Client Name: CBM Environmental Client #: 2175

Address: 377 Carolinda Blvd, Suite 114

City/State/Zip Code: Fort Mill, SC 29708

Project Manager: Scott Ball

Telephone Number: 803 548-5989 Fax: 803 548-5982

Sampler Name: (Print Name) SONYA PUNCH

Sampler Signature: Sonya Punch

Project Name: Smith's Grocery

Project #: 10629

Site/Location ID: 09322 State: SC

Report To: Scott Ball

Invoice To: CBM - Accounts

Quote #: PO#: 13786

TAT: X Standard; ___ Rush (surcharges may apply)

Date Needed: 5 days 12/5/05

Fax Results: (Y) N

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix (SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other)	Preservation & # of Containers: HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	Analyze For: 8260 - BTEX, MTBE, Naphthalene	QC Deliverables	REMARKS
Vickery WSW	11/29	840	G	-	GW		3						✓	None	170581
Third WSW	11/29	845	G	-	GW		3						✓	None	170582

QC Deliverables: ___ None; ___ Level 2 (Batch QC); ___ Level 3; ___ Level 4; Other: ___

Special Instructions: Please send to Charlotte office

	Date	Time		Date	Time
Relinquished By: Sonya Punch	Date: 11/29	Time: 1530	Received By: Michelle Gordon	Date: 11/29/00	Time: 1530
Relinquished By:	Date: 11/30	Time: 930	Received By: M. Bagley	Date: 11/30/00	Time: 9:00
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

LABORATORY COMMENTS: Init Lab Temp: 4.0 Rec Lab Temp:

Custody Seals: Y N N/A Bottles Supplied by TestAmerica: Y N

Method of Shipment:

CBM ENVIRONMENTAL TEL:8035485892 Jan 19'01 15:17 No.004 P.13

RECEIVED
DEC 20 2000

TESTAMERICA, INC.

COOLER RECEIPT FORM

Client: CBM BC# 21742

Cooler Received On: 11/30/00 And Opened On: 11/30/00 By: Mark Beasley

Mark Beasley
(Signature)

1. Temperature of Cooler when opened 4.0 DEGREES CELSIUS
2. Were custody seals on outside of cooler and intact? ..... YES
   a. If yes, what kind and where: TAPE 1 Front
   b. Were the signature and date correct? ..... YES
3. Were custody seals on containers intact? ..... NO
4. Were custody papers inside cooler? ..... YES
5. Were custody papers properly filled out (ink, signed, etc)? ..... YES
6. Did you sign the custody papers in the appropriate place? ..... YES
7. What kind of packing material was used? Bubblewrap Peanuts Other None
8. Was sufficient ice used (if appropriate)? ..... YES
9. Did all bottles arrive in good condition(unbroken)? ..... YES
10. Were all bottle labels complete (#, date, signed, pres, etc)? ..... YES
11. Did all bottle labels and tags agree with custody papers? ..... YES
12. Were correct bottles used for the analysis requested? ..... YES
13. If present, was any observable VOA headspace present? ..... NO
14. If present, were VOA vials checked for absence of air bubbles and noted if found? ..... YES
15. Was sufficient amount of sample sent in each bottle? ..... YES
16. Were correct preservatives used? ..... YES
17. Was residual chlorine present (if appropriate?) ..... NO
18. Corrective action taken, if necessary:
    a. Name of person contacted: SEE ATTACHED FOR RESOLUTION IF NEEDED
    b. Date: _____

TestAmerica INCORPORATED

RECEIVED DEC 20 2000

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
PO BOX 411387
CHARLOTTE, NC 28241

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: SONYA P.

Lab Number: 00-A170581
Sample ID: VICKERY WSW
Sample Type: Water
Site ID:

Date Collected: 11/29/00
Time Collected: 8:40
Date Received: 11/30/00
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	1.1	ug/l	1.0	1.0	1	12/ 2/00	14:08	M.Himelick	8260B	6542
Ethylbenzene	ND	ug/l	1.0	1.0	1	12/ 2/00	14:08	M.Himelick	8260B	6542
Naphthalene	ND	ug/l	5.0	5.0	1	12/ 2/00	14:08	M.Himelick	8260B	6542
Toluene	ND	ug/l	1.0	1.0	1	12/ 2/00	14:08	M.Himelick	8260B	6542
Xylenes, Total	ND	ug/l	1.0	1.0	1	12/ 2/00	14:08	M.Himelick	8260B	6542
Methyl-t-butyl ether	ND	ug/l	5.0	2.0	1	12/ 2/00	14:08	M.Himelick	8260B	6542

ND - Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	108.	71. - 136.
VOA Surr, Toluene d8	98.	69. - 129.
VOA Surr, 4-BFB	100.	65. - 122.
VOA Surr, DBFM	102.	61. - 139.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica INCORPORATED

RECEIVED
DEC 20 2000

ANALYTICAL REPORT

Laboratory Number: 00-A170581
Sample ID: VICKERY WSW

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 12/ 5/00

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica INCORPORATED

RECEIVED DEC 20 2000

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
PO BOX 411387
CHARLOTTE, NC 28241

Lab Number: 00-A170582
Sample ID: HILL WSW
Sample Type: Water
Site ID:

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: SONYA P.

Date Collected: 11/29/00
Time Collected: 8:45
Date Received: 11/30/00
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	1.0	1.0	1	12/ 2/00	14:47	M.Himelick	8260B	6542
Ethylbenzene	ND	ug/l	1.0	1.0	1	12/ 2/00	14:47	M.Himelick	8260B	6542
Naphthalene	ND	ug/l	5.0	5.0	1	12/ 2/00	14:47	M.Himelick	8260B	6542
Toluene	ND	ug/l	1.0	1.0	1	12/ 2/00	14:47	M.Himelick	8260B	6542
Xylenes, Total	ND	ug/l	1.0	1.0	1	12/ 2/00	14:47	M.Himelick	8260B	6542
Methyl-t-butyl ether	ND	ug/l	5.0	2.0	1	12/ 2/00	14:47	M.Himelick	8260B	6542

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	111.	71. - 136.
VOA Surr, Toluene d8	97.	69. - 129.
VOA Surr, 4-BFB	101.	65. - 122.
VOA Surr, DBFM	104.	61. - 139.

= Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica INCORPORATED

RECEIVED DEC 2 0 2000

ANALYTICAL REPORT

Laboratory Number: 00-A170582
Sample ID: HILL WSW

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: Michael H. Dunn Report Date: 12/ 5/00

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

CBM ENVIRONMENTAL T:8035485892 Jan 19'01 15:22 No.011 P.19

TestAmerica INCORPORATED

Division/Laboratory Name: Charlotte

RECEIVED
JAN 2 2001

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
Compliance Monitoring

221171

Client Name: ~~377~~ CBM Client #: 2175

Address: 377 Commerce Blvd

City/State/Zip Code: Fort Mill SC 29715

Project Manager: Scott Ball

Telephone Number: 803-548-5989 Fax: 803-548-5992

Sampler Name: (Print Name) Jen Bunger

Sampler Signature: Jen Bunger

Project Name: Smiths Grocery

Project #: 10629

Site/Location ID: York State: SC

Report To: Scott Ball

Invoice To:

Quote #: PO#: [redacted] 14145

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix: SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other	Preservation & # of Containers: HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	Analyze For: BTEX, MTBE									QC Deliverables	REMARKS
Vickery WSW	12/26	940	G		GW		3						✓										185533
Hill WSW	12/26	1110	G		GW		3						✓										34

AT
✓ Standard
___ Rush (surcharges may apply)
Date Needed: 1 day
Fax Results: (Y) N

QC Deliverables
___ None
___ Level 2 (Batch QC)
___ Level 3
___ Level 4
Other: _____

Special Instructions:

LABORATORY COMMENTS:
Init Lab Temp: 2.0
Fin Lab Temp:
Custody Seals: (Y) N N/A
Bottles Supplied by TestAmerica: Y N
Method of Shipment:

	Date	Time		Date	Time
Relinquished By: Jen Bunger	12/26	1500	Received By: Elizabeth Williams	12-27-00	1010
Relinquished By: Cindy Pitt	12/27	1400	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By: M. Rede	12/28/00	9:00

Charlotte office
FAX # (704) 332-0073

TESTAMERICA,INC.-NASHVILLE

RECEIVED
JAN 0 5 2001

COOLER RECEIPT FORM

Client: CBM BC# 22172

Cooler Received On: 12/28/00 And Opened On: 9:00 By: Mark Rider

M. Rider
(Signature)

1. Temperature of Cooler when opened 20 Degrees Celsius
2. Were custody seals on outside of cooler?.....(YES)..NO
   a. If yes, how many, what kind and where: F
3. Were custody seals on containers and intact?.....(NO)..YES
4. Were the seals intact, signed, and dated correctly?.....(YES)...NO
5. Were custody papers inside cooler?.....(YES)...NO
6. Were custody papers properly filled out (ink,signed,etc)?.....(YES)...NO
7. Did you sign the custody papers in the appropriate place?.....(YES)...NO
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Other None
9. Was sufficient ice used (if appropriate)?.....(YES)..NO
10. Did all bottles arrive in good condition(unbroken)?.....(YES)..NO
11. Were all bottle labels complete (#,date,signed,pres,etc)?.....(YES)..NO
12. Did all bottle labels and tags agree with custody papers?.....(YES)..NO
13. Were correct bottles used for the analysis requested?.....(YES)..NO
14. a. Were VOA vials received?.....(YES)..NO
    b. Was there any observable head space present in any VOA vial?.....(NO)..YES
15. Was sufficient amount of sample sent in each bottle?.....(YES)...NO
16. Were correct preservatives used?.....(YES)...NO
17. Was residual chlorine present?.....(NO)..YES
18. Corrective action taken, if necessary:

    See attached for resolution

TestAmerica INCORPORATED

RECEIVED JAN 0 5 2001

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
377 CAROWINDS BLVD, STE. 118
FORT MILL, SC 29708

Project: 10629
Project Name: SMITHS GROCERY
Sampler: JEN BERGER

Lab Number: 00-A185533
Sample ID: VICKERY WSW
Sample Type: Water
Site ID: YORK

Date Collected: 12/26/00
Time Collected: 9:40
Date Received: 12/28/00
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	1.0	1.0	1	1/ 3/01	9:58	M.Himelick	8260B	4160
Ethylbenzene	ND	ug/l	1.0	1.0	1	1/ 3/01	9:58	M.Himelick	8260B	4160
Naphthalene	ND	ug/l	5.0	5.0	1	1/ 3/01	9:58	M.Himelick	8260B	4160
Toluene	ND	ug/l	1.0	1.0	1	1/ 3/01	9:58	M.Himelick	8260B	4160
Xylenes, Total	ND	ug/l	1.0	1.0	1	1/ 3/01	9:58	M.Himelick	8260B	4160
Methyl-t-butyl ether	ND	ug/l	5.0	2.0	1	1/ 3/01	9:58	M.Himelick	8260B	4160

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	89.	71. - 136.
VOA Surr, Toluene d8	101.	69. - 129.
VOA Surr, 4-BFB	100.	65. - 122.
VOA Surr, DBFM	92.	61. - 139.

= Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica INCORPORATED

RECEIVED
JAN 0 5 2001

ANALYTICAL REPORT

Laboratory Number: 00-A185533
Sample ID: VICKERY WSW

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: Michael H. Dunn Report Date: 1/ 4/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica INCORPORATED

RECEIVED JAN 0 5 2001

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
377 CAROWINDS BLVD, STE. 118
FORT MILL, SC 29708

Project: 10629
Project Name: SMITHS GROCERY
Sampler: JEN BERGER

Lab Number: 00-A185534
Sample ID: HILL WSW
Sample Type: Water
Site ID: YORK

Date Collected: 12/26/00
Time Collected: 10:10
Date Received: 12/28/00
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	1.0	1.0	1	1/ 3/01	10:36	M.Himelick	8260B	4160
Ethylbenzene	ND	ug/l	1.0	1.0	1	1/ 3/01	10:36	M.Himelick	8260B	4160
Naphthalene	ND	ug/l	5.0	5.0	1	1/ 3/01	10:36	M.Himelick	8260B	4160
Toluene	ND	ug/l	1.0	1.0	1	1/ 3/01	10:36	M.Himelick	8260B	4160
Xylenes, Total	ND	ug/l	1.0	1.0	1	1/ 3/01	10:36	M.Himelick	8260B	4160
Methyl-t-butyl ether	ND	ug/l	5.0	2.0	1	1/ 3/01	10:36	M.Himelick	8260B	4160

ND - Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	89.	71. - 136.
VOA Surr, Toluene d8	100.	69. - 129.
VOA Surr, 4-BFB	101.	65. - 122.
VOA Surr, DBFM	94.	61. - 139.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica INCORPORATED

RECEIVED
JAN 0 5 2001

ANALYTICAL REPORT

Laboratory Number: 00-A185534
Sample ID: HILL WSW

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 1/ 4/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
Assessment and Corrective Action Division
Phone (803) 898-4318 Fax (803) 898-4330

Lois B. Smith
3176 Charlotte Highway
York, SC 29745-9802

Re: Smith's Grocery
UST Permit #09322; CA#13300
Assessment Component Cost Proposal received January 19, 2001
York County

Dear Ms. Smith:

The Underground Storage Tank Program of the South Carolina Department of Health and Environmental Control (SCDHEC) agrees that the next scope of work at this site will be completed utilizing your own contractor. The Department has approved the enclosed cost proposal for the implementation of post-GAC ground water sampling activities, which can be initiated immediately.

A Cost Proposal (CP) #13300 has been approved to complete the necessary work and will be kept on file. The amount on the CP form represents the SUPERB allowable costs as established on March 31, 2000 for upto three rounds of monthly sampling of the two water supply wells with granular activated carbon filters in operation. The Department shall be notified before each sampling event.

All applicable laboratory and report preparation certification requirements must be satisfied. The sampling reports should be submitted within two weeks of each sampling event. If the invoice is not submitted within 120 days of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

Please reference UST Permit ID#09322 and Cost Agreement #13300 on all correspondence regarding this approval. If you have any questions concerning this correspondence, please contact me at (803) 898-4318.

Sincerely,

Sriram Madabhushi

Sriram Madabhushi, Hydrologist
Owner/Operator Assistance Section

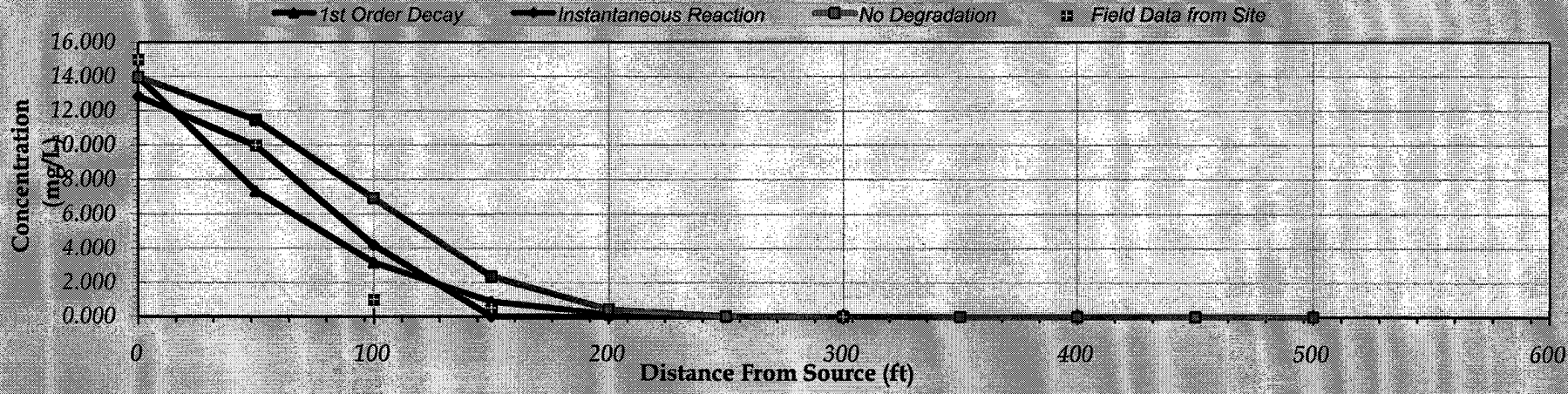
enc.: Approved Assessment Component Cost Proposal

cc: Scott Ball, CBM Environmental, P.O. Box 411387, Charlotte, NC 28241 (w/ enclosure)
Financial file (with enclosure)
Technical file

09322

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

	Distance from Source (ft)										
TYPE OF MODEL	0	50	100	150	200	250	300	350	400	450	500
No Degradation	13.978	11.471	6.911	2.359	0.418	0.036	0.001	0.000	0.000	0.000	0.000
1st Order Decay	13.978	7.323	3.164	0.885	0.140	0.011	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	12.838	9.974	4.194	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	15.000	10.000	1.000	0.500			0.005				



Calculate Animation

Time: 10 Years

Return to Input

Recalculate This Sheet

UST DOCKET 171

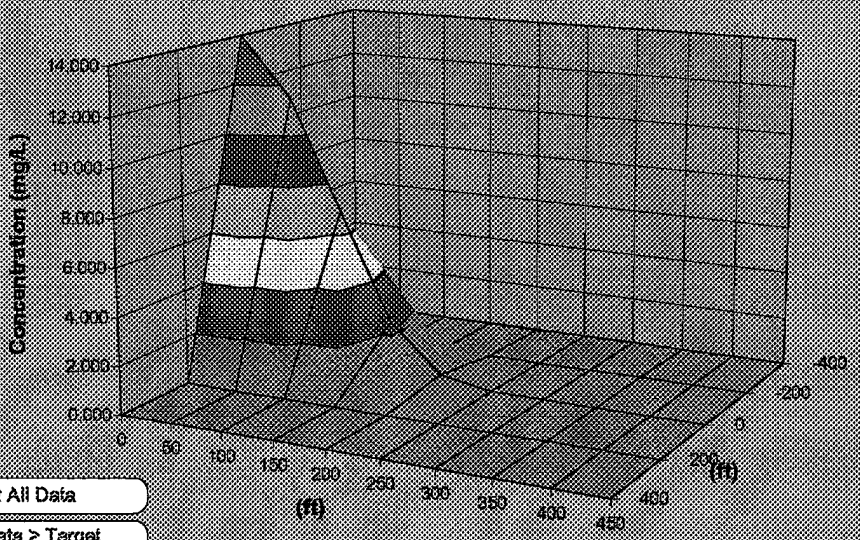
DISSOLVED HYDROCARBON CONCENTRATIONS IN PLUME (mg/L at Z=0)

Transverse Distance (ft)	Distance from Source (ft)										
	0	50	100	150	200	250	300	350	400	450	500
400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
200	0.047	0.019	0.013	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000
0	13.978	11.471	6.911	2.359	0.418	0.036	0.001	0.000	0.000	0.000	0.000
-200	0.047	0.019	0.013	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000
-400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MASS FLUX (mg/day)	3.9E+4	2.9E+4	1.7E+4	5.9E+3	1.0E+3	9.0E+1	3.7E+0	6.8E-2	5.7E-4	2.1E-6	3.6E-9

Model to Display:

- No Degradation Model
- 1st Order Decay Model
- Instantaneous Reaction Model

Time: **10 Years** Target Level: **0.005** mg/L Displayed Model: **No Degradation**



Plot All Data

Plot Data > Target

Plume and Source Masses (Order of Magnitude Accuracy)

Plume Mass if No Biodegradation:	136.3	(Kg)
- Actual Plume Mass:	136.3	(Kg)
= Plume Mass Removed by Biodeg:	0.0	(Kg)
	0 %	

Change in Electron Acceptor/Byproduct Masses:

Oxygen	Nitrate	Iron II	Sulfate	Methane	
na	na	na	na	na	(Kg)

Contam. Mass in Source (t=0 Years):	2000.0	(Kg)
Contam. Mass in Source Now (t=10Years):	1863.7	(Kg)
Current Volume of Groundwater in Plume:	53.0	(ac-ft)
Flowrate of Water Through Source Zone:	1.475	(ac-ft/yr)

Mass HELP

Recalculate

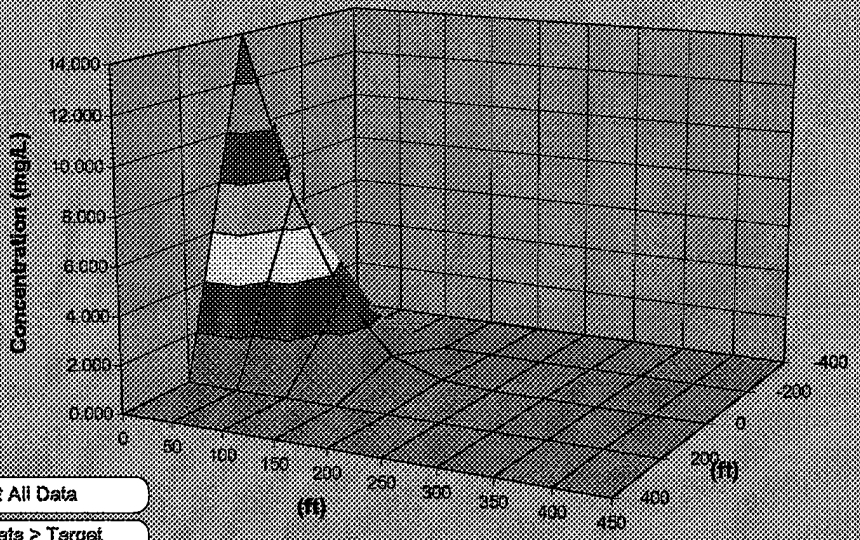
DISSOLVED HYDROCARBON CONCENTRATIONS IN PLUME (mg/L at Z=0):

Transverse Distance (ft) Y \ Distance from Source (ft)	0	50	100	150	200	250	300	350	400	450	500
400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
200	0.047	0.012	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	13.978	7.323	3.164	0.885	0.140	0.011	0.000	0.000	0.000	0.000	0.000
-200	0.047	0.012	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MASS FLUX (mg/day)	3.9E+4	1.8E+4	7.9E+3	2.2E+3	3.5E+2	2.8E+1	1.1E+0	2.0E-2	1.6E-4	6.0E-7	9.9E-10

Model to Display:

- No Degradation Model
- 1st Order Decay Model
- Instantaneous Reaction Model

Time: **10 Years** Target Level: **0.005** mg/L Displayed Model: **1st Order Decay**



Plot All Data

Plot Data > Target

Plume and Source Masses (Order of Magnitude Accuracy)

Plume Mass If No Biodegradation	136.3	(Kg)
- Actual Plume Mass	87.0	(Kg)
= Plume Mass Removed by Biodeg	49.3	(Kg)
	(36 %)	

Change in Electron Acceptor/Byproduct Masses:

Oxygen	Nitrate	Iron II	Sulfate	Methane	
na	na	na	na	na	(Kg)

Contam. Mass in Source (t=0 Years)	2000.0	(Kg)
Contam. Mass in Source Now (t=10Years)	1863.7	(Kg)
Current Volume of Groundwater in Plume	45.5	(ac-ft)
Flowrate of Water Through Source Zone	1.475	(ac-ft/yr)

Mass HELP

Recalculate

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/06/2000 CoC : Benzene

Source: MW-10 Receptor: Vickery WSW

Input Parameters:

CoC RBSL:	0.005	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	60.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000004	/s

Calculations:

EXP(-0.5384)	=	0.5837
ERFC(-7.9228)	=	2.0000
ERF(3.6515)	=	1.0000
ERF(2.5927)	=	0.9999

Decay is considered

Ax:	6.0000
Ay:	2.0000
Az:	0.3000

Results:

Csstl :	8.5670	ug/L
Csstl :	0.0085670	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/06/2000 CoC : Benzene

Source: MW-12 Receptor: Vickery WSW

Input Parameters:

CoC RBSL:	0.005	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	40.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000004	/s

Calculations:

EXP(-0.3649)	=	0.6942
ERFC(-9.5235)	=	2.0000
ERF(5.4772)	=	1.0000
ERF(3.8891)	=	1.0000

Decay is considered

Ax:	4.0000
Ay:	1.3333
Az:	0.2000

Results:

Csstl :	7.2021	ug/L
Csstl :	0.0072021	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/06/2000 CoC : Lead

Source: MW-1 Receptor: Smith WSW

Input Parameters:

CoC RBSL:	0.015	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	90.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000004	/s

Calculations:

EXP(-0.7888)	=	0.4544
ERFC(-6.6369)	=	2.0000
ERF(2.4343)	=	0.9997
ERF(1.7285)	=	0.9888

Decay is considered

Ax:	9.0000
Ay:	3.0000
Az:	0.4500

Results:

Csstl :	33.3954	ug/L
Csstl :	0.0333954	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/06/2000 CoC : Benzene

Source: MW-1 Receptor: Smith WSW

Input Parameters:

CoC RBSL:	0.005	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	100.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000004	/s

Calculations:

EXP(-0.8699)	=	0.4190
ERFC(-6.3467)	=	2.0000
ERF(2.1909)	=	0.9989
ERF(1.5556)	=	0.9768

Decay is considered

Ax:	10.0000
Ay:	3.3333
Az:	0.5000

Results:

Csstl :	12.2312	ug/L
Csstl :	0.0122312	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/06/2000 CoC : Toluene

Source: MW-1 Receptor: Smith WSW

Input Parameters:

CoC RBSL:	1.000	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	90.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000004	/s

Calculations:

EXP(-0.7888)	=	0.4544
ERFC(-6.6369)	=	2.0000
ERF(2.4343)	=	0.9997
ERF(1.7285)	=	0.9888

Decay is considered

Ax:	9.0000
Ay:	3.0000
Az:	0.4500

Results:

Csstl :	2226.3613	ug/L
Csstl :	2.2263613	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/06/2000 CoC : Ethylbenzene

Source: MW-1 Receptor: Smith WSW

Input Parameters:

CoC RBSL:	0.700	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	90.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000004	/s

Calculations:

EXP(-0.7888)	=	0.4544
ERFC(-6.6369)	=	2.0000
ERF(2.4343)	=	0.9997
ERF(1.7285)	=	0.9888

Decay is considered

Ax:	9.0000
Ay:	3.0000
Az:	0.4500

Results:

Csstl :	1558.4529	ug/L
Csstl :	1.5584529	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/06/2000 CoC : Xylenes

Source: MW-1 Receptor: Smith WSW

Input Parameters:

CoC RBSL:	10.000	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	90.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000004	/s

Calculations:

EXP(-0.7888)	=	0.4544
ERFC(-6.6369)	=	2.0000
ERF(2.4343)	=	0.9997
ERF(1.7285)	=	0.9888

Decay is considered

Ax:	9.0000
Ay:	3.0000
Az:	0.4500

Results:

Csstl :	22263.6125	ug/L
Csstl :	22.2636125	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/06/2000 CoC : MtBE

Source: MW-1 Receptor: Smith WSW

Input Parameters:

CoC RBSL:	0.040	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	90.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000004	/s

Calculations:

EXP(-0.7888)	=	0.4544
ERFC(-6.6369)	=	2.0000
ERF(2.4343)	=	0.9997
ERF(1.7285)	=	0.9888

Decay is considered

Ax:	9.0000
Ay:	3.0000
Az:	0.4500

Results:

Csstl :	89.0545	ug/L
Csstl :	0.0890545	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/06/2000 CoC : Naphthalene

Source: MW-1 Receptor: Smith WSW

Input Parameters:

CoC RBSL:	0.025	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	90.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000004	/s

Calculations:

EXP(-0.7888)	=	0.4544
ERFC(-6.6369)	=	2.0000
ERF(2.4343)	=	0.9997
ERF(1.7285)	=	0.9888

Decay is considered

Ax:	9.0000
Ay:	3.0000
Az:	0.4500

Results:

Csstl :	55.6590	ug/L
Csstl :	0.0556590	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

BIOSCREEN Natural Attenuation Decision Support System

Air Force Center for Environmental Excellence — *Version 1.4*

Smith Grocery
Benzene
Run Name

Data Input Instructions:

115 (ft) — 1. Enter value directly, ...or
0.02 — 2. Calculate by filling in grey cells below. (To restore formulas, hit button below).

Variable* — *Data used directly in model.*
20 — *Value calculated by model. (Don't enter any data).*

1. HYDROGEOLOGY

Seepage Velocity*	Vs	9.7	(ft/yr)
or		↑↓	
Hydraulic Conductivity	K	1.0E-04	(cm/sec)
Hydraulic Gradient	I	0.023	(ft/ft)
Porosity	n	0.25	(-)

2. DISPERSION

Longitudinal Dispersivity*	alpha x	16.1	(ft)
Transverse Dispersivity*	alpha y	1.6	(ft)
Vertical Dispersivity*	alpha z	0.0	(ft)
or		↑↓	
Estimated Plume Length	Lp	400	(ft)

3. ADSORPTION

Retardation Factor*	R	1.0	(-)
or		↑↓	
Soil Bulk Density	rho	1.53	(kg/l)
Partition Coefficient	Koc	81	(L/kg)
FractionOrganicCarbon	foc	6.9E-5	(-)

4. BIODEGRADATION

1st Order Decay Coeff*	lambda	1.4E-1	(per yr)
or		↑↓	
Solute Half-Life	t-half	5.00	(year)
or Instantaneous Reaction Model			
Delta Oxygen*	DO	4.85	(mg/L)
Delta Nitrate*	NO3	4.25	(mg/L)
Observed Ferrous Iron*	Fe2+	1.1	(mg/L)
Delta Sulfate*	SO4	11.95	(mg/L)
Observed Methane*	CH4	0.026	(mg/L)

5. GENERAL

Modeled Area Length*	500	(ft)
Modeled Area Width*	800	(ft)
Simulation Time*	10	(yr)

6. SOURCE DATA

Source Thickness in Sat Zone* 66 (ft)

Vertical Plane Source. Look at Plume Cross Section and Input Concentrations & Widths for Zones 1, 2, and 3

Source Zones:

Width* (ft)	Conc. (mg/L)*
50	0.05
50	1
200	15
50	1
50	0.05

View of Plume Looking Down

Source Halflife (see Help):

60	100	(yr)
Inst. React	↑↓ 1st Order	
Soluble Mass	2000	(Kg)

In Source NAPL Soil

Observed Centerline Concentrations at Monitoring Wells
If No Data Leave Blank or Enter "0"

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	15.0	10.0	1.0	.5			.005				
Dist. from Source (ft)	0	50	100	150	200	250	300	350	400	450	500

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE — **View Output**

RUN ARRAY — **View Output**

Help

Recalculate This Sheet

Paste Example Dataset

Restore Formulas for Vs, Dispersivities, R, lambda, other

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/05/2000 CoC : Benzene

Source: MW-2 Receptor: Vickery WSW

Input Parameters:

CoC RBSL:	0.005	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	75.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000000	/s

Calculations:

EXP(0.0000)	=	1.0000
ERFC(-6.2934)	=	2.0000
ERF(2.9212)	=	1.0000
ERF(2.0742)	=	0.9979

Decay is NOT considered

Ax:	7.5000
Ay:	2.5000
Az:	0.3750

Results:

Csstl :	5.0105	ug/L
Csstl :	0.0050105	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/05/2000 CoC : Benzene

Source: MW-2 Receptor: Vickery WSW

Input Parameters:

CoC RBSL:	0.005	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	75.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000044	/s

Calculations:

EXP(-5.1496)	=	0.0058
ERFC(-13.1611)	=	2.0000
ERF(2.9212)	=	1.0000
ERF(2.0742)	=	0.9979

Decay is considered

Ax:	7.5000
Ay:	2.5000
Az:	0.3750

Results:

Csstl :	863.6189	ug/L
Csstl :	0.8636189	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/05/2000 CoC : Benzene

Source: MW-2 Receptor: Vickery WSW

Input Parameters:

CoC RBSL:	0.005	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	75.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000004	/s

Calculations:

EXP(-0.6650)	=	0.5143
ERFC(-7.1802)	=	2.0000
ERF(2.9212)	=	1.0000
ERF(2.0742)	=	0.9979

Decay is considered

Ax:	7.5000
Ay:	2.5000
Az:	0.3750

Results:

Csstl :	9.7429	ug/L
Csstl :	0.0097429	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: SSTL Model version 1.0

Site ID: 09322 12/05/2000 CoC : Benzene

Source: MW-2 Receptor: Vickery WSW

Input Parameters:

CoC RBSL:	0.005	mg/L
Width across flow dir.:	160.0000	m
Estimated Source Depth:	22.000	m
Distance along x-axis:	75.000	m
Distance along y-axis:	0.000	m
Distance along z-axis:	0.000	m
Seepage Velocity:	0.0000000423	m/s
Time of transport:	1000.0	years
First Order Decay Rate	0.0000000020	/s

Calculations:

EXP(-2.7757)	=	0.0623
ERFC(-9.9951)	=	2.0000
ERF(2.9212)	=	1.0000
ERF(2.0742)	=	0.9979

Decay is considered

Ax:	7.5000
Ay:	2.5000
Az:	0.3750

Results:

Csstl :	80.4156	ug/L
Csstl :	0.0804156	mg/L

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: Leachability Model version 1.0

Site ID: 09322 12/07/2000 CoC : Benzene

Input Parameters:

FOC :	60.000	mg/Kg
TPH :	5.000	mg/Kg
Cs :	0.307	mg/Kg
Koc :	81	mL/g
Phi :	0.450	
Wr :	0.080	
Kf :	0.000560000	cm/s
L :	300.00	cm
Hw :	25	cm
Hf :	-15	cm
Bd :	1.500	g/cc
t-half:	16.0000	days
SSTL:	0.0050	mg/L
H':	0.22600	mg/L/mg/L
DAF:	8.0000	

Output Data:

fcs :	0.00006	
f:	0.37	
t:	141655.39	seconds
Vw:	2188.687	ft/yr
Kd:	0.005	ml/g
Vc:	2153.796	ft/yr
Tc:	1.67	days
Log(Cp):	-2.270	
Cp:	0.005	mg/Kg
SSTL:	0.005	mg/Kg

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: Leachability Model version 1.0

Site ID: 09322 12/07/2000 CoC : Toluene

Input Parameters:

FOC :	60.000	mg/Kg
TPH :	5.000	mg/Kg
Cs :	5.010	mg/Kg
Koc :	176	mL/g
Phi :	0.450	
Wr :	0.080	
Kf :	0.000560000	cm/s
L :	300.00	cm
Hw :	25	cm
Hf :	-15	cm
Bd :	1.500	g/cc
t-half:	10.0000	days
SSTL:	1.6660	mg/L
H':	0.28000	mg/L/mg/L
DAF:	8.0000	

Output Data:

fcs :	0.00006	
f:	0.37	
t:	141655.39	seconds
Vw:	2188.687	ft/yr
Kd:	0.011	ml/g
Vc:	2114.265	ft/yr
Tc:	1.70	days
Log(Cp):	0.273	
Cp:	1.874	mg/Kg
SSTL:	1.900	mg/Kg

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: Leachability Model version 1.0

Site ID: 09322 12/07/2000 CoC : Ethylbenzene

Input Parameters:

FOC :	60.000	mg/Kg
TPH :	5.000	mg/Kg
Cs :	9.420	mg/Kg
Koc :	133	mL/g
Phi :	0.450	
Wr :	0.080	
Kf :	0.000560000	cm/s
L :	300.00	cm
Hw :	25	cm
Hf :	-15	cm
Bd :	1.500	g/cc
t-half:	22.0000	days
SSTL:	1.3370	mg/L
H':	0.30100	mg/L/mg/L
DAF:	8.0000	

Output Data:

fcs :	0.00006	
f:	0.37	
t:	141655.39	seconds
Vw:	2188.687	ft/yr
Kd:	0.008	ml/g
Vc:	2131.977	ft/yr
Tc:	1.69	days
Log(Cp):	0.149	
Cp:	1.410	mg/Kg
SSTL:	1.456	mg/Kg

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: Leachability Model version 1.0

Site ID: 09322 12/07/2000 CoC : Xylenes

Input Parameters:

FOC :	60.000	mg/Kg
TPH :	5.000	mg/Kg
Cs :	65.180	mg/Kg
Koc :	639	mL/g
Phi :	0.450	
Wr :	0.080	
Kf :	0.000560000	cm/s
L :	300.00	cm
Hw :	25	cm
Hf :	-15	cm
Bd :	1.500	g/cc
t-half:	28.0000	days
SSTL:	43.5030	mg/L
H':	0.27800	mg/L/mg/L
DAF:	8.0000	

Output Data:

fcs :	0.00006	
f:	0.37	
t:	141655.39	seconds
Vw:	2188.687	ft/yr
Kd:	0.038	ml/g
Vc:	1940.670	ft/yr
Tc:	1.85	days
Log(Cp):	1.658	
Cp:	45.545	mg/Kg
SSTL:	56.072	mg/Kg

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

SCDHEC :: Leachability Model version 1.0

Site ID: 09322 12/07/2000 CoC : Naphthalene

Input Parameters:

FOC :	60.000	mg/Kg
TPH :	5.000	mg/Kg
Cs :	2.160	mg/Kg
Koc :	1543	mL/g
Phi :	0.450	
Wr :	0.080	
Kf :	0.000560000	cm/s
L :	300.00	cm
Hw :	25	cm
Hf :	-15	cm
Bd :	1.500	g/cc
t-half:	48.0000	days
SSTL:	0.2130	mg/L
H':	0.00200	mg/L/mg/L
DAF:	8.0000	

Output Data:

fcs :	0.00006	
f:	0.37	
t:	141655.39	seconds
Vw:	2188.687	ft/yr
Kd:	0.093	ml/g
Vc:	1672.541	ft/yr
Tc:	2.15	days
Log(Cp):	-0.658	
Cp:	0.220	mg/Kg
SSTL:	0.252	mg/Kg

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

BUREAU OF LAND AND WASTE MANAGEMENT
UNDERGROUND STORAGE TANK PROGRAM
2600 Bull Street, Columbia, SC 29201
Phone (800) 826-5435 Fax (803) 898-4330

Lois B. Smith
3176 Charlotte Highway
York, SC 29745-9802

Re: Smith's Grocery
UST Permit ID#09322
Monitoring Report received November 9, 2000
York County

Dear Mrs. Smith:

The Underground Storage Tank (UST) Program has reviewed the referenced November 2000 Monitoring Report. Potential receptors include the water supply wells at the Vickery, Hill, Strife and Smith Residences located around your facility. Active corrective action is necessary to ensure there is no potential impact to human health or the environment.

The site's priority classification is **1D**. Therefore, SUPERB funds are currently available for implementation of an acceptable method of corrective action. The selected technology must completely reduce the petroleum chemicals of concern to those concentrations listed in the Corrective Action Solicitation Package. All rehabilitation activities associated with the UST release must be performed by a SCDHEC certified site rehabilitation contractor as required by R.61-98.

A minimum of three competitive Responses to the Solicitation Package must be submitted. The Department understands that you wish to select the rehabilitation contractor to perform the corrective action. In addition to the Response Forms you personally solicit as outlined below, the Department will announce the solicitation in the South Carolina Business Opportunities. This announcement is to ensure enough Responses are received to initiate a corrective action in timely manner. This announcement will clearly indicate that the UST owner/operator will make the contractor selection to receive financial approval at the most reasonable cost as determined by the solicitation process.

Procedures

The following steps should be followed as you secure responses to the Corrective Action Solicitation Package.

Step 1. Select a minimum of three (3) certified site rehabilitation contractors to complete the enclosed Corrective Action Solicitation Response Form. A list of currently certified contractors is enclosed.

Step 2. Provide each of the selected site rehabilitation contractors a copy of this letter and the enclosed Corrective Action Solicitation Package.

Step 3. Direct each of your selected site rehabilitation contractors to submit their response form to the attention of Lee A. Monts, by February 28, 2001.

You will be provided copies of all the response forms submitted. Upon review of the responses, you will be required to complete a Corrective Action Solicitation Response Summary form which designates which site rehabilitation contractor you wish to use.

On all future correspondence, please reference the **UST Permit #09322.** Please note that approval from the Department must be issued before corrective action begins. Questions concerning this correspondence should be addressed to my attention at (803) 898-4318 or (800) 826-5435 (toll free with in South Carolina only).

Sincerely,

Sriram Madabhushi

Sriram Madabhushi, Hydrologist
Owner/Operator Assistance Section

enc: Corrective Action Guidance
Corrective Action Request for Price Quotation Package (4 copies)
List of certified site rehabilitation contractors

cc: Jeff Vickery, (Cover letter only for information)
LAM Read File (Cover letter only)
Technical file (Cover letter and Request for Price Quotation package)

D · H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

BUREAU OF LAND AND WASTE MANAGEMENT
UNDERGROUND STORAGE TANK PROGRAM
2600 Bull Street, Columbia, SC 29201
Phone (803) 898-4350 Fax (803) 898-4330

Corrective Action Solicitation Package
Smith's Grocery - UST Permit #09322

PURPOSE and SCOPE OF WORK

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (DHEC) has determined that active corrective action of the petroleum release from a regulated underground storage tank site is required, and Mrs. Lois Smith, the owner/operator responsible for the release, has opted to seek the services of a certified contractor to perform corrective action in accordance with defined rehabilitation goals. The ~~objective is to maintain potable water for,~~ reduce the levels of chemicals of concern (CoC) in the soil and in the ground-water to below defined site specific target levels (SSTLs). **In this request for solicitation response, DHEC is acting not as an agent, but as a coordinator between site rehabilitation contractors and the UST owner/operator. As payment will be from the State Underground Petroleum Environmental Response Bank (SUPERB) Account, requirements outlined in this technical specifications package, the SUPERB Act, and R.61-98 apply. All contractors submitting a solicitation response must be South Carolina Certified Class I Site Rehabilitation Contractors.** The scope of work defined in this solicitation is to be implemented at Smith's Grocery, 3176 Charlotte Highway, York, SC 29745, York County for the release reported on June 30, 1993.

SPECIAL CONDITIONS

1. CONTRACT PERIOD: The corrective action pay for performance will be effective from date of financial approval until the corrective action, as described in this technical specification package, is completed by a SCDHEC Class I Site Rehabilitation Contractor.

2. This technical specification package is for corrective action at only one (1) site in South Carolina. **Compensation from the SUPERB Account is not considered a state contract for purposes of procurement or subject to state bid requirements in accordance with Section 44-2-130(D) of the State Underground Petroleum Response Bank (SUPERB) Act.** A signed corrective action solicitation response form should be returned (via mail or fax) to Mr. Lee Monts of the UST Program by the date specified to be forwarded to Mrs. Lois Smith.

3. FINANCIAL APPROVAL: **The owner/operator will select the contractor to perform this active corrective action in accordance with the SUPERB Act (Title 44, Chapter 2 of the Code of Laws of South Carolina). Therefore, financial approval may not be to any of the contractors that submit a solicitation response or to the contractor who submits the lowest price.** When the UST owner/operator selects the rehabilitation contractor, a contractual agreement will be made between the owner/operator and the environmental contractor. If the work is performed in an acceptable manner, DHEC will make payment from the SUPERB Account in accordance with the payment instructions from the UST owner/operator. The proposed implementation schedule to achieve the remediation goals, the removal of all equipment and abandonment of wells, (including pre-existing wells), trenches, etc. installed by the contractor, and the proposed remediation technology(ies) or method(s) must protect public health and the environment and be eligible for permitting by DHEC. The total cost, methods, and estimated time to complete the contract must also be advantageous to the State of South Carolina.

4. REASONABLE COST: The low price submitted to the UST Program (as the coordinator) or as obtained by the UST owner/operator, will be considered the allowable cost by the SUPERB program to complete the corrective action as described in this technical specification package as long as the price is within reason. DHEC reserves the right to reject any and all corrective action solicitation responses that appear to be out of line with the customary and reasonable cost for the same scope of work in a similar geologic setting.

5. Contractor must agree to make positive efforts to use women and minority owned businesses and individuals.

6. AMENDMENTS: All amendments to this solicitation response will be in writing from the UST Program. The UST owner/operator or DHEC will not be legally bound by any amendment or interpretation, which is not in writing.

7. QUESTIONS: Questions or requests for information must be submitted in writing and received by 5:00p.m., February 12, 2000. After this date, no further questions will be addressed. A written response will be provided to all requestors of this technical specification package. The questions may be faxed to Lee Monts (fax number (803) 898-4330).

8. **NOTE . . . THE ONLY OFFICIAL CONTACT PERSON AT DHEC DURING THE SOLICITATION RESPONSE SUBMITTAL AND FINANCIAL APPROVAL PROCESS IS LEE MONTS. CONTRACTORS ARE NOT TO CONTACT ANY OTHER UST PROGRAM PERSONNEL OR OTHER CONTRACTORS.**

9. The certified contractor selected by the UST owner/operator will be required to treat the area where the dissolved petroleum chemicals of concern are above site specific target levels (see Figure 2). Verification that interim corrective action goals have been met will be based upon ground-water quality samples collected from monitoring wells *MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 thru MW-15, MW-17, MW-18, MW-19, TW-2 and TW-3*. Verification that final corrective goals have been met will be based upon ground-water quality samples collected from all existing monitoring wells, and additional verification wells to be installed at locations designated by DHEC (see specification #10 for more detail).

10. REPORTS: Deliver the reports to: SCDHEC, UST Program, Attn.: Sriram Madabhushi, 2600 Bull Street, Columbia, SC 29201 or other location as specified. A minimum of two (2) copies of each plan and two (2) copies of each report must be delivered to the above address. Based on permitting and other requirements, engineering report, UIC permits, air modeling forms or NPDES Permits may be required. Please contact the Department for the exact number of copies of each document to be submitted.

11. INVOICING: Invoices will be submitted to: SCDHEC, UST Program, Attn.: Financial Section, 2600 Bull Street, Columbia, SC 29201, using the Department's Corrective Action (CA) Invoice form. The initial invoice must be received at the above address within 120 days from the date of the letter directing Corrective Action Plan (CAP) implementation or funds will be uncommitted as required by the Section 44-2-40(B) of the SUPERB Act. If funds are uncommitted, any submitted invoices will be held until funding is available. Payment to the contractor will be a pay-for-performance system as follows:

A. Payment of forty percent (40%) of the total price approved will be made within 90 days of operation of the remediation system or implementation of corrective action as described in the approved corrective action plan (CAP), subject to the limitations of Section 44-2-40 of the SUPERB Act. This will be documented in the initial monitoring report. The CoC concentrations requiring reduction is as follows:

CoC concentrations in parts per billion (µg/l) based on August 23 & October 10, 2000 sampling:

(CoC may increase or decrease in the future)

Well	Benzene	Toluene	Ethyl-benzene	Xylenes	MtBE	Lead	EDB	Naph-thalene	Total Conc.
Vickery WSW	5	2.	2	26	2	5	5	5	52
Hill WSW	2	2	2	2	5	5	5	5	28
Smith WSW	2	2	2	2	2	5	5	5	25
Strife WSW	5	5	5	15	5	5	5	5	50
MW-1	1100	19000	2700	10000	80	2	0.32	770	33652.32
MW-2	25000	39000	3500	15000	200	1300	179	200	84379
MW-6	3400	14000	1900	8000	80	39	4.83	700	28123.83
MW-7	2000	4100	3100	15000	200	110	0.66	1400	25910.66
MW-8	9500	56000	5300	16000	200	4	0.48	820	87824.48
MW-10	5800	26000	3200	19000	800	21	95.3	800	55716.3
MW-11	5	5	5	10	5	6	0.02	5	41.02
MW-12	390	5	68	730	5	7	20.8	52	1277.8
MW-13	5	5	5	10	75	5	0.02	5	110.02
MW-14	5	5	5	10	5	37	0.51	5	72.51
MW-15	5	5	5	10	5	39	0.05	5	74.05
MW-17	5	5	5	10	5	29	0.02	5	64.02
MW-18	5	5	5	10	5	42	0.12	5	77.12
MW-19	5	5	5	10	5	51	0.02	5	86.02
TW-2	400	8	5.0	180	5.0	2	0.05	18	618.05
TW-3	5	5	5	10	5	2	0.23	5	37.23
Initial Conc.*	47644	158164	19824	84035	1694	1716	322.43	4820	318219.43
SSTL Conc.	120	10975	7772	80343	490	199	53.33	391	100343.33
Initial Conc. above SSTL	47524	147189	12052	3692	1204	1517	269.1	4429	217876.1

* Laboratory analysis is less than calculated SSTLs; therefore, SSTL concentration is set equal to laboratory concentration.
** CoC concentration may change due to seasonal fluctuations in the groundwater.

B. Payment of thirty-five percent (35%) of the total price approved will be made based on achieving interim CoC concentration reduction goals at the site as verified in monitoring *MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 thru MW-15, MW-17, MW-18, MW-19, TW-2 and TW-3*. Payment will be made for interim goals of 25, 50, and 75 percent reduction of total CoC concentration by the implementation of corrective action. **NOTE: Payment cannot be based on laboratory analyses for any well that has been used for injection unless that well has returned to ambient conditions.**

(1) 25 percent total concentration reduction will be achieved when one-quarter of the initial BTEX, MtBE, Lead, EDB and Naphthalene concentrations from monitoring *MW-1, MW-2,*

MW-6, MW-7, MW-8, MW-10 thru MW-15, MW-17, MW-18, MW-19, TW-2 and TW-3 is removed as compared to the SSTLs. The following formula will be used to calculate the percent total concentration reduction: total concentration above SSTLs from initial sampling less total concentration above SSTLs from subsequent sampling divided by total concentration above SSTLs from initial sampling. Payment of 10 percent (10%) of the total price approved will be made upon verification (see Specifications item 10 for the method of verification) of at least one-quarter of the total CoC concentration above SSTLs is removed.

The following example demonstrates the CoC Concentration Reduction Calculation:

Well		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	Conc. above SSTL
MW-1	Initial Conc. A	7,500	4,000	2,000	15,000	3,000	1,000	32,500
	SSTL B	10	2,000	1,400	10,000	80	50	13,540
	Initial Conc. above SSTL C	7,490	2,000	600	5,000	2,920	950	18,960
	Subsequent Concentration D	3,000	1,000	900	13,000	2,000	5	19,905
	SSTL E	10	2,000	1,400	10,000	80	50	13,540
	Subseq. Conc. above SSTL F	2,990	0	0	3,000	1,920	0	7,910
MW-4	Initial G	150	400	50	250	300	25	1175
	SSTL H	5	400	50	250	40	25	770
	Initial Conc. above SSTL I	145	0	0	0	260	0	405
	Subsequent Concentration J	100	100	1	1	100	1	303
	SSTL K	5	400	50	250	40	25	770
	Subseq. Conc. above SSTL L	95	0	0	0	60	0	155
Totals	Initial Conc. above SSTL M	(sum of initial concentration above SSTL for all wells) (C+I)						19,365
	Subseq. Conc. above SSTL N	(sum of subsequent concentration above SSTL for all wells) (F+L)						8,065

Notes: **If subsequent sampling indicates a CoC concentration at or below the SSTL and/or a CoC concentration at BDL but the reporting limit is at/or below the SSTL value for any constituent, the value for the concentration reduction will be 0 (no negative numbers).**

If subsequent sampling indicates a CoC concentration at BDL but the reporting limit is above the SSTL, the value for any constituent will be the analytical reporting limit.

Concentration Reduction Calculation

$$\text{CoC Concentration Reduction} = \frac{(M-N)}{(M)} = \frac{(19{,}365-8{,}065)}{19{,}365} = 0.5835 * 100 = 58.35\% \text{ CoC Reduction}$$

(2) 50 percent total concentration reduction will be achieved when one-half of the initial BTEX, M*t*BE, Lead, EDB, and Naphthalene concentration from monitoring monitoring *MW-1, MW-2, MW-6, MW-7, MW-8, MW-10 thru MW-15, MW-17, MW-18, MW-19, TW-2 and TW-3* is removed as compared to the SSTLs. The formula outlined in item 11. B. (1) will be used. Payment of 10 percent (10%) of the total price approved will be made upon verification (see Specifications item 10 for the method of verification) of at least one-half of the total CoC concentration above SSTLs is removed.

(3) 75 percent total concentration reduction will be achieved when three-quarters of the initial BTEX, M*t*BE, Lead, EDB, and Naphthalene concentration from monitoring wells *MW-1, MW-2, MW-6, MW-7, MW-8, MW-10, MW-11 thru MW-15, MW-17, MW-18, MW-19, TW-2 and TW-3* is removed as compared to the SSTLs. The formula outlined in item 11 B (1) will be used. Payment of 15 percent (15%) of the total price approved will be made upon verification (see Specifications item 10 for the method of verification) of at least three-quarters of the total CoC concentration above SSTLs is removed.

C. **The final 25 percent (25%) of the total price approved will be paid upon: 1) verification that the levels of CoC do not exceed the site-specific target levels (SSTLs) defined in item 11.C. at any point in the area of concern (see Figure 2). Verification that the SSTLs have been met will be based upon ground-water quality samples collected from all existing monitoring wells, and additional verification wells to be installed at locations designated by DHEC (see specification #10 for more detail); and 2) all remediation and assessment items installed by the contractor (e.g., wells [including preexisting wells], trenches, etc.) are removed from the site or properly abandoned.** The SSTLs are as follows:

In the source area, near SB-4, SB-5 and MW-1 (Figure 3 – Appendix B), the following SSTLs for soil should be met.

Site specific target levels (SSTLs) in parts per billion (µg/kg):

CoC	SSTLs (mg/Kg)
Benzene	0.005
Toluene	1.9
Ethylbenzene	1.456
Xylenes	56.072
Naphthalene	0.252

Groundwater Site specific target levels (SSTLs) in parts per billion (µg/l)

Well	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	Lead	EDB	Naph-thalene	Total
Vickery	5	2*	2*	26*	2*	5*	5*	5*	52
Hill	2*	2*	2*	2*	5*	5*	5*	5*	28
Strife	2*	2*	2*	2*	2*	5*	5*	5*	25
Smith	5	5*	5*	15*	5*	5*	5*	5*	50
MW-1	11	2223	1558	10000	80	2*	0.32*	56	13930.32
MW-2	10	2021	1416	15000	81	30	10	51	18619
MW-6	6	1212	850	8000*	48	18	4.83*	31	10169.83
MW-7	6	1212	850	12123	48	18	0.66*	31	14288.66
MW-8	12	2424	1700	16000	96	4*	0.48*	62	20298.48
MW-10	9	1819	1274	18185	73	21	9	46	21436
MW-11	5*	5**	5**	10**	5**	5**	0.02*	5**	40.02
MW-12	7	5**	68	730	5**	7**	7	36	865
MW-13	5*	5**	5**	10**	5**	5**	0.02	5**	40.02
MW-14	5*	5**	5**	10**	5**	5**	0.51	5**	40.51
MW-15	5*	5**	5**	10**	5**	15	0.05	5**	50.05
MW-17	5*	5**	5**	10**	5**	15	0.02	5**	50.02
MW-18	5*	5**	5**	10**	5**	15	0.12	5**	50.12
MW-19	5*	5**	5**	10**	5**	15	0.02	5**	50.02
TW-2	5*	8	5**	180	5**	2**	0.05	18	223.05
TW-3	5*	5*	5**	10*	5**	2**	0.23	5**	37.23
Total	120	10975	7772	80343	490	199	53.33	391	100343.33

* Laboratory analysis is less than calculated SSTLs; therefore, SSTL concentration is set equal to laboratory concentration.
** Laboratory analysis is below detection limits; therefore, SSTL concentration is set equal to detection limits.

12. NOTIFICATION FOR FAILURE TO PERFORM: If the contractor fails to meet any specification of corrective action as outlined in this document, DHEC will notify the contractor by certified letter of the deficiency(ies). If the contractor does not correct the deficiency(ies) within 30 days, the contractor will be in breach of contract and the financial approval may be voided by DHEC. DHEC will notify the contractor by certified letter that the financial approval is void and if any invoices are payable upon review and approval of DHEC. If the contractor corrects the deficiency(ies) within 30 days, the financial approval will continue. Please note contractor-owned items used on-site for the contract that are destroyed by acts of nature, improper maintenance or handling, theft or vandalism will not be replaced or reimbursed by the SUPERB Account. The amount of financial approval will be final and will not be increased or cancelled for any reason (e.g., unanticipated iron fouling of a system, wells clogging because of biological activity or sediments, increased subcontractor costs, loss of utilities, modification

to the system to meet the remediation goals, etc.) with the exception of unforeseen geologic circumstances or identification of additional CoC from another release.

13. SITE SPECIFIC DETAILS: A brief technical summary of the release, including a location map and specifics of existing wells, is attached. The detailed technical file will be available for review through the Freedom of Information (FOI) Office located on the third floor of the Sims Building, 2600 Bull Street, Columbia, SC. Review of the detailed technical file is not mandatory; however, contractors submitting a solicitation response are strongly encouraged to review the file to ensure a complete understanding of the contract requirements. The contractor given financial approval will be responsible for understanding the information in the technical file. Appointments to view the technical file may be scheduled on weekdays between the hours of 8:30 A.M. to 5:00 P.M. by calling the SCDHEC Freedom of Information Office at (803) 898-3882. Please request file for UST Permit#09322.

NOTE: **Free-phase product may be present at this site. No free-phase product was detected during the base-line sampling event, however, application of corrective action technologies can result in the mobilization and possible appearance of free-phase product or elevated CoC concentrations in the monitoring wells.**

14. **The contractor will submit a CAP within 30 days of notification of selection by the UST Owner/Operator Assistance Section.** The implementation of the CAP will be initiated immediately upon the Department's directive to implement the CAP and all associated permit(s) have been issued; implementation will be in accordance with the schedule presented in the CAP. **A performance bond or irrevocable standby letter of credit, equal to the financial approval amount, will be required by DHEC.** The issuing institution for an irrevocable standby letter of credit must be an entity that has the authority to issue letters of credit in South Carolina and whose letter-of-credit operations are regulated and examined by a federal or state agency. The original performance bond or irrevocable letter of credit will be submitted to the UST Program, Attn.: Lee Monts, within 30 days of financial approval. The performance bond or irrevocable standby letter of credit will specify that the SUPERB Account will be the recipient of any forfeiture. Since DHEC is responsible for the disbursement of funds from the SUPERB Account, the financial responsibility mechanism (i.e., bond or letter-of-credit) will be held by the UST Program until the work is successfully completed.

15. **MINIMUM REQUIREMENTS: Corrective action will be considered complete once the levels of CoC are verified to be below the SSTLs listed in item 11.C., and removal or abandonment of all remediation and assessment items installed by the contractor (e.g., wells [including preexisting wells], trenches, etc.). See Specification #10 for the method of verification.** All rehabilitation activities associated with a UST release must be performed by a SCDHEC certified Class I site rehabilitation contractor as required by R. 61-98. All corrective action plans and reports must be sealed by a Professional Engineer or Professional Geologist registered in the State of South Carolina. All engineering reports, drawings and plans must be sealed by a Professional Engineer registered in the State of South Carolina. All laboratory analysis for CoC must be performed by a SC certified laboratory. All monitoring, verification, injection, or recovery wells must be installed and abandoned by a SC certified well driller. All applicable certification, training, permits, applications, and fees associated with well installation; injection, discharge, treatment, or transportation of ground water, air, or soil; construction or operation of a remediation system; and any other action requiring a permit are the responsibility of the contractor. Any required business or occupation license and occupational safety and health training (e.g., OSHA) as defined by the laws and regulations of the United States of America, State of South Carolina, county or city is also the responsibility of the contractor. The terms and conditions of all applicable permits will be met. Any contaminated ground water, soil, or construction material must be properly transported and disposed of, or treated at an approved facility with prior approval from DHEC. Any

costs for utilities construction and service (electric, telephone, sewer, etc.) required by the corrective action are the responsibility of the contractor.

SPECIFICATIONS for CORRECTIVE ACTION

All corrective action solicitation responses submitted must meet the following specifications as required by the proposed treatment method(s) or corrective action technology(ies):

1. The solicitation response for active corrective action may be submitted by mail or by fax. The response will outline in general terms an approach to achieve the remediation goals (e.g., reduction of each CoC to SSTL). The response must outline the following:

   A. A description of the proposed treatment method(s) or technology(ies) for corrective action.

   B. The estimated amount of time in months to complete site rehabilitation to meet the remediation goals, install verification wells, and remove or abandon all assessment and remediation items installed as part of the corrective action.

   C. The total cost (in thousands of dollars) to complete site rehabilitation to meet the remediation goals and to remove or abandon all assessment and remediation items installed as part of the corrective action.

2. The contractor selected by the owner/operator to perform corrective action activities must complete and submit a detailed CAP (three copies) for the release at Smith's Grocery - UST Permit #09322), 3176 Charlotte Highway, York, SC 29745, York County, South Carolina **within 30 days of notification by the UST Program. NOTE:** ***Use of monitoring well(s) for injection purposes is not allowed.*** A condition of the plan may include installation of additional recovery, sparge, compliance, or injection wells. The plan must define all active (pump and treat, sparge, vapor extraction, excavation of impacted soils, bioremediation, etc.) and passive (intrinsic remediation, monitoring, etc.) corrective action method(s) proposed to reduce CoC to SSTLs. It must be shown, by use of scientific models, computations, or discussion, how each CoC will be reduced to the SSTL for each remediation method proposed for the release. Any assumptions used in a model will be listed or shown, as well as, appropriate references. Intrinsic corrective action will require monitoring to verify remediation. General construction details will be included (e.g., install four additional recovery wells, construct a compliance point, install four air injection wells, excavate 3,000 cubic yards of impacted soils, etc.) as well as details of well abandonment and equipment removal. A remediation time table including abandonment of wells and removal of equipment will be included with the CAP. The UST Program will review the CAP and initiate a public notice period for a maximum of 30 days. The contractor must obtain a copy of the applicable portion of the tax map. This map will depict the location of the facility, and all impacted properties, and all properties located adjacent to the impacted properties. The names and addresses of the owners of each of these properties will be provided. The contractor may be required to attend or provide input at a public meeting upon request by DHEC. Any CAP amendments and modifications arising from public notice must be submitted within 15 days of notification by DHEC. The CAP and any amendments or modifications must be sealed by a qualified Professional Engineer or Geologist registered in the State of South Carolina. The owner/operator, Mrs. Lois Smith, will be consulted and will approve the location of the corrective action system. If permanent, the system must be enclosed in a fenced area or small building. The initial invoice must be received at the above address within four months or funds will be uncommitted as required by the SUPERB Act. If funds are uncommitted this invoice will be held until funding is available.

An initial monitoring report documenting CoC concentrations in all wells and potentiometric conditions prior to start up (including verification of system operation or CAP implementation) must be submitted to the UST Program within 45 days after financial approval. Sampling for the initial monitoring report must occur prior to system startup.

Based on naturally occurring conditions, the dissolved concentration of petroleum chemicals of concern (CoC) will increase or decrease. For the purposes of this contract, the total CoC concentration for the wells included in the technical specification package may reasonably increase up to 150 percent or decrease as much as 50 percent. If the total CoC concentration in all wells listed in Special Condition 11.B. increases more than 150 percent based on this initial sampling or if measurable free product that has not been previously documented in any report is detected during the initial sampling event, the contractor may request in writing that the award be canceled. **If either of these conditions occurs, the contractor will contact the UST project manager within two days of problem identification and will submit written documentation within five days of notification.** The contractor will be reimbursed for one personnel mobilization to collect samples, one sample collection and one analytical fee each monitoring well sampled as outlined in SUPERB Allowable Costs, plus $6,000 for all other costs incurred (e.g., CAP preparation, obtaining performance bond, business license). The contract will be canceled and the performance bond will be returned to the company. If the total CoC concentration in all wells listed in Special Condition 11.B. decreases to less than 50 percent based on this initial sampling the DHEC may cancel the award. If the corrective action system is started or treatment is performed, the contractor will be required to complete the contract unless geological conditions change or another release is confirmed. See special condition 12. If the contract is canceled by DHEC, the contractor will be notified by certified letter and an invoice for the above outlined items shall be submitted within 20 days from the date of the certified letter canceling the contract.

3. Complete and submit all applications for permits (injection, NPDES, BAQC modeling form, thermal treatment, construction, etc. and an engineering report (2 copies each) with the CAP. Any required permit changes or corrections will be submitted within 15 days of notification by DHEC. The ER and any ER amendments and modifications, must be sealed by a Professional Engineer registered in the State of South Carolina. After review of the CAP and all permit applications by DHEC, the UST Program will issue a notice to proceed with CAP implementation.

   Implementation of the corrective action plan before the completion of the public notice process and approval of all permits by DHEC is not authorized. If premature implementation occurs, the Department will not reimburse those costs from the SUPERB Account, and the financial approval amount will be reduced by that amount. If the Department agrees with early implementation to better protect human health in an emergency and provides approval in writing, early implementation without any reduction to the financial approval amount will be authorized.

4. Implement the CAP within 30 days of receipt of notice to proceed and any required permit to construct. Disruption to the owner/operator's normal business will be kept to a minimum. The contractor will repair the site to the condition as it existed prior to installation of the corrective action system (e.g., asphalt paved areas will be repaved with asphalt, concrete areas will be replaced with concrete, grass areas will have soil replaced to the original grade and be reseeded or sodded with grass, etc.). Upon completion of any required construction, DHEC will inspect the system and issue a permit to operate. The contractor will, at all times, keep the site free from waste materials and rubbish related to the corrective action. Until completion of the corrective action, the contractor will keep the premises in a clean, neat and workmanlike condition satisfactory to DHEC. All generated soil and wastewater will be removed from the site promptly. Manifests documenting the proper disposal of the soil and wastewater must be included in the appropriate report.

5. Gain access to the adjacent property to sample monitoring wells and to install any corrective action equipment, as required. The contractor will repair the adjacent property to the condition as it existed prior to installation of the corrective action systems (e.g., asphalt paved areas will be repaved with asphalt, concrete areas will be replaced with concrete, grass areas will have soil replaced to the original grade and reseeded or sodded with grass, etc.)

6. Initiate system startup within 15 days of receipt of the permit to operate. Remediation as defined in the CAP and ER will begin upon system startup. An initial monitoring report documenting CoC concentrations in all wells and potentiometric conditions prior to start up (including verification of system operation or CAP implementation) must be submitted to the UST Program. **If any problem with CAP implementation occurs, the contractor will contact the UST project manager within 24 hours of problem identification and will submit written documentation within five days of notification.**

NOTE: Free-phase product may be present at this site. No free-phase product was detected during the base-line sampling event, however, application of corrective action technologies can result in the mobilization and possible appearance of free-phase product or elevated CoC concentrations in the monitoring wells.

7. Complete and submit a corrective action monitoring report (3 copies plus one copy for any DHEC Bureau that issued a permit) on a quarterly basis. The corrective action monitoring reports must include:

A. A narrative portion that documents current site conditions and system effectiveness in achieving the remediation goals (e.g., free product removal, reducing CoC to the SSTLs) as outlined in the CAP. Any system down time and the associated reason(s) will be included in the report.

B. Conclusions and recommendations based on the reported data.

C. Ground-water laboratory analytical data for all monitoring wells in the following format (additional parameters such as dissolved oxygen may be required; do not sample wells containing free product):

Analytical Data (µg/l)

Monitoring Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MtBE	Naphthalene
MW-1	07/15/99	145	200	146	1,000	170	47
	10/15/99	140	190	140	900	50	165
MW-2	07/15/99	580	800	300	1,000	60	20
	10/15/99	480	690	257	912	50	19

D. Ground-water potentiometric data for all monitoring wells in the following format:

Ground-water Data (feet)

Monitoring Well	Date	TOC Elevation	TOC to GW	TOC to FP	FP Thickness	GW Elevation
MW-1	07/15/99	98.0	17.54			80.46
	10/15/99	98.0	17.90			80.10
MW-2	07/15/99	100.0	20.50	20.47	0.03	79.50
	10/15/99	100.0	21.50	21.48	0.02	78.50

E. A ground-water elevation contour map of the site based on current ground-water potentiometric data.

F. A CoC map based upon current ground-water laboratory analytical data. The ground-water data should be adjacent to the relevant monitoring well using the following format (additional parameters such as dissolved oxygen may be required):

MW - Number
Benzene (µg/l)
Toluene (µg/l)
Ethylbenzene (µg/l)
Xylenes (µg/l)
MTBE (µg/l)
Lead (µg/l)
EDB (ng/l)
Naphthalene (µg/l)

G. A copy of the DHEC approval letter and manifests for any contaminated soil and ground-water removed from the site for treatment and/or disposal.

H. Additional data required by permits (e.g., air analyses, wastewater effluent analyses and amounts, etc.). The data should be reported on a form or in a format specified in the permits, and attached to the monitoring report as an addendum.

All rehabilitation activities associated with the UST release must be performed by a SCDHEC Certified Site Rehabilitation Contractor. All air, soil, and ground-water analyses must be performed by a South Carolina certified laboratory. The corrective action monitoring report must be sealed by a Professional Engineer or Geologist registered in the State of South Carolina. All monitoring wells associated with the release will be sampled on a quarterly basis for the first year. Thereafter, the number of wells sampled may be reduced and/or the interval between corrective action monitoring reports may be lengthened upon clear demonstration of CoC reduction, unless restricted by permit requirements. Any approval to reduce the number of wells sampled or the frequency of sampling must be in writing from the Bureau of Land and Waste Management UST Program. DHEC may require data to be reported on a form or in a specific format. The contractor will be provided with the proper report forms and format prior to system startup. The contractor will be notified of any revisions to the report forms or format 90 days prior to the due date for the corrective action monitoring report.

8. Collect one (1) ground-water sample per monitoring event for all monitoring wells associated with the release. Each well should be purged prior to sampling. Purging is considered complete once the ground-water temperature and pH have stabilized. Sampling logs should note all temperature and pH measurements, as well as the location and type of each sample submitted for laboratory analysis. Each ground-water sample will be collected in accordance with established QA/QC protocol and submitted to a certified laboratory for analysis. The samples must be analyzed for the following parameters:

Analyte	Analytical Method	Reporting Limit (µg/l)
BTEX, Naphthalene, MtBE	8260B	5
Lead	200.7	5
EDB	8260B	0.02
PAH	8270C	10

Additional samples (air, groundwater, effluent, soil) required by permits must be collected in accordance with established QA/QC protocol and submitted to a certified laboratory for analysis. The samples will be analyzed for parameters stipulated in the permits. Sampling and analytical data for each sample (e.g., field sampling logs, chain of custody forms, certificates of analysis, and the lab certification number) will be included in the corrective action monitoring report.

9. Properly dispose of all contaminated soil and ground water generated during the implementation of the CAP and installation of verification wells. DHEC must approve the disposal facility selected for treatment and disposal of the free product and contaminated soil and ground water. The owner/operator of the facility is considered the generator for any contaminated soil and ground water. The contractor must document all disposal of free product and contaminated soil and ground water in the quarterly corrective action monitoring report.

10. Verification for the removal of free product will be conducted by SCDHEC personnel with an interface probe. If the remediation technology is in-situ (e.g., pump and treat, air sparging, vapor extraction): suspend operation of the system once the remediation goals for all CoC have been maintained for a period of 30 days. Samples are to be taken after one (1) quarter or after all CoC levels have reached equilibrium and again after a second quarter. Along with the parameters listed in Specification #8, the ground-water samples should also be sampled for the following parameters:

Analyte	Analytical Method*	Reporting Limit
Dissolved Oxygen	SM4500-O G	500 µg/l
Ferrous Iron	SM3500-Fe D	30 µg/l
Methane	Kerr Method	1 mg/l
Nitrate	9056/9210	100 µg/l
Sulfate	9038/9056	1000 µg/l

*or EPA equivalent method that can achieve the same reporting level

If sample results indicate that the remediation goals are not sustained, the contractor must submit a corrective action status report (up to 3 copies) that outlines the deficiency(ies) and offers recommendations for achieving the remediation goals with a revised timetable. Modifying and restarting of the system will be directed by DHEC. The system will operate until all remediation goals are again maintained for a minimum period of 30 days. Operation of the system will then be suspended again and samples taken to verify that remediation goals are sustained. This cycle of activity, including status reports, will be repeated until all CoC levels remain below SSTLs for all wells listed in Special Conditions item 11 C for two (2) consecutive quarters. Up to three verification wells for soil and groundwater analyses may then be installed at locations designated by DHEC. Costs for verification well installation are considered part of the financial approval amount. Each well will be sampled in accordance with Specifications item 8 and the analyses compared to the calculated SSTLs for the CoC at that well location. If the laboratory analyses are at or below the SSTLs, corrective action will be considered complete. If any analysis is above the SSTL, the corrective action will not be considered complete, and the activity cycle described above must be repeated until all CoC levels remain below SSTLs for those wells listed in Special Conditions item 11 C. Split or duplicate samples may be collected by DHEC (or its subcontractors) to verify achievement of remediation goals. Split ground-water samples will be accomplished during quarterly monitoring events and during the final sampling of monitoring and verification wells to document that the cleanup goals have been met. A ground-water sample will be collected from each monitoring well to substantiate the ¼, ½, or ¾ concentration reduction has occurred. Once the site rehabilitation contractor indicates the final cleanup goals have been reached, a ground-water sample will be collected from each monitoring well plus the required verification wells. These two separate quality assurance events will consist of a representative ground-water sample being collected by the certified rehabilitation contractor. Part of the split sample will be analyzed by a SCDHEC certified laboratory selected by the contractor as part of the routine quarterly reporting process, and the second half of the sample will be analyzed by a SCDHEC laboratory selected

by the UST Program. In addition to the ground water collected from the monitoring wells, the UST Program may provide up to three prepared blanks for the contractor's laboratory to analyze. The laboratory analysis from the contractor's and the UST Program's laboratory will be compared. In the event of substantial variance (more than 15%), a second sampling event with field and prepared blanks will be sent to a SC certified laboratory by the UST Program for analysis. The contractor will be notified when the wells will be resampled, can observe this second sampling event, and will be provided analytical results for comment. Based on these results, DHEC Laboratory Certification will be contacted to assist the UST program in determining the cause of the laboratory variation. The Director of the Assessment and Corrective Action Division will make the final decision on which analytical values will be the basis for payment or closure based on the recommendation of the site rehabilitation contractor, DHEC Laboratory Certification, the UST Section Manager, and Project Manager. The site rehabilitation contractor will be provided a written record of any decision. **At least two weeks notice will be provided to the UST Project Manager prior to mobilizing to the site for sampling to verify attainment of remediation goals.** Costs for transportation and analysis of split or duplicate samples will be paid by DHEC.

or

If the remediation technology is a single event (e. g. excavation of impacted soils, vacuum enhanced recovery): collect sufficient samples as outlined in the CAP to verify the reduction of CoC to the remediation goals. The contractor may be required to install and sample soil and groundwater in up to three verification wells at locations designated by DHEC. If the levels of CoC in all samples are at or below SSTLs, corrective action will be considered complete. If the level of any CoC is above the SSTL, additional corrective action will be required. The contractor will submit one (1) corrective action status report to document the reduction of CoC to the remediation goals. Split or duplicate samples will be collected by DHEC (or its subcontractors) to verify achievement of remediation goals in the manner outlined above. **At least two weeks notice will be provided to UST Project Manager prior to mobilizing to the site for sampling to verify attainment of remediation goals.** Costs for transportation and analysis of split or duplicate samples will be paid by DHEC.

11. Disassemble and remove the remediation system and all associated remediation items including utilities from the site within 60 days of notification by DHEC that the remediation goal for the release associated with the UST(s) at the site has been achieved. Disruption to the owner/operator's normal business will be kept to a minimum.

12. Properly abandon all wells (including preexisting wells), borings, trenches, and piping/utility runs installed by the contractor as part of corrective action within 60 days of notification by DHEC that the remediation goal for the release associated with the UST(s) at the site has been achieved. The abandonment will be in accordance with South Carolina Well Standards and Regulations R. 61-71 and accepted industry standards for abandonment of trenches and piping/utility runs. Disruption to the property owner's normal business will be kept to a minimum. The contractor must notify DHEC of the method of well abandonment and final disposal of any free product and contaminated soil or ground water. The contractor will return the site to the condition prior to corrective action (e.g., asphalt paved areas will be repaved with asphalt, concrete areas will be replaced with concrete, grass areas will have soil replaced to the original grade and reseeded or sodded with grass, etc.)

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

BUREAU OF LAND AND WASTE MANAGEMENT
UNDERGROUND STORAGE TANK PROGRAM

Submit the following by February 12, 2001

CORRECTIVE ACTION SOLICITATION RESPONSE

Please respond to the following questions:

1. The corrective action method(s) or technology (ies) that will be proposed in the CAP will be (list all active and/or intrinsic methods or technologies for remediation of the aquifer; attach additional pages(s) as required): _____

2. The estimated time in months to complete the corrective action from the date of financial approval, corrective action goals are met, and all corrective action items are removed from the site or properly abandoned is approximately _____ months. This time assumes all submitted plans and reports will be reviewed by DHEC within 30 days of receipt.

3. The total cost in dollars, regardless of the type, quantity or duration of the permitted technology applied, to treat the area of concern (see Figure 2) such that the thickness of free product does not exceed 0.01 foot and levels of CoCs do not exceed the site-specific target levels (SSTLs) defined in item 11.C. at any point, complete all associated monitoring and post-remediation verification, prepare all plans, reports, and correspondence; obtain and meet all terms and conditions of all required permits and licenses; design, install, monitor, operate, maintain, and when completed, properly abandon or remove all assessment and remediation items installed as part of corrective action; provide evidence of performance bond; and other items outlined in this request for solicitation response for Smith's Grocery (UST Permit #09322), 3176 Charlotte Highway, York, SC 29745, York County is: $ _____

ACCEPTANCE and DELIVERY STATEMENT

In compliance with the request for solicitation response and subject to all conditions thereof, the contractor offers and agrees, if selected by the UST owner/operator within _____ days from the final solicitation response submittal date, to furnish any or all items/services quoted at the prices set forth once financial approval has been issued by the Department.

For the purpose of this submittal and acceptance of financial approval should it occur, I certify that this company understands the nature of the release and the geological conditions at this facility as documented in the technical file and this solicitation. Additionally, I certify that this company understands that acceptance is based on total cost to treat the area of concern.

_____ _____
Contractor (Print) Certification Number

_____ _____
Authorized Representative (Print) Signature

_____
Date Signed

Sally

CBM

ENVIRONMENTAL SERVICES, INC.

November 11, 2000

Ms. Pam Dubois
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

RECEIVED
NOV 09 2000
Bureau of Underground
Storage Tank Management

RE: Water Supply Well Analytical Data
Top of Casing Elevation Data
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Ms. Dubois:

The purpose of this correspondence is to present information associated with assessment activities conducted at the above referenced site. Three additional monitoring wells were completed at the site on August 17-18, 2000. The monitoring wells installed included one Type II monitor well (MW-20) and two Type III monitor wells (TW-2 and TW-3). A subsequent survey was completed and the top of casing elevations for the three monitoring wells were determined. The top of casing elevations are as follows:

MW-20 – 87.89 feet
TW-2 – 94.57 feet
TW-3 – 98.97 feet

Water supply wells located at the Vickery residence and the Hill residence were sampled on October 19, 2000. Granular activated carbon (GAC) units have been installed on each of the wells to treat groundwater affected by petroleum hydrocarbons. Pre-treatment and post-treatment samples were collected from each of the water supply wells. The samples were submitted for analyses of BTEX, MTBE and naphthalene using Method 8260. No detectable concentrations of the requested method constituents were reported in the pre-treatment and post-treatment samples collected from the Hill water supply well. No detectable concentrations of the requested method constituents were reported in the post-treatment sample collected from the Vickery well. Benzene was reported in the pre-treatment sample collected from the Vickery well at a concentration of 83.8 ug/L. The complete analytical reports for the groundwater samples collected from the water supply wells are attached.

If you have any questions or require additional information concerning this matter, please contact the undersigned at (803) 548-5989.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: file

P.O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29715 • 803 548-5989 • Fax 803 548-5892

TestAmerica
INCORPORATED

RECEIVED
NOV 0 2 2000

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
PO BOX 411387
CHARLOTTE, NC 28241

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: SHANNON COTTRILL

Lab Number: 00-A151379
Sample ID: VICKERY (PRE)
Sample Type: Ground water
Site ID:

Date Collected: 10/19/00
Time Collected: 17:35
Date Received: 10/21/00
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	83.8	ug/l	2.0	2.0	1	10/29/00	1:51	C.Bates	8260B	6360
Ethylbenzene	ND	ug/l	2.0	2.0	1	10/29/00	1:51	C.Bates	8260B	6360
Naphthalene	ND	ug/l	5.0	5.0	1	10/29/00	1:51	C.Bates	8260B	6360
Toluene	ND	ug/l	2.0	2.0	1	10/29/00	1:51	C.Bates	8260B	6360
Xylenes, Total	25.9	ug/l	2.0	2.0	1	10/29/00	1:51	C.Bates	8260B	6360
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	10/29/00	1:51	C.Bates	8260B	6360

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	83.	71. - 136.
VOA Surr, Toluene d8	109.	69. - 129.
VOA Surr, 4-BFB	93.	65. - 122.
VOA Surr, DBFM	91.	61. - 139.

= Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica
INCORPORATED

RECEIVED
NOV 0 2 2000

ANALYTICAL REPORT

Laboratory Number: 00-A151379
Sample ID: VICKERY (PRE)

These results relate only to the items tested.
This report shall not be reproduced except in full and with
permission of the laboratory.

Report Approved By: _____ Report Date: 10/30/00

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica INCORPORATED

RECEIVED NOV 0 2 2000

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
PO BOX 411387
CHARLOTTE, NC 28241

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: SHANNON COTTRILL

Lab Number: 00-A151380
Sample ID: VICKERY (POST)
Sample Type: Ground water
Site ID:

Date Collected: 10/19/00
Time Collected: 17:46
Date Received: 10/21/00
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	10/29/00	2:30	C.Bates	8260B	6360
Ethylbenzene	ND	ug/l	2.0	2.0	1	10/29/00	2:30	C.Bates	8260B	6360
Naphthalene	ND	ug/l	5.0	5.0	1	10/29/00	2:30	C.Bates	8260B	6360
Toluene	ND	ug/l	2.0	2.0	1	10/29/00	2:30	C.Bates	8260B	6360
Xylenes, Total	ND	ug/l	2.0	2.0	1	10/29/00	2:30	C.Bates	8260B	6360
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	10/29/00	2:30	C.Bates	8260B	6360

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	98.	71. - 136.
VOA Surr, Toluene d8	102.	69. - 129.
VOA Surr, 4-BFB	90.	65. - 122.
VOA Surr, DBFM	96.	61. - 139.

= Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica
INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 00-A151380
Sample ID: VICKERY (POST)

These results relate only to the items tested.
This report shall not be reproduced except in full and with
permission of the laboratory.

Report Approved By: _____ Report Date: 10/30/00

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica
INCORPORATED

RECEIVED
NOV 0 2 2000

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
PO BOX 411387
CHARLOTTE, NC 28241

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: SHANNON COTTRILL

Lab Number: 00-A151381
Sample ID: HILL (PRE)
Sample Type: Ground water
Site ID:

Date Collected: 10/19/00
Time Collected: 18:00
Date Received: 10/21/00
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	10/29/00	3:09	C.Bates	8260B	6360
Ethylbenzene	ND	ug/l	2.0	2.0	1	10/29/00	3:09	C.Bates	8260B	6360
Naphthalene	ND	ug/l	5.0	5.0	1	10/29/00	3:09	C.Bates	8260B	6360
Toluene	ND	ug/l	2.0	2.0	1	10/29/00	3:09	C.Bates	8260B	6360
Xylenes, Total	ND	ug/l	2.0	2.0	1	10/29/00	3:09	C.Bates	8260B	6360
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	10/29/00	3:09	C.Bates	8260B	6360

ND - Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	104.	71. - 136.
VOA Surr, Toluene d8	97.	69. - 129.
VOA Surr, 4-BFB	89.	65. - 122.
VOA Surr, DBFM	99.	61. - 139.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica
INCORPORATED

RECEIVED
NOV 0 2 2000

ANALYTICAL REPORT

Laboratory Number: 00-A151381
Sample ID: HILL (PRE)

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 10/30/00

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica
INCORPORATED

RECEIVED
NOV 0 2 2000

ANALYTICAL REPORT

CBM ENVIRONMENTAL-CHARLOTTE 2175
JOHN HESS
PO BOX 411387
CHARLOTTE, NC 28241

Lab Number: 00-A151382
Sample ID: HILL (POST)
Sample Type: Ground water
Site ID:

Date Collected: 10/19/00
Time Collected: 18:15
Date Received: 10/21/00
Time Received: 9:00

Project: 10629
Project Name: SMITH'S GROCERY
Sampler: SHANNON COTTRILL

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	10/29/00	3:48	C.Bates	8260B	6360
Ethylbenzene	ND	ug/l	2.0	2.0	1	10/29/00	3:48	C.Bates	8260B	6360
Naphthalene	ND	ug/l	5.0	5.0	1	10/29/00	3:48	C.Bates	8260B	6360
Toluene	ND	ug/l	2.0	2.0	1	10/29/00	3:48	C.Bates	8260B	6360
Xylenes, Total	ND	ug/l	2.0	2.0	1	10/29/00	3:48	C.Bates	8260B	6360
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	10/29/00	3:48	C.Bates	8260B	6360

ND - Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	102.	71. - 136.
VOA Surr, Toluene d8	101.	69. - 129.
VOA Surr, 4-BFB	90.	65. - 122.
VOA Surr, DBFM	99.	61. - 139.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica
INCORPORATED

RECEIVED
NOV 0 2 2000

ANALYTICAL REPORT

Laboratory Number: 00-A151382
Sample ID: HILL (POST)

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 10/30/00

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

NOV 0 2 2000

TestAmerica INCORPORATED

Division/Laboratory Name: _____

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes? Compliance Monitoring _____

Client Name: CBM ENVIRONMENTAL Client #: 2175

Address: 377 CAROWINDS BLVD, SUITE 118

City/State/Zip Code: FORT MILL, SC 29708

Project Manager: SCOTT BALL

Telephone Number: 803-548-5989 Fax: 803-548-5892

Sampler Name: (Print Name) SHANNON COTTRILL

Sampler Signature: Shannon M. Cottrill

Project Name: SMITH'S GROCERY

Project #: 10629

Site/Location ID: _____ State: SC

Report To: SCOTT BALL

Invoice To: CBM ENVIRONMENTAL SERVICES

Quote #: _____ PO#: 13595

TAT: ✓ Standard ___ Rush (surcharges may apply)

Date Needed: 10/27/00 (5 DAY TURN)

Fax Results: (Y) N

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix: DW - Drinking Water, GW - Groundwater, WW - Wastewater, S - Soil/Solid, SL - Sludge, Specify Other	Preservation & # of Containers: HNO3	HCl	NaOH	H2SO4	Methanol	None	Other (Specify)	Analyze For: 8260B - BTEX + MTBE + TNAP	QC Deliverables	REMARKS
VICKERY (PRE)	10/19/00	17:35	G		DW	3							✓	None	151379
VICKERY (POST)	"	17:46	G		DW	3							✓	Level 2 (Batch QC)	380
HILL (PRE)	"	18:00	G		DW	3							✓	Level 3	381
HILL (POST)	"	18:15	G		DW	3							✓	Level 4	382
														Other: _____	

BC 212783

Fax COC to Charlotte office FAX (704) 392-9079

Special Instructions:

	Date:	Time:		Date:	Time:
Relinquished By: Shannon M. Cottrill	10/20/00		Received By: Michelle Pickett	10/20/00	1850
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By: C. Allen	Date: 10-21-00	Time: 0900

LABORATORY COMMENTS:
Init Lab Temp: 2°
Rec Lab Temp:
Custody Seals: Y (N) N/A
Bottles Supplied by TestAmerica: (Y) N
Method of Shipment:

SB, JH, file

TESTAMERICA, INC.-NASHVILLE

RECEIVED
NOV 02 2000

COOLER RECEIPT FORM

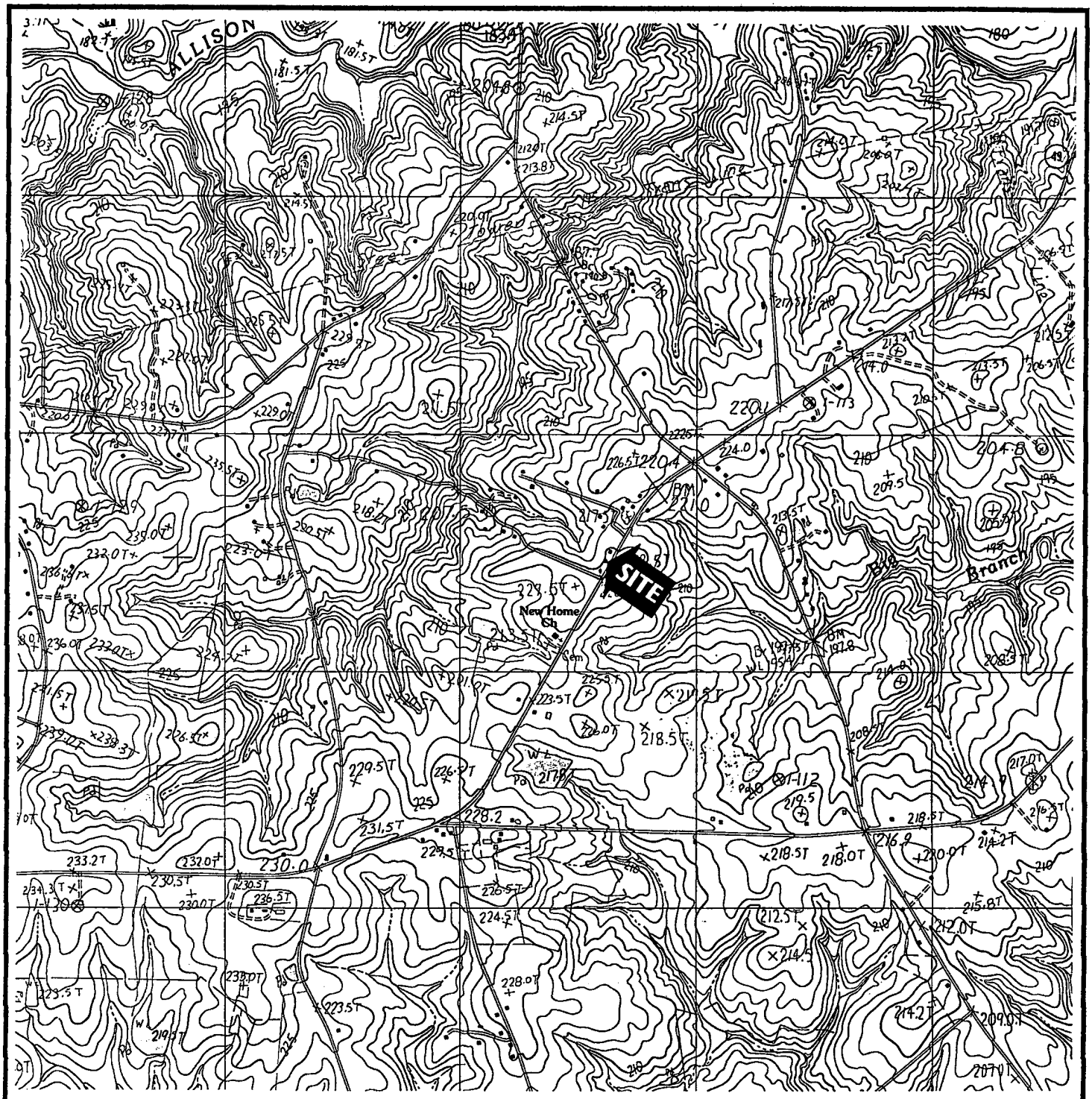
Client: Com Env - 2175 BC# 212783

Cooler Received On: 10-21-00 And Opened On: 10-21-00 By: Cray Allen

Cray R. Allen
(Signature)

1. Temperature of Cooler when opened 2 Degrees Celsius
2. Were custody seals on outside of cooler? ..... YES (NO)
   a. If yes, how many, what kind and where: _____
3. Were custody seals on containers and intact? ..... (NO) YES
4. Were the seals intact, signed, and dated correctly? ..... (YES) NO
5. Were custody papers inside cooler? ..... (YES) NO
6. Were custody papers properly filled out (ink,signed,etc)? ..... (YES) NO
7. Did you sign the custody papers in the appropriate place? ..... (YES) NO
8. What kind of packing material used? (Bubblewrap) Peanuts Vermiculite Other None
9. Was sufficient ice used (if appropriate)? ..... (YES) NO
10. Did all bottles arrive in good condition(unbroken)? ..... (YES) NO
11. Were all bottle labels complete (#,date,signed,pres,etc)? ..... (YES) NO
12. Did all bottle labels and tags agree with custody papers? ..... (YES) NO
13. Were correct bottles used for the analysis requested? ..... (YES) NO
14. a. Were VOA vials received? ..... (YES) NO
    b. Was there any observable head space present in any VOA vial? ..... (NO) YES
15. Was sufficient amount of sample sent in each bottle? ..... (YES) NO
16. Were correct preservatives used? ..... (YES) NO
17. Was residual chlorine present? ..... (NO) YES
17. Corrective action taken, if necessary:

    See attached for resolution



CLOVER, SC QUADRANGLE

CBM ENVIRONMENTAL SERVICES, INC.

LATITUDE: 35° 02' 30" N	
LONGITUDE: 81° 08' 48" W	
DATE: 02/11/99	
DRAWN BY: AWB	
CHECKED BY: JFH	

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SOUTH CAROLINA

SITE I.D. NO. 09322

FIGURE 1

USGS TOPOGRAPHIC MAP

CBM PROJECT NO. 10629

CBM
ENVIRONMENTAL SERVICES, INC.

CP# 11972 was done 8/10 for 3 months add. pt. well smpling

September 28, 2000

RECEIVED
OCT 0 2 2000
Bureau of Underground Storage Tank Management

Ms. Pam Dubois
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

RE: Groundwater Monitoring Report
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

√d6 addendum

Dear Ms. Dubois:

The purpose of this report is to present the results of monitoring well installation and groundwater sampling activities conducted at the above referenced site. The activities were conducted in general accordance with the Assessment Component Cost Proposal submitted to the SCDHEC on February 29, 2000 and approved in correspondence dated March 14, 2000 and June 20, 2000. Three additional monitoring wells were completed at the site on August 17-18, 2000. The monitoring wells installed included one Type II monitor well (MW-20) and two Type III monitor wells (TW-2 and TW-3). A subsequent survey has not been approved for the site. Therefore, the top of casing elevations for the three monitoring wells have not been surveyed. A comprehensive groundwater sampling event was conducted at the site on August 21-23, 2000. Groundwater samples were collected from monitoring wells MW-1 through MW-20 and TW-1 through TW-3 during the sampling event. Groundwater samples have also been routinely collected from water supply wells in the area around the site. The following Figures, Tables and Appendices have been attached:

Figure 1: USGS Topographic Map
Figure 2: Site Map
Figure 3: Water Table Surface Map
Figure 4: Groundwater Quality Map
Table 1: Summary of Groundwater Elevation Data
Table 2: Summary of Groundwater Analytical Data – Monitoring Wells
Table 3: Summary of Groundwater Analytical Data – Natural Attenuation Parameters
Appendix A: Well Construction Records
Appendix B: Laboratory Analytical Reports
Appendix C: Groundwater Sampling Data Sheets
Appendix D: Disposal Manifest

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

Concentrations of one or more dissolved phase BTEX constituents, MTBE, EDB and/or naphthalene that exceeded the RBSLs were reported in monitoring wells MW-1, MW-2, MW-6 through MW-10, MW-12, TW-1 and TW-2. In addition, concentrations of total lead that exceeded the RBSL were reported in MW-2 through MW-4, MW-6, MW-7, MW-9, MW-10 and MW-13 through MW-20. Please note that the site and all surrounding residential properties use water supply wells as a source of potable water. A municipal water source is not available to the area. Water supply wells located at the Vickery and Hill residences, located to the east of the site, have been affected by petroleum hydrocarbons. Granular activated carbon treatment systems have been installed at the wells and are currently being used to treat the groundwater pumped from the wells. Monthly post treatment samples were collected at the Vickery and Hill water supply wells through July 2000. Pre-approval for the continued monthly sampling of the Vickery and Hill water supply wells was submitted to the SCDHEC on August 3, 2000. Monthly sampling of the wells will be continued when approval is received from the SCDHEC.

Based on the groundwater quality data obtained from the monitoring wells, it appears that the horizontal and vertical extent of the hydrocarbon plume has been adequately defined for the purpose of determining an appropriate corrective action.

Please contact the undersigned at (803) 548-5989 if you have any questions or comments concerning this project.

Sincerely,
CBM Environmental Services, Inc.

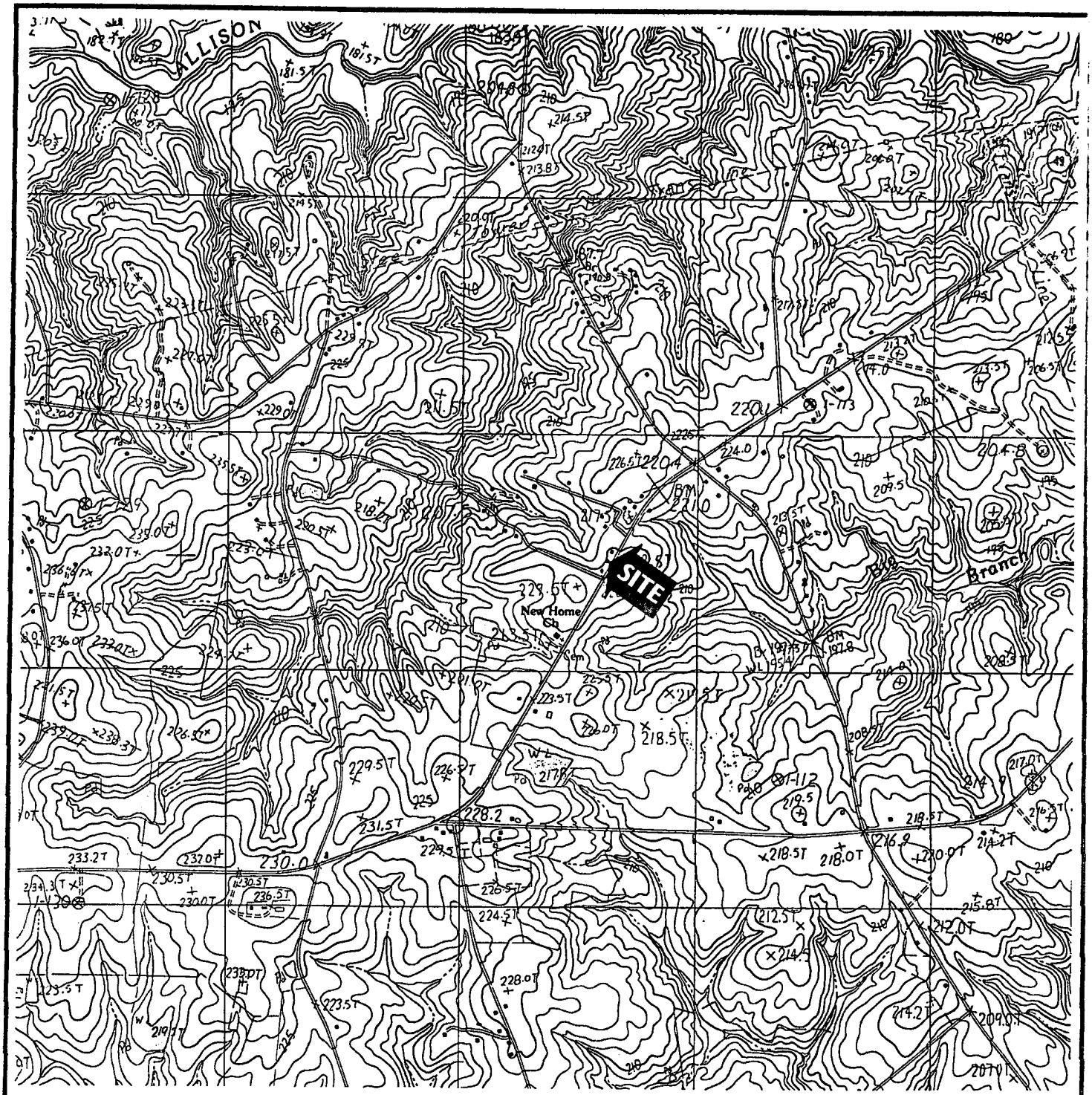
W. Scott Ball
Senior Project Manager

JAMES E. WELLONS, III
REGISTERED
No. 2236
PROFESSIONAL GEOLOGIST
SOUTH CAROLINA

James E. Wellons, III, P.G.
License No. 2236

enclosures

cc: Mrs. Lois Smith, Smith's Grocery
file



SCALE 1:24,000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

CONTOUR INTERVAL 3 METERS

QUADRANGLE LOCATION

CLOVER, SC QUADRANGLE

CBM ENVIRONMENTAL SERVICES, INC.

LATITUDE: 35° 02' 30" N	
LONGITUDE: 81° 08' 48" W	
DATE: 02/11/99	
DRAWN BY: AWB	
CHECKED BY: JFH	

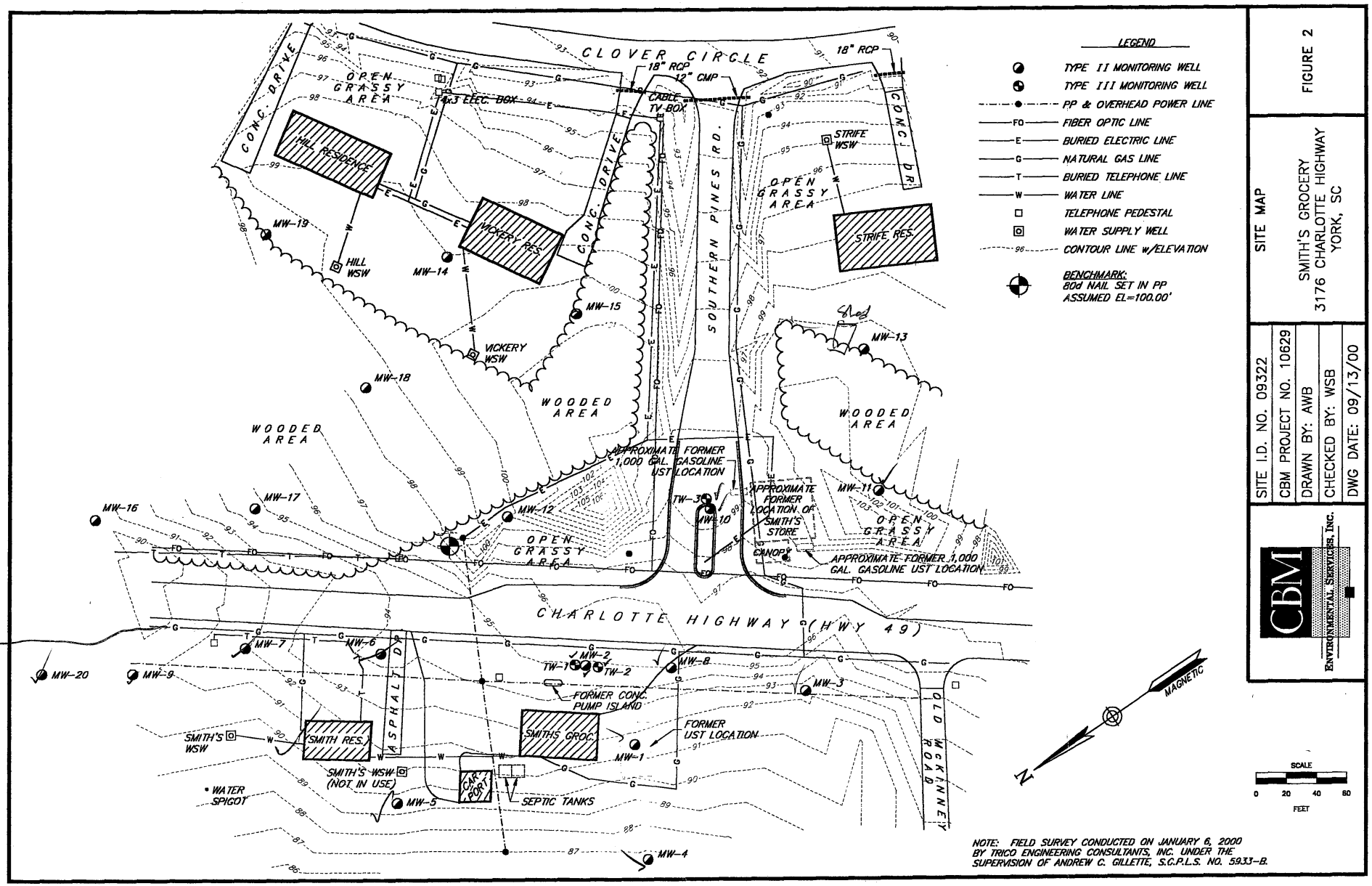
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SOUTH CAROLINA

SITE I.D. NO. 09322

FIGURE 1

USGS TOPOGRAPHIC MAP

CBM PROJECT NO. 10629



LEGEND

- TYPE II MONITORING WELL
- TYPE III MONITORING WELL
- PP & OVERHEAD POWER LINE
- FO — FIBER OPTIC LINE
- E — BURIED ELECTRIC LINE
- G — NATURAL GAS LINE
- T — BURIED TELEPHONE LINE
- W — WATER LINE
- TELEPHONE PEDESTAL
- WATER SUPPLY WELL
- 96 — CONTOUR LINE w/ELEVATION

BENCHMARK:
80d NAIL SET IN PP
ASSUMED EL=100.00'

NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

FIGURE 2

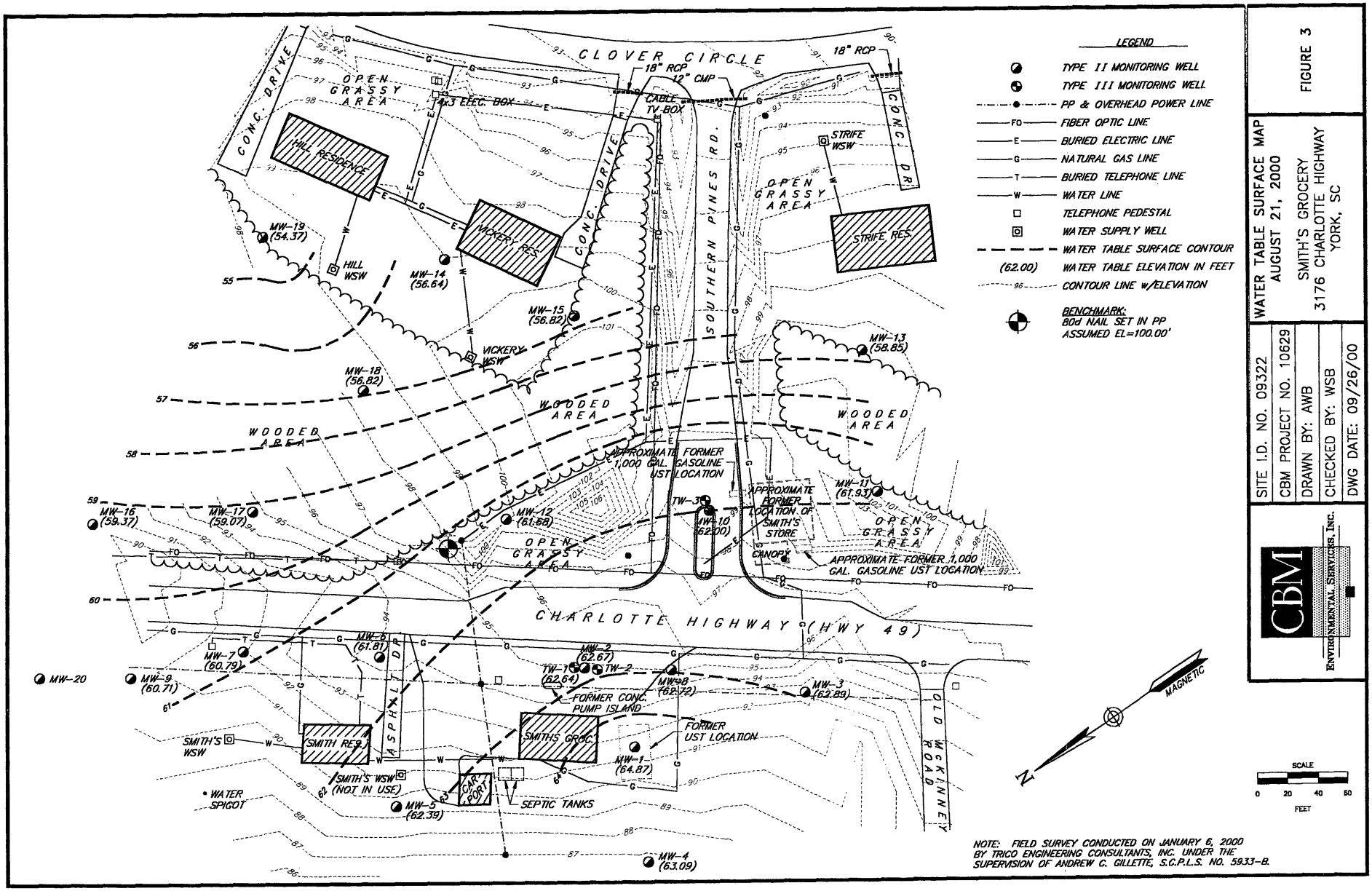
SITE MAP

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: WSB
DWG DATE: 09/13/00

CBM
ENVIRONMENTAL SERVICES, INC.

Wilson Hwy Rd.



NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

FIGURE 3

WATER TABLE SURFACE MAP
AUGUST 21, 2000

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: WSB
DWG DATE: 09/26/00

CBM
ENVIRONMENTAL SERVICES, INC.

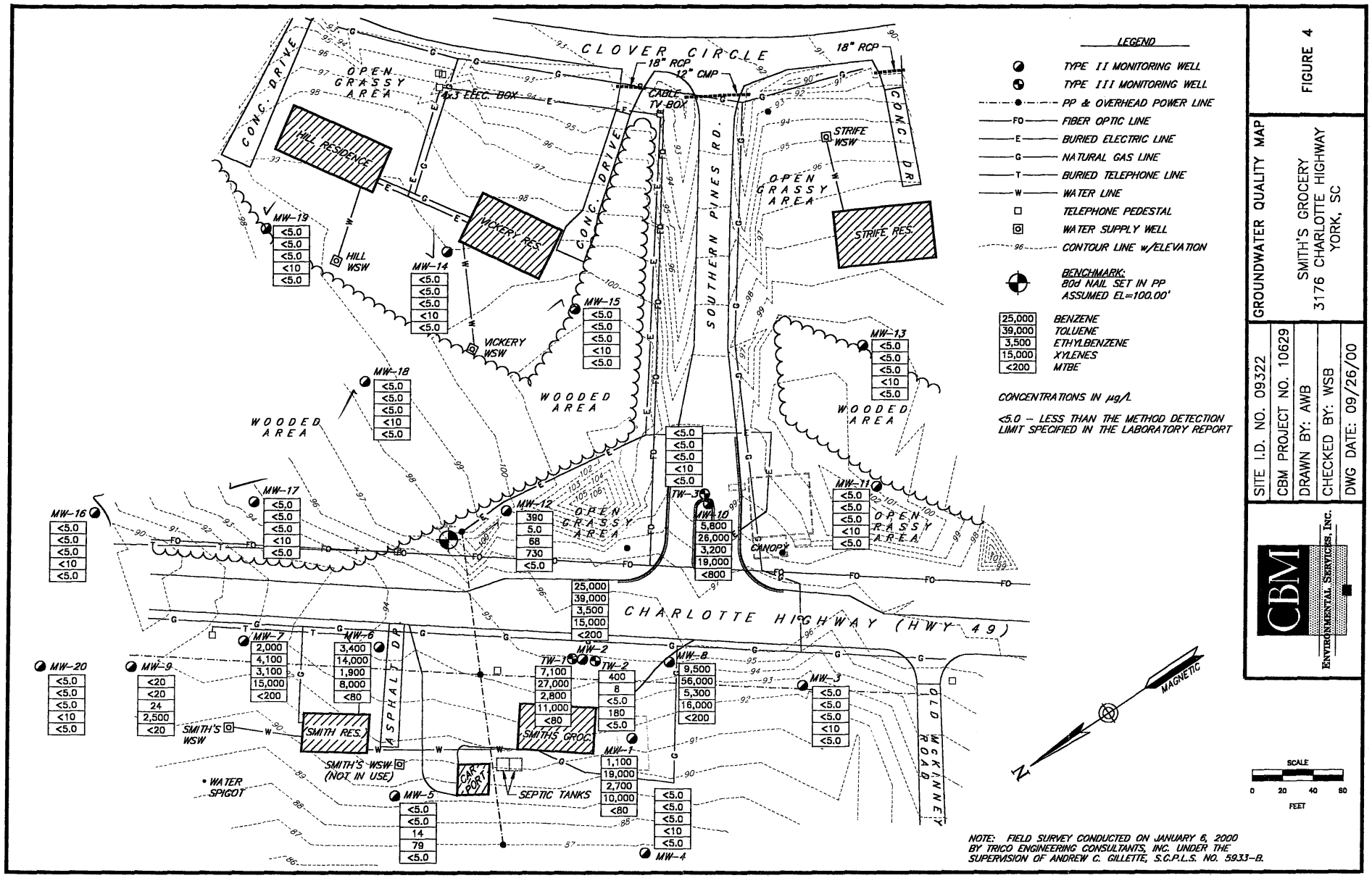


FIGURE 4

GROUNDWATER QUALITY MAP

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: WSB
DWG DATE: 09/26/00

CBM
ENVIRONMENTAL SERVICES, INC.

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA[1]
SMITH'S GROCERY

Well No.	Date	Top of Casing Elevation	Depth to Water	Water Table Elevation	Well Depth	Screened Interval
MW-1	12/1/99	91.16	27.85	63.31	35	25-35
	8/21/00		26.29	64.87		
MW-2	12/1/99	94.57	31.58	62.99	38	23-38
	8/21/00		31.90	62.67		
MW-3	12/1/99	91.91	28.62	63.29	35	25-35
	8/21/00		29.02	62.89		
MW-4	12/1/99	86.20	22.76	63.44	27	17-27
	8/21/00		23.11	63.09		
MW-5	12/1/99	89.29	26.20	63.09	30	20-30
	8/21/00		26.90	62.39		
MW-6	12/1/99	93.91	31.60	62.31	37	27-37
	8/21/00		32.10	61.81		
MW-7	12/1/99	91.68	30.41	61.27	36	26-36
	8/21/00		30.89	60.79		
MW-8	12/1/99	94.72	31.65	63.07	38	23-38
	8/21/00		32.00	62.72		
MW-9	12/1/99	90.54	29.31	61.23	36	21-36
	8/21/00		29.83	60.71		
MW-10	12/1/99	99.77	37.30	62.47	44	29-44
	8/21/00		37.77	62.00		
MW-11	12/1/99	100.46	38.23	62.23	44	29-44
	8/21/00		38.53	61.93		
MW-12	12/1/99	99.61	37.53	62.08	44	29-44
	8/21/00		37.93	61.68		
MW-13	12/1/99	100.39	41.22	59.17	47	32-47
	8/21/00		41.54	58.85		
MW-14	12/1/99	98.89	41.85	57.04	50	35-50
	8/21/00		42.25	56.64		
MW-15	12/1/99	100.18	43.23	56.95	50	35-50
	8/21/00		43.36	56.82		
MW-16	12/1/99	89.91	30.00	59.91	37	22-37
	8/21/00		30.54	59.37		

TABLE 1 (cont'd)
SUMMARY OF GROUNDWATER ELEVATION DATA[1]
SMITH'S GROCERY

Well No.	Date	Top of Casing Elevation	Depth to Water	Water Table Elevation	Well Depth	Screened Interval
MW-17	12/1/99	94.46	34.67	59.79	40	25-40
	8/21/00		35.39	59.07		
MW-18	12/1/99	98.14	40.87	57.27	46	31-46
	8/21/00		41.32	56.82		
MW-19	12/1/99	98.27	43.51	54.76	50	35-50
	8/21/00		43.90	54.37		
MW-20	8/21/00	NS	27.58	----	35	20-35
TW-1	12/1/99	94.72	32.00	62.72	61	56-61
	8/21/00		32.08	62.64		
TW-2	8/21/00	NS	32.00	----	88	86-88
TW-3	8/21/00	NS	37.00	----	71	66-71

Notes:
1. Elevations relative to a temporary benchmark with an assumed datum of 100.00 feet; data reported in feet.
2. Not surveyed.

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA[1]
MONITORING WELLS
SMITH'S GROCERY

Well No.	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	EDB	Naphthalene	Total Lead
MW-1	12/1/99	**610**[2]	**11,000**	**3,200**	**18,500**	<5[3]	<5	**610**	7.3
	8/21/00	**1,100**	**19,000**	**2,700**	**10,000**	<80	0.32	**770**	2
MW-2	12/1/99	**36,000**	**49,000**	**2,800**	**14,200**	**1,600**	**260**	**890**	**1,300**
	8/21/00	**25,000**	**39,000**	**3,500**	**15,000**	<200	**179**	<200	**1,300**
MW-3	12/1/99	<5	<5	<5	<15	<5	<5	<5	<5
	8/21/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**33**
MW-4	12/2/99	<5	<5	<5	<15	<5	<5	<5	6.3
	8/22/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**40**
MW-5	12/2/99	<5	<5	20	77	<5	<5	<5	**18**
	8/22/00	<5.0	<5.0	14	79	<5.0	<0.02	**8**	2
MW-6	12/2/99	**3,300**	**11,000**	**1,300**	7,000	<5	**9.6**	**270**	**32**
	8/22/00	**3,400**	**14,000**	**1,900**	8,000	<80	4.83	**700**	**39**
MW-7	12/2/99	**1,800**	**3,100**	**2,000**	**11,200**	<5	<5	**780**	**59**
	8/22/00	**2,000**	**4,100**	**3,100**	**15,000**	<200	0.66	**1,400**	**110**
MW-8	12/1/99	**14,000**	**60,000**	**4,900**	**24,900**	<5	<5	**900**	14
	8/21/00	**9,500**	**56,000**	**5,300**	**16,000**	<200	0.48	**820**	4
MW-9	12/2/99	**18**	59	250	4,000	<5	<5	**260**	11
	8/22/00	<20	<20	24	2,500	<20	0.10	**140**	**16**
MW-10	12/2/99	**10,000**	**23,000**	**2,200**	**11,100**	<5	**290**	**320**	**22**
	8/23/00	**5,800**	**26,000**	**3,200**	**19,000**	<800	**95.3**	<800	**21**
MW-11	12/2/99	<5	<5	<5	<15	<5	<5	<5	**16**
	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	6.0
MW-12	12/2/99	**500**	9.8	130	880	<5	**30**	**37**	7.7
	8/23/00	**390**	5.0	68	730	<5.0	**20.8**	**52**	7
MW-13	12/2/99	<5	<5	<5	<15	<5	<5	<5	<5
	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**75**

TABLE 2 (cont'd)
SUMMARY OF GROUNDWATER ANALYTICAL DATA[1]
MONITORING WELLS
SMITH'S GROCERY

Well No.	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	EDB	Naphthalene	Total Lead
MW-14	12/2/99	<5	<5	<5	<15	<5	<5	<5	<5
	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	0.51	<5.0	**37**
MW-15	12/2/99	<5	<5	<5	<15	<5	<5	<5	**16**
	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	0.05	<5.0	**39**
MW-16	12/2/99	<5	<5	<5	<15	<5	<5	<5	7.9
	8/22/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**75**
MW-17	12/2/99	<5	<5	<5	<15	<5	<5	<5	15
	8/22/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**29**
MW-18	12/2/99	<5	<5	<5	<15	<5	<5	<5	**50**
	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	0.12	<5.0	**42**
MW-19	12/2/99	<5	<5	<5	<15	<5	<5	<5	**83**
	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**51**
MW-20	8/22/00	<5.0	<5.0	<5.0	<10	<5.0	<0.02	<5.0	**150**
TW-1	12/2/99	**5,800**	**13,000**	**1,000**	5,300	<5	<5	**190**	8
	8/21/00	**7,100**	**27,000**	**2,800**	**11,000**	<80	1.09	**160**	<2
TW-2	8/21/00	**400**	**8**	<5.0	180	<5.0	0.05	**18**	<2
TW-3	8/23/00	<5.0	<5.0	<5.0	<10	<5.0	0.23	<5.0	<2
	RBSL[4]	5	1,000	700	10,000	40	5	10	15

Notes:
1. Analyses for BTEX constituents, MTBE, and naphthalene by Method 8260; analyses for EDB by 504.1; analyses for PAHs by Method 8270; analyses for total lead by EPA Method 200.7; all results reported in µg/L.
2. Concentrations in bold face type exceeded the RBSLs.
3. Less than the method detection limit specified in the laboratory report.
4. January 1998 Risk-Based Screening Levels.

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL DATA[1]
NATURAL ATTENUATION PARAMETERS
SMITH'S GROCERY

Well No.	Date Sampled	Dissolved Oxygen	Nitrate	Sulfate	Iron	Methane
MW-1	12/1/99	3.40	<0.050[2]	6.2	2.6	0.027
	8/21/00	0.87	<0.05	0.59	11	<0.026
MW-2	12/1/99	2.57	<0.050	20	8.2	<0.0086
	8/21/00	3.10	<0.05	1.1	3.3	<0.026
MW-3	12/1/99	5.86	1.0	6.6	1.2	<0.0086
	8/21/00	4.10	0.84	<0.05	10	<0.026
MW-4	12/2/99	5.83	2.1	<5.0	0.28	<0.0086
	8/22/00	4.55	2.3	<0.50	23	<0.026
MW-5	12/2/99	4.18	0.072	5.0	1.4	<0.0086
	8/22/00	2.57	0.98	<0.50	2.4	<0.026
MW-6	12/2/99	3.70	<0.050	<5.0	0.63	<0.0086
	8/22/00	0.86	<0.05	<0.50	7.8	<0.026
MW-7	12/2/99	1.87	0.052	6.7	0.70	<0.0086
	8/22/00	1.32	<0.05	<0.05	24	<0.026
MW-8	12/1/99	2.02	<0.050	<5.0	0.44	<0.0086
	8/21/00	0.70	<0.05	<0.50	2.0	<0.026
MW-9	12/2/99	4.60	<0.050	5.3	0.57	<0.0086
	8/22/00	1.91	<0.05	<0.050	7.6	<0.026
MW-10	12/2/99	4.80	<0.050	7.2	0.17	<0.0086
	8/23/00	1.48	<1.0	6.2	8.6	<0.026
MW-11	12/2/99	5.46	3.8	5.7	0.81	<0.0086
	8/23/00	3.05	4.2	6.0	0.84	<0.026
MW-12	12/2/99	2.93	0.62	<5.0	0.36	<0.0086
	8/23/00	1.50	<1.0	5.3	4.1	<0.026
MW-13	12/2/99	5.53	0.80	7.1	0.065	<0.0086
	8/23/00	5.50	1.4	5.4	26	<0.026
MW-14	12/2/99	5.41	0.80	35	0.23	<0.0086
	8/23/00	5.95	2.1	9.6	70	<0.026
MW-15	12/2/99	5.42	3.4	5.5	0.66	<0.0086
	8/23/00	5.24	4.3	5.3	17	<0.026
MW-16	12/2/99	4.88	0.059	10	0.79	<0.0086
	8/22/00	3.80	0.36	5.1	310	<0.026
MW-17	12/2/99	2.70	<0.050	12	0.90	<0.0086
	8/22/00	2.20	0.090	<0.050	20	<0.026
MW-18	12/2/99	5.93	1.9	<5.0	18	<0.0086
	8/23/00	5.10	2.4	11	64	<0.026

TABLE 3 (cont'd)
SUMMARY OF GROUNDWATER ANALYTICAL DATA[1]
NATURAL ATTENUATION PARAMETERS
SMITH'S GROCERY

Well No.	Date Sampled	Dissolved Oxygen	Nitrate	Sulfate	Iron	Methane
MW-19	12/2/99	6.00	2.6	<5.0	10	<0.0086
	8/23/00	6.03	2.7	5.2	83	<0.026
MW-20	8/22/00	5.54	0.64	<0.050	48	<0.026
TW-1	12/2/99	4.35	0.19	15	0.92	<0.0086
	8/21/00	1.4	<0.05	12	3.3	<0.026
TW-2	8/21/00	4.70	0.36	5.8	0.16	<0.026
TW-3	8/23/00	2.35	1.9	17	0.34	<0.026

Notes:
1. Results reported in mg/L.
2. Less than the method detection limit specified in the laboratory report.

APPENDIX A
Well Construction Records

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

DHEC — PROMOTE PROTECT PROSPER

1. LOCATION OF WELL:

County:	SYSTEM NAME
York	Smith's Grocery
Latitude:	Longitude:
35° 02' 30" N	81° 09' 48" W

Distance and Direction from Road Intersections:
480' from HWY 49/Old Mckinney Rd

Street Address & City of Well Location:
3176 CHARLOTTE HIGHWAY, YORK

Sketch Map:
See Figure 2

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish - Brown Micaceous Silty Clay (Friable)	16'	16'
Brown Micaceous Silty Clay (Friable)	3'	19'
Reddish - Brown Miceaceous Silt (Friable)	7'	26'
Tan Micaceous Silty Clay (Friable)	9'	35'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS
MW - 20 BENTONITE 18-19'

4. OWNER OF WELL: LOIS SMITH
Address: 3176 CHARLOTTE HIGHWAY
YORK, SOUTH CAROLINA 29745
Telephone No: (803) 684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: (803) 548-5989

5. WELL DEPTH (completed) 35 ft. Date Started: 3/28/00 Date Completed: 3/28/00

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐ Remediation

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 20 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15
Set Between: 20 ft. and 35 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
27.58 ft. below land surface after 24 hours
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 19 ft. to 35 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☐ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 18 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 350 ft. SW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services, Inc. Date: 9/27/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Authorized Representative Cert. No. 1331

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County:	SYSTEM NAME
York	Smith's Grocery
Latitude:	Longitude:
35° 02' 30" N	81° 08' 48" W

Distance and Direction from Road Intersections:
190' from HWY 49/Old McKinney Rd

Street Address & City of Well Location:
3176 CHARLOTTE HIGHWAY, YORK

Sketch Map:
See Figure 2

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Light Tan Sandy Clay	74'	74'
Light Tan Clayey Sand (Loose)	5'	79'
Light Tan Sandy Clay (Firm)	6'	85'
Tan Clayey Sand (Loose)	3'	88'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS
TW - 2 BENTONITE 82 - 84'

4. OWNER OF WELL: LOIS SMITH
Address: 3176 CHARLOTTE HIGHWAY
YORK, SOUTH CAROLINA 29745
Telephone No: (803) 684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: (803) 548-5989

5. WELL DEPTH (completed) 88 ft. Date Started: 08/15/00 Date Completed: 08/17/00

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ____ ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐ Remediation

8. CASING: ☒ Threaded ☐ Welded
Diam.: 4", 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
4 in. to 70 ft. depth
2 in. to 86 ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 2'
Set Between: 86 ft. and 88 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
32.00 ft. below land surface after 24 hours
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: ____

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 84 ft. to 88 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 82 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 5 ft. N direction
Petroleum Type well disinfected upon completion ☐ Yes ☒ No Type: ____ Amount: ____

16. PUMP: Date Installed: ____ Not Installed ☒
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services, Inc. Date: 9/26/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: ____ Authorized Representative Cert. No.: 1468

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County:	SYSTEM NAME
York	Smith's Grocery
Latitude:	Longitude:
35° 02' 30" N	81° 08' 48" W

Distance and Direction from Road Intersections:
35' from HWY 49/Southern Pines Rd

Street Address & City of Well Location:
3176 CHARLOTTE HIGHWAY, YORK

Sketch Map:
See Figure 2

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish - Brown Micaceous Silty Clay (Friable)	3'	3'
Orangish - Brown Micaceous Silty Clay (Friable)	4'	7'
Light Brown To Tan Micaceous Silty Clay (Friable)	10'	17'
Brown Micaceous Silty Clay (Friable)	6'	23'
Reddish -Brown Micaceous Silty Clay (Friable)	4'	27'
Dark Brown Micaceous Silty Clay (Friable)	8'	35'
Dark Reddish-Brown Micaceous Silty Clay (Friable)	6'	41'
Dark Brown to Brown Micaceous Silty Clay	6'	47'
Reddish - Brown To Tan Silt With Weathered Rock	6'	53'
Brown Silts With Weathered Rock	18'	71'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS
TW - 3 BENTONITE 62 - 64'

4. OWNER OF WELL: LOIS SMITH
Address: 3176 CHARLOTTE HIGHWAY
YORK, SOUTH CAROLINA 29745
Telephone No: (803) 684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: (803) 548-5989

5. WELL DEPTH (completed) 71 ft. Date Started: 03/29/00 Date Completed: 08/18/00

6. ☒ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug
☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE:
☐ Domestic ☐ Public Supply-Permit No. ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☒ Monitor Well ☐ Remediation

8. CASING: ☒ Threaded ☐ Welded
Diam.: 6", 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
6" in. to 50 ft. depth
2" in. to 66 ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 5'
Set Between: 66 ft. and 71 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
37.00 ft. below land surface after 24 hours
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 64 ft. to 71 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 62' ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 135 ft. N direction
Petroleum Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services, Inc. Date: 9/27/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Authorized Representative Cert. No.: 1468

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

APPENDIX B
Laboratory Analytical Reports

Lab Report

RECEIVED
SEP 0 5 2000
10629

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB79167**
Login Group: MK829G20
Sample Collection Date/Time: 8/21/00 11:20
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	1.3	mg/L	0.2	7421	8/25/00 18:27	DHJ
MTBE	Not detected	ug/L	200	8260	8/25/00 13:10	MP
BENZENE	25000	ug/L	200	8260	8/25/00 13:10	MP
TOLUENE	39000	ug/L	200	8260	8/25/00 13:10	MP
ETHYLBENZENE	3500	ug/L	200	8260	8/25/00 13:10	MP
XYLENES	15000	ug/L	400	8260	8/25/00 13:10	MP
NAPHTHALENE	Not detected	ug/L	200	8260	8/25/00 13:10	MP
SURR: DIBROMOFLUOROMETHANE	96	%	86-118	8260	8/25/00 13:10	MP
SURR: TOLUENE, D8	90	%	88-110	8260	8/25/00 13:10	MP
SURR: BROMOFLUOROBENZENE	103	%	86-115	8260	8/25/00 13:10	MP
DILUTION FACTOR	100	ug/L		8260	8/25/00 13:10	MP

METALS DIGESTION	Completed			EPA 200.7	8/24/00 10:45	PRF
IRON, TOTAL	3.3	mg/L	0.10	EPA 200.7	8/24/00 18:47	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 09:30	PRF
EDB	179	ug/L	4.00	EPA 504	8/29/00 17:09	SA

METHANE	Not detected	ug/L	26	RSK175M	8/29/00 13:09	SA

Sample Comments:
Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

SB JH, file

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **TW-2**
Prism Sample ID: **AB79168**
Login Group: MK829G20
Sample Collection Date/Time: 8/21/00 15:15
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3510	Completed				8/24/00 18:30	GRR
LEAD, TOTAL GF 7421	Less than	mg/L	0.002	7421	8/25/00 18:54	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/25/00 13:51	MP
BENZENE	400	ug/L	5.0	8260	8/25/00 13:51	MP
TOLUENE	8	ug/L	5.0	8260	8/25/00 13:51	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/25/00 13:51	MP
XYLENES	180	ug/L	10	8260	8/25/00 13:51	MP
NAPHTHALENE	18	ug/L	5.0	8260	8/25/00 13:51	MP
SURR: DIBROMOFLUOROMETHANE	101	%	86-118	8260	8/25/00 13:51	MP
SURR: TOLUENE, D8	93	%	88-110	8260	8/25/00 13:51	MP
SURR: BROMOFLUOROBENZENE	108	%	86-115	8260	8/25/00 13:51	MP
DILUTION FACTOR	1	ug/L		8260	8/25/00 13:51	MP

NAPHTHALENE	8.8	ug/L	5.0	8270	8/25/00 14:14	CWA
ACENAPHTHENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
ANTHRACENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
FLUORANTHENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
FLUORENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
PYRENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
BENZO(a)ANTHRACENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
BENZO(a)PYRENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
BENZO(b)FLUORANTHENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
BENZO(k)FLUORANTHENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
CHRYSENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
DIBENZO(a,h)ANTHRACENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
INDENO(1,2,3-cd)PYRENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
ACENAPTHYLENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
BENZO(g,h,i)PERYLENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
PHENANTHRENE	Not detected	ug/L	5.0	8270	8/25/00 14:14	CWA
SURR: NITROBENZENE-D5	67	%	28-103	8270	8/25/00 14:14	CWA

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **TW-2**
Prism Sample ID: **AB79168**
Login Group: MK829G20
Sample Collection Date/Time: 8/21/00 15:15
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SURR: 2-FLUOROBIPHENYL	51	%	32-106	8270	8/25/00 14:14	CWA
SURR: TERPHENYL, D14	53**	%	64-150	8270	8/25/00 14:14	CWA
DILUTION FACTOR	1	ug/L		8270	8/25/00 14:14	CWA
METALS DIGESTION	Completed			EPA 200.7	8/24/00 10:45	PRF
IRON, TOTAL	0.16	mg/L	0.10	EPA 200.7	8/24/00 18:52	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 09:30	PRF
EDB	0.05	ug/L	0.02	EPA 504	8/29/00 17:37	SA
METHANE	Not detected	ug/L	26	RSK175M	8/29/00 13:17	SA

Sample Comments:

Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

** - Surrogate for 8270 fell below acceptance range. Matrix interference is suspected.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **TW-1**
Prism Sample ID: **AB79169**
Login Group: MK829G20
Sample Collection Date/Time: 8/21/00 17:00
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	Less than	mg/L	0.002	7421	8/25/00 19:13	DHJ
MTBE	Not detected	ug/L	80	8260	8/25/00 15:22	MP
BENZENE	7100	ug/L	80	8260	8/25/00 15:22	MP
TOLUENE	27000	ug/L	80	8260	8/25/00 15:22	MP
ETHYLBENZENE	2800	ug/L	80	8260	8/25/00 15:22	MP
XYLENES	11000	ug/L	160	8260	8/25/00 15:22	MP
NAPHTHALENE	160	ug/L	80	8260	8/25/00 15:22	MP
SURR: DIBROMOFLUOROMETHANE	102	%	86-118	8260	8/25/00 15:22	MP
SURR: TOLUENE, D8	93	%	88-110	8260	8/25/00 15:22	MP
SURR: BROMOFLUOROBENZENE	107	%	86-115	8260	8/25/00 15:22	MP
DILUTION FACTOR	40	ug/L		8260	8/25/00 15:22	MP

METALS DIGESTION	Completed			EPA 200.7	8/24/00 10:45	PRF
IRON, TOTAL	3.3	mg/L	0.10	EPA 200.7	8/24/00 18:57	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 09:30	PRF
EDB	1.09	ug/L	0.02	EPA 504	8/29/00 18:05	SA

METHANE	Not detected	ug/L	26	RSK175M	8/29/00 13:31	SA

Sample Comments:
Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB79170**
Login Group: MK829G20
Sample Collection Date/Time: 8/21/00 17:50
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.033	mg/L	0.004	7421	8/25/00 19:49	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/25/00 16:05	MP
BENZENE	Not detected	ug/L	5.0	8260	8/25/00 16:05	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/25/00 16:05	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/25/00 16:05	MP
XYLENES	Not detected	ug/L	10	8260	8/25/00 16:05	MP
NAPHTHALENE	Not detected	ug/L	5.0	8260	8/25/00 16:05	MP
SURR: DIBROMOFLUOROMETHANE	101	%	86-118	8260	8/25/00 16:05	MP
SURR: TOLUENE, D8	98	%	88-110	8260	8/25/00 16:05	MP
SURR: BROMOFLUOROBENZENE	104	%	86-115	8260	8/25/00 16:05	MP
DILUTION FACTOR	1	ug/L		8260	8/25/00 16:05	MP

METALS DIGESTION	Completed			EPA 200.7	8/24/00 10:45	PRF
IRON, TOTAL	10	mg/L	0.10	EPA 200.7	8/24/00 19:01	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 09:30	PRF
EDB	Not detected	ug/L	0.02	EPA 504	8/29/00 18:33	SA

METHANE	Not detected	ug/L	26	RSK175M	8/29/00 13:35	SA

Sample Comments:
Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB79171**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 08:30
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.040	mg/L	0.004	7421	8/25/00 19:58	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/25/00 16:52	MP
BENZENE	Not detected	ug/L	5.0	8260	8/25/00 16:52	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/25/00 16:52	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/25/00 16:52	MP
XYLENES	Not detected	ug/L	10	8260	8/25/00 16:52	MP
NAPHTHALENE	Not detected	ug/L	5.0	8260	8/25/00 16:52	MP
SURR: DIBROMOFLUOROMETHANE	90	%	86-118	8260	8/25/00 16:52	MP
SURR: TOLUENE, D8	90	%	88-110	8260	8/25/00 16:52	MP
SURR: BROMOFLUOROBENZENE	115	%	86-115	8260	8/25/00 16:52	MP
DILUTION FACTOR	1	ug/L		8260	8/25/00 16:52	MP

SULFATE	Less than	mg/L	0.50	9056	8/24/00	USB
NITRATE	2.3	mg/L	0.05	9056	8/24/00	USB
METALS DIGESTION	Completed			EPA 200.7	8/24/00 10:45	PRF
IRON, TOTAL	23	mg/L	0.10	EPA 200.7	8/24/00 19:06	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 09:30	PRF
EDB	Not detected	ug/L	0.02	EPA 504	8/29/00 19:00	SA

METHANE	Not detected	ug/L	26	RSK175M	8/29/00 13:43	SA

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB79172**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 08:55
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.002	mg/L	0.002	7421	8/25/00 20:06	DHJ
MTBE	Not detected	ug/L	80	8260	8/25/00 18:52	MP
BENZENE	1100	ug/L	80	8260	8/25/00 18:52	MP
TOLUENE	19000	ug/L	80	8260	8/25/00 18:52	MP
ETHYLBENZENE	2700	ug/L	80	8260	8/25/00 18:52	MP
XYLENES	10000	ug/L	160	8260	8/25/00 18:52	MP
NAPHTHALENE	770	ug/L	80	8260	8/25/00 18:52	MP
SURR: DIBROMOFLUOROMETHANE	93	%	86-118	8260	8/25/00 18:52	MP
SURR: TOLUENE, D8	89	%	88-110	8260	8/25/00 18:52	MP
SURR: BROMOFLUOROBENZENE	102	%	86-115	8260	8/25/00 18:52	MP
DILUTION FACTOR	40	ug/L		8260	8/25/00 18:52	MP

SULFATE	0.59	mg/L	0.50	9056	8/24/00	USB
NITRATE	Less than	mg/L	0.05	9056	8/24/00	USB
METALS DIGESTION	Completed			EPA 200.7	8/24/00 10:45	PRF
IRON, TOTAL	11	mg/L	0.10	EPA 200.7	8/24/00 19:11	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 09:30	PRF
EDB	0.32	ug/L	0.02	EPA 504	8/29/00 19:28	SA

METHANE	Not detected	ug/L	26	RSK175M	8/29/00 13:46	SA

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB79173**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 10:30
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.002	mg/L	0.002	7421	8/25/00 20:15	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/25/00 19:33	MP
BENZENE	Not detected	ug/L	5.0	8260	8/25/00 19:33	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/25/00 19:33	MP
ETHYLBENZENE	14	ug/L	5.0	8260	8/25/00 19:33	MP
XYLENES	79	ug/L	10	8260	8/25/00 19:33	MP
NAPHTHALENE	8	ug/L	5.0	8260	8/25/00 19:33	MP
SURR: DIBROMOFLUOROMETHANE	92	%	86-118	8260	8/25/00 19:33	MP
SURR: TOLUENE, D8	88	%	88-110	8260	8/25/00 19:33	MP
SURR: BROMOFLUOROBENZENE	98	%	86-115	8260	8/25/00 19:33	MP
DILUTION FACTOR	1	ug/L		8260	8/25/00 19:33	MP

SULFATE	Less than	mg/L	0.50	9056	8/24/00	USB
NITRATE	0.98	mg/L	0.05	9056	8/24/00	USB
METALS DIGESTION	Completed			EPA 200.7	8/24/00 10:45	PRF
IRON, TOTAL	2.4	mg/L	0.10	EPA 200.7	8/24/00 19:15	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 09:30	PRF
EDB	Not detected	ug/L	0.02	EPA 504	8/29/00 20:24	SA

METHANE	Not detected	ug/L	26	RSK175M	8/29/00 13:49	SA

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB79174**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 11:20
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.039	mg/L	0.002	7421	8/25/00 20:24	DHJ
MTBE	Not detected	ug/L	80	8260	8/25/00 20:13	MP
BENZENE	3400	ug/L	80	8260	8/25/00 20:13	MP
TOLUENE	14000	ug/L	80	8260	8/25/00 20:13	MP
ETHYLBENZENE	1900	ug/L	80	8260	8/25/00 20:13	MP
XYLENES	8000	ug/L	160	8260	8/25/00 20:13	MP
NAPHTHALENE	700	ug/L	80	8260	8/25/00 20:13	MP
SURR: DIBROMOFLUOROMETHANE	97	%	86-118	8260	8/25/00 20:13	MP
SURR: TOLUENE, D8	96	%	88-110	8260	8/25/00 20:13	MP
SURR: BROMOFLUOROBENZENE	113	%	86-115	8260	8/25/00 20:13	MP
DILUTION FACTOR	40	ug/L		8260	8/25/00 20:13	MP
SULFATE	Less than	mg/L	0.50	9056	8/24/00	USB
NITRATE	Less than	mg/L	0.05	9056	8/24/00	USB
METALS DIGESTION	Completed			EPA 200.7	8/24/00 11:00	PRF
IRON, TOTAL	7.8	mg/L	0.10	EPA 200.7	8/24/00 19:42	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 09:30	PRF
EDB	4.83	ug/L	0.02	EPA 504	8/29/00 20:52	SA
METHANE	Not detected	ug/L	.26	RSK175M	8/29/00 13:53	SA

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 05 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-7**
Prism Sample ID: **AB79175**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 13:30
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.11	mg/L	0.008	7421	8/25/00 20:34	DHJ
MTBE	Not detected	ug/L	200	8260	8/25/00 20:53	MP
BENZENE	2000	ug/L	200	8260	8/25/00 20:53	MP
TOLUENE	4100	ug/L	200	8260	8/25/00 20:53	MP
ETHYLBENZENE	3100	ug/L	200	8260	8/25/00 20:53	MP
XYLENES	15000	ug/L	400	8260	8/25/00 20:53	MP
NAPHTHALENE	1400	ug/L	200	8260	8/25/00 20:53	MP
SURR: DIBROMOFLUOROMETHANE	99	%	86-118	8260	8/25/00 20:53	MP
SURR: TOLUENE, D8	92	%	88-110	8260	8/25/00 20:53	MP
SURR: BROMOFLUOROBENZENE	111	%	86-115	8260	8/25/00 20:53	MP
DILUTION FACTOR	100	ug/L		8260	8/25/00 20:53	MP

SULFATE	Less than	mg/L	0.05	9056	8/24/00	USB
NITRATE	Less than	mg/L	0.05	9056	8/24/00	USB
METALS DIGESTION	Completed			EPA 200.7	8/24/00 11:00	PRF
IRON, TOTAL	24	mg/L	0.10	EPA 200.7	8/24/00 19:57	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 09:30	PRF
EDB	0.66	ug/L	0.02	EPA 504	8/29/00 21:20	SA

METHANE	Not detected	ug/L	26	RSK175M	8/29/00 13:54	SA

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

RECEIVED
SEP 05 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB79176**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 13:55
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.016	mg/L	0.004	7421	8/25/00 20:43	DHJ
SULFATE	Less than	mg/L	0.050	9056	8/24/00	USB
NITRATE	Less than	mg/L	0.05	9056	8/24/00	USB
METALS DIGESTION	Completed			EPA 200.7	8/24/00 11:00	PRF
IRON, TOTAL	7.6	mg/L	0.10	EPA 200.7	8/24/00 20:02	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 09:30	PRF
EDB	0.10	ug/L	0.02	EPA 504	8/29/00 21:47	SA
METHANE	Not detected	ug/L	26	RSK175M	8/29/00 14:01	SA

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 05 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-20**
Prism Sample ID: **AB79177**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 14:25
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3510	Completed				8/24/00 20:00	GRR
LEAD, TOTAL GF 7421	0.15	mg/L	0.020	7421	8/25/00 20:51	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/25/00 22:14	MP
BENZENE	Not detected	ug/L	5.0	8260	8/25/00 22:14	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/25/00 22:14	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/25/00 22:14	MP
XYLENES	Not detected	ug/L	10	8260	8/25/00 22:14	MP
NAPHTHALENE	Not detected	ug/L	5.0	8260	8/25/00 22:14	MP
SURR: DIBROMOFLUOROMETHANE	93	%	86-118	8260	8/25/00 22:14	MP
SURR: TOLUENE, D8	90	%	88-110	8260	8/25/00 22:14	MP
SURR: BROMOFLUOROBENZENE	92	%	86-115	8260	8/25/00 22:14	MP
DILUTION FACTOR	1	ug/L		8260	8/25/00 22:14	MP

NAPHTHALENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
ACENAPHTHENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
ANTHRACENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
FLUORANTHENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
FLUORENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
PYRENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
BENZO(a)ANTHRACENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
BENZO(a)PYRENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
BENZO(b)FLUORANTHENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
BENZO(k)FLUORANTHENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
CHRYSENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
DIBENZO(a,h)ANTHRACENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
INDENO(1,2,3-cd)PYRENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
ACENAPTHYLENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
BENZO(g,h,i)PERYLENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
PHENANTHRENE	Not detected	ug/L	5.0	8270	8/25/00 16:50	CWA
SURR: NITROBENZENE-D5	54	%	28-103	8270	8/25/00 16:50	CWA

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-20**
Prism Sample ID: **AB79177**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 14:25
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SURR: 2-FLUOROBIPHENYL	51	%	32-106	8270	8/25/00 16:50	CWA
SURR: TERPHENYL, D14	86	%	64-150	8270	8/25/00 16:50	CWA
DILUTION FACTOR	1	ug/L		8270	8/25/00 16:50	CWA
SULFATE	Less than	mg/L	0.050	9056	8/24/00	USB
NITRATE	0.64	mg/L	0.05	9056	8/24/00	USB
METALS DIGESTION	Completed			EPA 200.7	8/24/00 11:00	PRF
IRON, TOTAL	48	mg/L	0.10	EPA 200.7	8/24/00 20:06	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 09:30	PRF
EDB	Not detected	ug/L	0.02	EPA 504	8/29/00 22:15	SA
METHANE	Not detected	ug/L	26	RSK175M	8/29/00 14:06	SA

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 05 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-16**
Prism Sample ID: **AB79178**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 15:25
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.075	mg/L	0.010	7421	8/25/00 21:53	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/28/00 12:39	MP
BENZENE	Not detected	ug/L	5.0	8260	8/28/00 12:39	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/28/00 12:39	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/28/00 12:39	MP
XYLENES	Not detected	ug/L	10	8260	8/28/00 12:39	MP
NAPHTHALENE	Not detected	ug/L	5.0	8260	8/28/00 12:39	MP
SURR: DIBROMOFLUOROMETHANE	114	%	86-118	8260	8/28/00 12:39	MP
SURR: TOLUENE, D8	99	%	88-110	8260	8/28/00 12:39	MP
SURR: BROMOFLUOROBENZENE	102	%	86-115	8260	8/28/00 12:39	MP
DILUTION FACTOR	1	ug/L		8260	8/28/00 12:39	MP
SULFATE	5.1	mg/L	0.05	9056	8/24/00	USB
NITRATE	0.36	mg/L	0.05	9056	8/24/00	USB
METALS DIGESTION	Completed			EPA 200.7	8/24/00 11:00	PRF
IRON, TOTAL	310	mg/L	2.0	EPA 200.7	8/29/00 10:41	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 10:45	PRF
EDB	Not detected	ug/L	0.02	EPA 504	8/29/00 22:43	SA
METHANE	Not detected	ug/L	26	RSK175M	8/29/00 14:09	SA

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

RECEIVED
SEP 0 5 2000

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smiths Grocery
Customer Sample ID: MW-17
Prism Sample ID: AB79179
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 14:50
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.029	mg/L	0.004	7421	8/25/00 22:20	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/28/00 13:20	MP
BENZENE	Not detected	ug/L	5.0	8260	8/28/00 13:20	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/28/00 13:20	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/28/00 13:20	MP
XYLENES	Not detected	ug/L	10	8260	8/28/00 13:20	MP
NAPHTHALENE	Not detected	ug/L	5.0	8260	8/28/00 13:20	MP
SURR: DIBROMOFLUOROMETHANE	113	%	86-118	8260	8/28/00 13:20	MP
SURR: TOLUENE, D8	98	%	88-110	8260	8/28/00 13:20	MP
SURR: BROMOFLUOROBENZENE	104	%	86-115	8260	8/28/00 13:20	MP
DILUTION FACTOR	1	ug/L		8260	8/28/00 13:20	MP
SULFATE	Less than	mg/L	0.050	9056	8/24/00	USB
NITRATE	0.090	mg/L	0.05	9056	8/24/00	USB
METALS DIGESTION	Completed			EPA 200.7	8/24/00 11:00	PRF
IRON, TOTAL	20	mg/L	0.10	EPA 200.7	8/24/00 20:17	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 10:45	PRF
EDB	Not detected	ug/L	0.02	EPA 504	8/29/00 23:11	SA
METHANE	Not detected	ug/L	26	RSK175M	8/29/00 14:13	SA

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB79180**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 09:15
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SULFATE	1.1	mg/L	0.050	9056	8/24/00	USB
NITRATE	Less than	mg/L	0.05	9056	8/24/00	USB

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **TW-2**
Prism Sample ID: **AB79181**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 09:45
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SULFATE	5.8	mg/L	0.05	9056	8/24/00	USB
NITRATE	0.36	mg/L	0.05	9056	8/24/00	USB

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **TW-1**
Prism Sample ID: **AB79182**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 09:45
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SULFATE	12	mg/L	0.050	9056	8/24/00	USB
NITRATE	Less than	mg/L	0.05	9056	8/24/00	USB

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB79183**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 09:50
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SULFATE	Less than	mg/L	0.05	9056	8/24/00	USB
NITRATE	0.84	mg/L	0.05	9056	8/24/00	USB

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-8**
Prism Sample ID: **AB79184**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00 10:05
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SULFATE	Less than	mg/L	0.50	9056	8/24/00	USB
NITRATE	Less than	mg/L	0.05	9056	8/24/00	USB

Sample Comments:

Samples for Nitrate 9056 and Sulfate 9056 was subcontracted to SC certified laboratory #96031001.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **MW-8**
Prism Sample ID: **AB79185**
Login Group: MK829G20
Sample Collection Date/Time: 8/21/00 17:15
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.004	mg/L	0.002	7421	8/25/00 22:30	DHJ
MTBE	Not detected	ug/L	200	8260	8/28/00 14:02	MP
BENZENE	9500	ug/L	200	8260	8/28/00 14:02	MP
TOLUENE	56000	ug/L	200	8260	8/28/00 14:02	MP
ETHYLBENZENE	5300	ug/L	200	8260	8/28/00 14:02	MP
XYLENES	16000	ug/L	400	8260	8/28/00 14:02	MP
NAPHTHALENE	820	ug/L	200	8260	8/28/00 14:02	MP
SURR: DIBROMOFLUOROMETHANE	108	%	86-118	8260	8/28/00 14:02	MP
SURR: TOLUENE, D8	96	%	88-110	8260	8/28/00 14:02	MP
SURR: BROMOFLUOROBENZENE	94	%	86-115	8260	8/28/00 14:02	MP
DILUTION FACTOR	100	ug/L		8260	8/28/00 14:02	MP

METALS DIGESTION	Completed			EPA 200.7	8/24/00 11:00	PRF
IRON, TOTAL	2.0	mg/L	0.10	EPA 200.7	8/24/00 20:22	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 10:45	PRF
EDB	0.48	ug/L	0.02	EPA 504	8/29/00 23:38	SA

METHANE	Not detected	ug/L	26	RSK175M	8/29/00 14:16	SA

Sample Comments:
Sample for EDB by 504 and Methane was subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smiths Grocery
Customer Sample ID: QC
Prism Sample ID: AB79303
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT - LEAD, TOTAL GF 7421				7421	8/25/00 16:27	DHJ

BATCH ID: 000825C SAMPLES IN BATCH: AB79167-77

METHOD BLANK

COMPOUND	RESULT (mg/L)
Lead	<0.002

LABORATORY CONTROL SAMPLE

COMPOUND	KNOWN VALUE	SPIKE VALUE	% REC	% REC RANGE	PASS/ FAIL
Lead	0.040	0.037	93	80-120	PASS

MATRIX SPIKE RECOVERY SAMPLE SPIKED: AB79167

COMPOUND	SAMPLE CONC.	MS % REC	MSD % REC	RPD	% REC RANGE	RPD RANGE	PASS/ FAIL
Lead	1.3	**	**	4.2	70-130	10	PASS

BATCH ID: 000825D SAMPLES IN BATCH: AB79178-79, AB79185

METHOD BLANK

COMPOUND	RESULT (mg/L)
Lead	<0.002

LABORATORY CONTROL SAMPLE

COMPOUND	KNOWN VALUE	SPIKE VALUE	% REC	% REC RANGE	PASS/ FAIL
Lead	0.040	0.039	98	80-120	PASS

MATRIX SPIKE RECOVERY SAMPLE SPIKED: AB79178

COMPOUND	SAMPLE CONC.	MS % REC	MSD % REC	RPD	% REC RANGE	RPD RANGE	PASS/ FAIL
Lead	0.12	**	**	2.9	70-130	10	PASS

** MS recovery not calculated. Sample concentration is greater than 2x the amount of spike added.

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **QC**
Prism Sample ID: **AB79303**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT- METHOD BLANK DATA				x6010	8/24/00 18:09	MSP

BATCH ID:000824C
SAMPLES IN BATCH: AB79167-73

COMPOUND	RESULT (mg/l)
Iron	<0.05

BATCH ID:000824D
SAMPLES IN BATCH: AB79174-79, AB79185

COMPOUND	RESULT (mg/l)
Iron	<0.05

QC REPORT- MS/MSD DATA — x6010 — 8/24/00 18:09 — MSP

BATCH ID: 000824C SAMPLE SPIKED: AB79149
SAMPLES IN BATCH: AB79167-73

COMPOUND	SAMPLE CONC.	MS % REC	MSD % REC	RPD	% REC RANGE	RPD RANGE	PASS/ FAIL
Iron	<0.05	98	100	1.7	52-137	13	PASS

BATCH ID: 000824D SAMPLE SPIKED: AB79174
SAMPLES IN BATCH: AB79174-79, AB79185

COMPOUND	SAMPLE CONC.	MS % REC	MSD % REC	RPD	% REC RANGE	RPD RANGE	PASS/ FAIL
Iron	7.8	116	117	2.5	52-137	13	PASS

Lab Report

RECEIVED
SEP 0 5 2000

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **QC**
Prism Sample ID: **AB79303**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT- LCS DATA				x6010	8/24/00 18:09	MSP

BATCH ID: 000824C
SAMPLES IN BATCH: AB79167-73

COMPOUND	KNOWN VALUE	SPIKE VALUE	% REC	% REC RANGE	PASS/ FAIL
Iron	10	8.9	89	80-120	PASS

BATCH ID: 000824D
SAMPLES IN BATCH: AB79174-79, AB79185

COMPOUND	KNOWN VALUE	SPIKE VALUE	% REC	% REC RANGE	PASS/ FAIL
Iron	10	9.1	91	80-120	PASS

QC REPORT- LCS DATA — xSW846-8260 — 8/28/00 11:47 — MP

QC BATCH ID:hp4-082800

COMPOUND	KNOWN VALUE	SPIKE VALUE	% REC	% REC RANGE	PASS/ FAIL
MTBE	50	40.68	81	70-130	PASS
BENZENE	50	40.40	81	80-126	PASS
TOLUENE	50	43.39	87	80-122	PASS
ETHYLBENZENE	50	44.02	88	64-123	PASS
M,P-XYLENE	100	92.14	92	58-122	PASS
O-XYLENE	50	44.74	90	67-124	PASS
NAPHTHLENE	50	45.94	92	65-151	PASS

Lab Report

RECEIVED
SEP 0 5 2000

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **QC**
Prism Sample ID: **AB79303**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT - METHOD BLANK DATA				xSW846-8260	8/28/00 11:45	MP

QC BATCH ID:hp4-082800

COMPOUND	RESULT (ug/L)
MTBE	< 5
BENZENE	< 5
TOLUENE	< 5
EDB	< 5
ETHYLBENZENE	< 5
TOTAL XYLENES	< 5
NAPHTHALENE	< 5

QC REPORT- MS/MSD DATA — xSW846-8260 — 8/28/00 11:49 — MP

QC BATCH ID:hp4-082800 SAMPLE SPIKED:ab79171

COMPOUND	SAMPLE CONC.	MS % REC	MSD % REC	RPD	% REC RANGE	RPD RANGE	PASS/ FAIL
MTBE	50	98	98	0	70-130	<30	PASS
BENZENE	50	92	92	0	80-126	<21	PASS
TOLUENE	50	97	95	2	80-122	<39	PASS
EDB	50	105	109	4	69-125	<33	PASS
ETHYLBENZENE	50	95	91	4	64-123	<36	PASS
M,P-XYLENE	100	107	105	2	58-122	<36	PASS
O-XYLENE	50	107	106	1	67-124	<36	PASS
NAPHTHLENE	50	124	108	14	65-151	<30	PASS

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 05 2000

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smiths Grocery
Customer Sample ID: QC
Prism Sample ID: AB79303
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT - LCS DATA				xSW846-8270	8/25/00 13:23	CWA
PREP BATCH ID : WPAH-082400						
INSTRUMENT BATCH ID: 082500						
METHOD BLANK RESULTS:	RESULT % REC	QC LIMITS % REC				
NAPHTHALENE	45 %	40-105				
2-METHYL NAPHTHALENE	45 %	15-146				
ACENAPHTHYLENE	50 %	42-119				
ACENAPHTHENE	50 %	43-116				
FLUORENE	53 %	43-124				
PHENANTHRENE	68 %	47-129				
ANTHRACENE	69 %	49-129				
BENZO(A)ANTHRACENE	117 %	28-149				
CHRYSENE	106 %	28-150				
FLUORANTHENE	93 %	46-132				
PYRENE	87 %	44-136				
BENZO(B)FLUORANTHENE	122 %	43-136				
BENZO(K)FLUORANTHENE	82 %	43-130				
BENZO(A)PYRENE	100 %	47-128				
INDENO(1,2,3-C,D)PYRENE	101 %	35-126				
DIBENZO(A,H)ANTHRACENE	99 %	35-124				
BENZO(G,H,I)PERYLENE	98 %	33-125				

Lab Report

RECEIVED
SEP 05 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smiths Grocery**
Customer Sample ID: **QC**
Prism Sample ID: **AB79303**
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT - METHOD BLANK DATA				xSW846-8270	8/25/00 12:31	CWA
PREP BATCH ID : WPAH-082400						
INSTRUMENT BATCH ID: 082500						

METHOD BLANK RESULTS:	RESULT (ug/L)	DETECTION LIMIT
NAPTHALENE	<	10
2-METHYL NAPHTHALENE	<	10
ACENAPHTHYLENE	<	10
ACENAPHTHENE	<	10
FLUORENE	<	10
PHENANTHRENE	<	10
ANTHRACENE	<	10
BENZO(A)ANTHRACENE	<	10
CHRYSENE	<	10
FLUORANTHENE	<	10
PYRENE	<	10
BENZO(B)FLUORANTHENE	<	10
BENZO(K)FLUORANTHENE	<	10
BENZO(A)PYRENE	<	10
INDENO(1,2,3-C,D)PYRENE	<	10
DIBENZO (A,H) ANTHRACENE	<	10
BENZO(G,H,I)PERYLENE	<	10

Lab Report

RECEIVED
SEP 0 5 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

8/31/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smiths Grocery
Customer Sample ID: QC
Prism Sample ID: AB79303
Login Group: MK829G20
Sample Collection Date/Time: 8/22/00
Lab Submittal Date/Time: 8/22/00 16:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT - MS/MSD DATA				xSW846-8270	8/25/00 15:06	CWA

PREP BATCH ID : WPAH-082400 SAMPLE SPIKED: AB79168
INSTRUMENT BATCH ID: 082500

COMPOUND	SAMPLE RESULTS (ug/L)	MS % REC	MSD % REC	QC LIMITS % REC	RPD	QC LIMIT RPD	PASS/ FAIL
NAPHTHALENE	<10	39 #	45	(40-105)	15	50	PASS
2-METHYL NAPHTHALENE	<10	44	52	(15-146)	15	50	PASS
ACENAPHTHYLENE	<10	50	51	(42-119)	3	50	PASS
ACENAPHTHENE	<10	49	52	(43-116)	6	50	PASS
FLUORENE	<10	52	55	(43-124)	7	50	PASS
PHENANTHRENE	<10	74	71	(47-129)	4	50	PASS
ANTHRACENE	<10	66	63	(49-129)	4	50	PASS
BENZO(A)ANTHRACENE	<10	126	125	(28-149)	1	50	PASS
CHRYSENE	<10	117	114	(28-150)	3	50	PASS
FLUORANTHENE	<10	100	97	(46-132)	3	50	PASS
PYRENE	<10	86	86	(44-136)	1	50	PASS
BENZO(B)FLUORANTHENE	<10	124	137 #	(43-136)	10	50	PASS
BENZO(K)FLUORANTHENE	<10	84	83	(43-130)	2	50	PASS
BENZO(A)PYRENE	<10	99	100	(47-128)	1	50	PASS
INDENO(1,2,3-C,D)PYRENE	<10	106	91	(35-126)	16	50	PASS
DIBENZO (A,H) ANTRACENE	<10	103	88	(35-124)	16	50	PASS
BENZO(G,H,I)PERYLENE	<10	103	87	(33-125)	17	50	PASS

Recoveries were not within QC limits. Matrix interference is suspected

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 1 OF ____ QUOTE # ____

PRISM LABORATORIES, INC.
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

RECEIVED SEP 05 2000

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp ____	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client: CBM Environmental
Physical Address: 377 [illegible] Blvd, Suite 118, Fort Mill, SC 29715
Phone: 803 547 5989 Fax: 803 548 5892
P.O.#/Billing Reference: 13021
Project Name: Smith's Grocery, ID # 10629

REPORT TO: Name: Scott Ball
Address:
BILL TO: Name: CBM
Address:
Requested Due Date: Standard (5 day)
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested: NC ____ SC ✓ Other ____ NA ____
Water Chlorinated: Yes ____ No ____ NA ✓
Sample Iced Upon Collection: Yes ✓ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	BTEX, MTBE, Naph by 8260	PAH 8270	Lead	EDB	Nitrate	Sulfate	Ferrous Iron/Methane	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
MW-2	8-21-00	1120	H_2O	VOA/VOA/P/P/G	6/3/1/1/1	40 ml/1 L/500 ml	HCl/HCl/HNO_3/-/-/-	✓		✓	✓	[illegible]	[illegible]	✓			7916[illegible]
TW-2	↓	1515	↓	VOA/P/P/G/A	6/3/1/1/2	1 L	HCl/HNO_3/-/-/-	✓	✓	✓	✓	[illegible]	[illegible]	✓			7916[illegible]
TW-1	↓	1700	↓	VOA/VOA/P/P/G	6/3/1/1/1	[illegible]	HCl/HNO_3/-/-/-	✓	[illegible]	✓	✓	[illegible]	[illegible]	✓			71169
MW-3	↓	1750	↓	↓	↓	↓	↓	✓	[illegible]	✓	✓			✓			791[illegible]
MW-4	8-22-00	830	↓	↓	↓	↓	↓	✓		✓	✓	✓	✓	✓			791[illegible]
MW-1	↓	855	↓	↓	↓	↓	↓	✓		✓	✓	✓	✓	✓			79177
MW-5	↓	1030	↓	↓	↓	↓	↓	✓		✓	✓	✓	✓	✓			7917[illegible]
MW-6	↓	1120	↓	↓	↓	↓	↓	✓		✓	✓	✓	✓	✓			791[illegible]
MW-7	↓	1330	↓	↓	↓	↓	↓	✓		✓	✓	✓	✓	✓			791[illegible]
MW-9	↓	1355	↓	↓	↓	↓	↓	X		✓	✓	✓	✓	✓			79176

Sampler's Signature: Sonya Punch   Sampled By (Print Name): SONYA PUNCH   Affiliation: CBM

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Sonya Punch			
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: [signature]	Date 8-23-00	1645
Method of Shipment		Log-In Group No. [illegible]	

Additional Comments
- BTEX, MTBE, Naph by 8260
- PAH, 8270
- Lead
- EDB
- Nitrate / 9210/9056
- Sulfate

Ferrous Iron, Methane

NPDES: NC ____ SC ____ OTHER ____
UST: NC ✓ SC ____ OTHER ____
GROUNDWATER: NC ____ SC ____ OTHER ____
DRINKING WATER: NC ____ SC ____ OTHER ____
SOLID WASTE: NC ____ SC ____ OTHER ____
OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE # _____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 0.1	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client CBM

Physical Address (See BT)

Phone _____ Fax _____

P.O.#/Billing Reference 13024

Project Name Mick's Grocery Job # 10629

REPORT TO: Name Scott Ball

Address _____

BILL TO: Name CBM

Address _____

Requested Due Date Standard

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification

Requested NC ____ SC ____ Other ____ NA ✓

Water Chlorinated Yes ____ No ____ NA ✓

Sample Iced Upon Collection Yes ✓ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: BTEX MTBE 8260	PAH 8270	Lead	EDB	NITRATE	SULFATE	METHANE	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
MW-20	8-22-00	1420	H2O	VOA	6	40 ml	HCl	✓	✓	✓	✓	✓	✓	✓	✓		79173
MW-16		1525		VOA	6	40 ml	HCl	✓		✓	✓	✓	✓	✓	✓		79174
MW-17		1450						✓		✓	✓	✓	✓	✓	✓		79175
MW-2		0915		P	1	1L	-					✓	✓				79176
TW-2		945					-					✓	✓				79177
TW-1		945					-					✓	✓				79178
MW-3		950					-					✓	✓				79179
MW-8	✓	1005					-					✓	✓				79180
MW-7	8-21-00	1715	✓	VOA	6	40 ml	HCl HNO3	✓		✓	✓			✓	✓		79181
QC Report																	79503

Sampler's Signature _____ Sampled By (Print Name) SONYA PUNCH Affiliation CBM

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 8-22-00	1645
Method of Shipment		Log-In Group No.	

Additional Comments: BTEX MTBE 8260 PAH 8270 Lead EDB Nitrate Sulfate Ammonia Methane

NPDES NC ____ SC ____ OTHER ____ UST: NC ✓ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

RECEIVED
SEP 11 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-10**
Prism Sample ID: **AB79313**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 09:10
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.021	mg/L	0.002	7421	8/25/00 22:39	DHJ
MTBE	Not detected	ug/L	800	8260	8/28/00 14:51	MP
BENZENE	5800	ug/L	800	8260	8/28/00 14:51	MP
TOLUENE	26000	ug/L	800	8260	8/28/00 14:51	MP
ETHYLBENZENE	3200	ug/L	800	8260	8/28/00 14:51	MP
XYLENES	19000	ug/L	1600	8260	8/28/00 14:51	MP
NAPHTHALENE	Not detected	ug/L	800	8260	8/28/00 14:51	MP
SURR: DIBROMOFLUOROMETHANE	114	%	86-118	8260	8/28/00 14:51	MP
SURR: TOLUENE, D8	99	%	88-110	8260	8/28/00 14:51	MP
SURR: BROMOFLUOROBENZENE	98	%	86-115	8260	8/28/00 14:51	MP
DILUTION FACTOR	400	ug/L		8260	8/28/00 14:51	MP

SULFATE	6.2	mg/L	0.50	9056	8/26/00	USB
NITRATE	Less than	mg/L	1.0	9210	8/25/00 08:00	R&C
METALS DIGESTION	Completed			EPA 200.7	8/25/00 09:00	PRF
IRON, TOTAL	8.6	mg/L	0.10	EPA 200.7	8/29/00 11:56	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 10:45	PRF
EDB	95.3	ug/L	2.00	EPA 504	9/6/00 19:41	SA

METHANE	Not detected	ug/L	26	RSK175M	8/30/00 14:42	SA

SB, JH, file

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 1 1 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-10**
Prism Sample ID: **AB79313**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 09:10
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:

Sample for Sulfate was subcontracted to SC certified laboratory #96031001.

Sample for Nitrate was subcontracted to Rogers & Callcott.

Samples for EDB and Methane were subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

RECEIVED
SEP 1 1 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-11**
Prism Sample ID: **AB79314**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 10:05
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.006	mg/L	0.002	7421	8/25/00 22:48	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/28/00 15:38	MP
BENZENE	Not detected	ug/L	5.0	8260	8/28/00 15:38	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/28/00 15:38	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/28/00 15:38	MP
XYLENES	Not detected	ug/L	10	8260	8/28/00 15:38	MP
NAPHTHALENE	Not detected	ug/L	5.0	8260	8/28/00 15:38	MP
SURR: DIBROMOFLUOROMETHANE	116	%	86-118	8260	8/28/00 15:38	MP
SURR: TOLUENE, D8	101	%	88-110	8260	8/28/00 15:38	MP
SURR: BROMOFLUOROBENZENE	91	%	86-115	8260	8/28/00 15:38	MP
DILUTION FACTOR	1	ug/L		8260	8/28/00 15:38	MP

SULFATE	6.0	mg/L	0.50	9056	8/26/00	USB
NITRATE	4.2	mg/L	1.0	9210	8/25/00 08:00	R&C
METALS DIGESTION	Completed			EPA 200.7	8/25/00 09:00	PRF
IRON, TOTAL	0.84	mg/L	0.10	EPA 200.7	8/29/00 12:10	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 10:45	PRF
EDB	Not detected	ug/L	0.02	EPA 504	9/6/00 20:36	SA

METHANE	Not detected	ug/L	26	RSK175M	8/30/00 14:48	SA

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 11 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-11**
Prism Sample ID: **AB79314**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 10:05
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:

Sample for Sulfate was subcontracted to SC certified laboratory #96031001.

Sample for Nitrate was subcontracted to Rogers & Callcott.

Samples for EDB and Methane were subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

RECEIVED
SEP 11 2000

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-15**
Prism Sample ID: **AB79315**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 12:00
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.039	mg/L	0.002	7421	8/25/00 22:58	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/28/00 16:29	MP
BENZENE	Not detected	ug/L	5.0	8260	8/28/00 16:29	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/28/00 16:29	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/28/00 16:29	MP
XYLENES	Not detected	ug/L	10	8260	8/28/00 16:29	MP
NAPHTHALENE	Not detected	ug/L	5.0	8260	8/28/00 16:29	MP
SURR: DIBROMOFLUOROMETHANE	114	%	86-118	8260	8/28/00 16:29	MP
SURR: TOLUENE, D8	98	%	88-110	8260	8/28/00 16:29	MP
SURR: BROMOFLUOROBENZENE	95	%	86-115	8260	8/28/00 16:29	MP
DILUTION FACTOR	1	ug/L		8260	8/28/00 16:29	MP

SULFATE	5.3	mg/L	0.50	9056	8/26/00	USB
NITRATE	4.3	mg/L	1.0	9210	8/25/00 08:00	R&C
METALS DIGESTION	Completed			EPA 200.7	8/25/00 09:00	PRF
IRON, TOTAL	17	mg/L	0.10	EPA 200.7	8/29/00 12:14	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 10:45	PRF
EDB	0.05	ug/L	0.02	EPA 504	9/6/00 21:04	SA

METHANE	Not detected	ug/L	26	RSK175M	8/30/00 14:51	SA

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 11 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-15**
Prism Sample ID: **AB79315**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 12:00
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:

Sample for Sulfate was subcontracted to SC certified laboratory #96031001.

Sample for Nitrate was subcontracted to Rogers & Callcott.

Samples for EDB and Methane were subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

RECEIVED
SEP 1 1 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-14**
Prism Sample ID: **AB79316**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 12:55
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.037	mg/L	0.002	7421	8/25/00 23:08	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/28/00 17:15	MP
BENZENE	Not detected	ug/L	5.0	8260	8/28/00 17:15	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/28/00 17:15	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/28/00 17:15	MP
XYLENES	Not detected	ug/L	10	8260	8/28/00 17:15	MP
NAPHTHALENE	Not detected	ug/L	5.0	8260	8/28/00 17:15	MP
SURR: DIBROMOFLUOROMETHANE	107	%	86-118	8260	8/28/00 17:15	MP
SURR: TOLUENE, D8	96	%	88-110	8260	8/28/00 17:15	MP
SURR: BROMOFLUOROBENZENE	96	%	86-115	8260	8/28/00 17:15	MP
DILUTION FACTOR	1	ug/L		8260	8/28/00 17:15	MP

SULFATE	9.6	mg/L	0.50	9056	8/26/00	USB
NITRATE	2.1	mg/L	1.0	9210	8/25/00 08:00	R&C
METALS DIGESTION	Completed			EPA 200.7	8/25/00 09:00	PRF
IRON, TOTAL	70	mg/L	1.0	EPA 200.7	8/30/00 17:13	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 10:45	PRF
EDB	0.51	ug/L	0.02	EPA 504	9/6/00 21:31	SA

METHANE	Not detected	ug/L	26	RSK175M	8/30/00 14:55	SA

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

RECEIVED
SEP 11 2000

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-14**
Prism Sample ID: **AB79316**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 12:55
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:

Sample for Sulfate was subcontracted to SC certified laboratory #96031001.

Sample for Nitrate was subcontracted to Rogers & Callcott.

Samples for EDB and Methane were subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

RECEIVED SEP 11 2000

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-19**
Prism Sample ID: **AB79317**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 13:15
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.051	mg/L	0.002	7421	8/26/00 00:01	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/28/00 18:01	MP
BENZENE	Not detected	ug/L	5.0	8260	8/28/00 18:01	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/28/00 18:01	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/28/00 18:01	MP
XYLENES	Not detected	ug/L	10	8260	8/28/00 18:01	MP
NAPHTHALENE	Not detected	ug/L	5.0	8260	8/28/00 18:01	MP
SURR: DIBROMOFLUOROMETHANE	112	%	86-118	8260	8/28/00 18:01	MP
SURR: TOLUENE, D8	98	%	88-110	8260	8/28/00 18:01	MP
SURR: BROMOFLUOROBENZENE	93	%	86-115	8260	8/28/00 18:01	MP
DILUTION FACTOR	1	ug/L		8260	8/28/00 18:01	MP

SULFATE	5.2	mg/L	0.50	9056	8/26/00	USB
NITRATE	2.7	mg/L	1.0	9210	8/25/00 08:00	R&C
METALS DIGESTION	Completed			EPA 200.7	8/25/00 09:00	PRF
IRON, TOTAL	83	mg/L	1.0	EPA 200.7	8/30/00 17:17	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 10:45	PRF
EDB	Not detected	ug/L	0.02	EPA 504	9/6/00 21:58	SA

METHANE	Not detected	ug/L	26	RSK175M	8/30/00 14:58	SA

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 11 2000

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-19**
Prism Sample ID: **AB79317**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 13:15
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:

Sample for Sulfate was subcontracted to SC certified laboratory #96031001.

Sample for Nitrate was subcontracted to Rogers & Callcott.

Samples for EDB and Methane were subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

RECEIVED
SEP 11 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-18**
Prism Sample ID: **AB79318**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 13:45
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.042	mg/L	0.002	7421	8/26/00 00:20	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/28/00 18:42	MP
BENZENE	Not detected	ug/L	5.0	8260	8/28/00 18:42	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/28/00 18:42	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/28/00 18:42	MP
XYLENES	Not detected	ug/L	10	8260	8/28/00 18:42	MP
NAPHTHALENE	Not detected	ug/L	5.0	8260	8/28/00 18:42	MP
SURR: DIBROMOFLUOROMETHANE	112	%	86-118	8260	8/28/00 18:42	MP
SURR: TOLUENE, D8	96	%	88-110	8260	8/28/00 18:42	MP
SURR: BROMOFLUOROBENZENE	98	%	86-115	8260	8/28/00 18:42	MP
DILUTION FACTOR	1	ug/L		8260	8/28/00 18:42	MP

SULFATE	11	mg/L	0.50	9056	8/26/00	USB
NITRATE	2.4	mg/L	1.0	9210	8/25/00 08:00	R&C
METALS DIGESTION	Completed			EPA 200.7	8/25/00 09:00	PRF
IRON, TOTAL	64	mg/L	1.0	EPA 200.7	8/30/00 17:22	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 10:45	PRF
EDB	0.12	ug/L	0.02	EPA 504	9/6/00 22:26	SA

METHANE	Not detected	ug/L	26	RSK175M	8/30/00 15:01	SA

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 11 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-18**
Prism Sample ID: **AB79318**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 13:45
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:

Sample for Sulfate was subcontracted to SC certified laboratory #96031001.

Sample for Nitrate was subcontracted to Rogers & Callcott.

Samples for EDB and Methane were subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

RECEIVED
SEP 11 2000

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-12**
Prism Sample ID: **AB79319**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 14:00
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.007	mg/L	0.002	7421	8/26/00 00:29	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/28/00 19:23	MP
BENZENE	390	ug/L	5.0	8260	8/28/00 19:23	MP
TOLUENE	5	ug/L	5.0	8260	8/28/00 19:23	MP
ETHYLBENZENE	68	ug/L	5.0	8260	8/28/00 19:23	MP
XYLENES	730	ug/L	10	8260	8/28/00 19:23	MP
NAPHTHALENE	52	ug/L	5.0	8260	8/28/00 19:23	MP
SURR: DIBROMOFLUOROMETHANE	104	%	86-118	8260	8/28/00 19:23	MP
SURR: TOLUENE, D8	95	%	88-110	8260	8/28/00 19:23	MP
SURR: BROMOFLUOROBENZENE	99	%	86-115	8260	8/28/00 19:23	MP
DILUTION FACTOR	1	ug/L		8260	8/28/00 19:23	MP

SULFATE	5.3	mg/L	0.50	9056	8/26/00	USB
NITRATE	Less than	mg/L	1.0	9210	8/25/00 08:00	R&C
METALS DIGESTION	Completed			EPA 200.7	8/25/00 09:00	PRF
IRON, TOTAL	4.1	mg/L	0.10	EPA 200.7	8/29/00 12:34	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 10:45	PRF
EDB	20.8	ug/L	0.40	EPA 504	9/6/00 22:53	SA

METHANE	Not detected	ug/L	26	RSK175M	8/30/00 15:09	SA

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 1 1 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-12**
Prism Sample ID: **AB79319**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 14:00
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:

Sample for Sulfate was subcontracted to SC certified laboratory #96031001.

Sample for Nitrate was subcontracted to Rogers & Callcott.

Samples for EDB and Methane were subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

RECEIVED
SEP 1 1 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-13**
Prism Sample ID: **AB79320**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 14:25
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
LEAD, TOTAL GF 7421	0.075	mg/L	0.008	7421	8/26/00 00:50	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/28/00 20:05	MP
BENZENE	Not detected	ug/L	5.0	8260	8/28/00 20:05	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/28/00 20:05	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/28/00 20:05	MP
XYLENES	Not detected	ug/L	10	8260	8/28/00 20:05	MP
NAPHTHALENE	Not detected	ug/L	5.0	8260	8/28/00 20:05	MP
SURR: DIBROMOFLUOROMETHANE	110	%	86-118	8260	8/28/00 20:05	MP
SURR: TOLUENE, D8	97	%	88-110	8260	8/28/00 20:05	MP
SURR: BROMOFLUOROBENZENE	97	%	86-115	8260	8/28/00 20:05	MP
DILUTION FACTOR	1	ug/L		8260	8/28/00 20:05	MP

SULFATE	5.4	mg/L	0.50	9056	8/26/00	USB
NITRATE	1.4	mg/L	1.0	9210	8/25/00 08:00	R&C
METALS DIGESTION	Completed			EPA 200.7	8/25/00 09:00	PRF
IRON, TOTAL	26	mg/L	0.10	EPA 200.7	8/29/00 12:39	MSP
METALS DIGESTION	Completed			EPA 3020	8/25/00 10:45	PRF
EDB	Not detected	ug/L	0.02	EPA 504	9/6/00 23:20	SA

METHANE	Not detected	ug/L	26	RSK175M	8/30/00 15:12	SA

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 11 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-13**
Prism Sample ID: **AB79320**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 14:25
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:

Sample for Sulfate was subcontracted to SC certified laboratory #96031001.

Sample for Nitrate was subcontracted to Rogers & Callcott.

Samples for EDB and Methane were subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

RECEIVED
SEP 1 1 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **TW-3**
Prism Sample ID: **AB79321**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 10:20
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3510	Completed				8/24/00 20:00	GRR
LEAD, TOTAL GF 7421	Less than	mg/L	0.002	7421	8/30/00 19:43	DHJ
MTBE	Not detected	ug/L	5.0	8260	8/28/00 20:46	MP
BENZENE	Not detected	ug/L	5.0	8260	8/28/00 20:46	MP
TOLUENE	Not detected	ug/L	5.0	8260	8/28/00 20:46	MP
ETHYLBENZENE	Not detected	ug/L	5.0	8260	8/28/00 20:46	MP
XYLENES	Not detected	ug/L	10	8260	8/28/00 20:46	MP
NAPHTHALENE	Not detected	ug/L	5.0	8260	8/28/00 20:46	MP
SURR: DIBROMOFLUOROMETHANE	111	%	86-118	8260	8/28/00 20:46	MP
SURR: TOLUENE, D8	97	%	88-110	8260	8/28/00 20:46	MP
SURR: BROMOFLUOROBENZENE	93	%	86-115	8260	8/28/00 20:46	MP
DILUTION FACTOR	1	ug/L		8260	8/28/00 20:46	MP

NAPHTHALENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
ACENAPHTHENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
ANTHRACENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
FLUORANTHENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
FLUORENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
PYRENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
BENZO(a)ANTHRACENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
BENZO(a)PYRENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
BENZO(b)FLUORANTHENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
BENZO(k)FLUORANTHENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
CHRYSENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
DIBENZO(a,h)ANTHRACENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
INDENO(1,2,3-cd)PYRENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
ACENAPTHYLENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
BENZO(g,h,i)PERYLENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
PHENANTHRENE	Not detected	ug/L	5.0	8270	8/25/00 17:41	CWA
SURR: NITROBENZENE-D5	59	%	28-103	8270	8/25/00 17:41	CWA

Lab Report

RECEIVED
SEP 1 1 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **TW-3**
Prism Sample ID: **AB79321**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 10:20
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SURR: 2-FLUOROBIPHENYL	49	%	32-106	8270	8/25/00 17:41	CWA
SURR: TERPHENYL, D14	75	%	64-150	8270	8/25/00 17:41	CWA
DILUTION FACTOR	1	ug/L		8270	8/25/00 17:41	CWA

SULFATE	17	mg/L	0.50	9056	8/26/00	USB
NITRATE	1.9	mg/L	1.0	9210	8/25/00 08:00	R&C
METALS DIGESTION	Completed			EPA 200.7	8/28/00 09:30	PRF
IRON, TOTAL	0.34	mg/L	0.10	EPA 200.7	8/29/00 21:24	MSP
METALS DIGESTION	Completed			EPA 3020	8/28/00 12:00	PRF
EDB	0.23	ug/L	0.02	EPA 504	9/6/00 23:48	SA

METHANE	Not detected	ug/L	26	RSK175M	8/30/00 15:15	SA

Sample Comments:

Sample for Sulfate was subcontracted to SC certified laboratory #96031001.

Sample for Nitrate was subcontracted to Rogers & Callcott.

Samples for EDB and Methane were subcontracted to SC certified laboratory #84009.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 11 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB79322**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00 14:50
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	Not detected	ug/L	20	8260	8/29/00 13:13	MP
BENZENE	Not detected	ug/L	20	8260	8/29/00 13:13	MP
TOLUENE	Not detected	ug/L	20	8260	8/29/00 13:13	MP
ETHYLBENZENE	24	ug/L	20	8260	8/29/00 13:13	MP
XYLENES	2500	ug/L	40	8260	8/29/00 13:13	MP
NAPHTHALENE	140	ug/L	20	8260	8/29/00 13:13	MP
SURR: DIBROMOFLUOROMETHANE	115	%	86-118	8260	8/29/00 13:13	MP
SURR: TOLUENE, D8	99	%	88-110	8260	8/29/00 13:13	MP
SURR: BROMOFLUOROBENZENE	90	%	86-115	8260	8/29/00 13:13	MP
DILUTION FACTOR	10	ug/L		8260	8/29/00 13:13	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 11 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: QC
Prism Sample ID: AB79323
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT - LEAD, TOTAL GF 7421				7421	8/25/00 21:00	MSP

BATCH ID: 000825D SAMPLES IN BATCH: AB79313-20

METHOD BLANK

COMPOUND	RESULT (mg/L)
Lead	<0.002

LABORATORY CONTROL SAMPLE

COMPOUND	KNOWN VALUE	SPIKE VALUE	% REC	% REC RANGE	PASS/ FAIL
Lead	0.040	0.039	98	80-120	PASS

MATRIX SPIKE RECOVERY SAMPLE SPIKED: AB79178

COMPOUND	SAMPLE CONC.	MS % REC	MSD % REC	RPD	% REC RANGE	RPD RANGE	PASS/ FAIL
Lead	0.12	**	**	2.9	70-130	10	PASS

BATCH ID: 000828E SAMPLES IN BATCH: AB79321

METHOD BLANK

COMPOUND	RESULT (mg/L)
Lead	<0.002

LABORATORY CONTROL SAMPLE

COMPOUND	KNOWN VALUE	SPIKE VALUE	% REC	% REC RANGE	PASS/ FAIL
Lead	0.040	0.044	110	80-120	PASS

MATRIX SPIKE RECOVERY SAMPLE SPIKED: AB79321

COMPOUND	SAMPLE CONC.	MS % REC	MSD % REC	RPD	% REC RANGE	RPD RANGE	PASS/ FAIL
Lead	<0.002	85	85	0	70-130	10	PASS

** MS recovery not calculated. Sample concentration is greater than 2x the amount of spike added.

Lab Report

RECEIVED
SEP 1 1 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **QC**
Prism Sample ID: **AB79323**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT- METHOD BLANK DATA				x6010	8/29/00 11:40	MSP

BATCH ID: 000825A
SAMPLES IN BATCH: AB79313-20

COMPOUND	RESULT (mg/l)
Iron	<0.05

BATCH ID:000828B
SAMPLES IN BATCH: AB79321

COMPOUND	RESULT (mg/l)
Iron	<0.05

QC REPORT- MS/MSD DATA — x6010 — 8/29/00 11:40 — MSP

BATCH ID: 000825A — SAMPLE SPIKED: AB79313
SAMPLES IN BATCH: AB79313-20

COMPOUND	SAMPLE CONC.	MS % REC	MSD % REC	RPD	% REC RANGE	RPD RANGE	PASS/ FAIL
Iron	8.6	119	119	1.3	52-137	13	PASS

BATCH ID:0000828B — SAMPLE SPIKED: AB79201
SAMPLES IN BATCH: AB79321

COMPOUND	SAMPLE CONC.	MS % REC	MSD % REC	RPD	% REC RANGE	RPD RANGE	PASS/ FAIL
Iron	0.13	95	94	1.1	52-137	13	PASS

Lab Report

RECEIVED
SEP 11

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **QC**
Prism Sample ID: **AB79323**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT- LCS DATA				x6010	8/29/00 11:40	MSP

BATCH ID:000825A
SAMPLES IN BATCH: AB79313-20

COMPOUND	KNOWN VALUE	SPIKE VALUE	% REC	% REC RANGE	PASS/ FAIL
Iron	10	9.8	98	80-120	PASS

BATCH ID:000828B
SAMPLES IN BATCH: AB79321

COMPOUND	KNOWN VALUE	SPIKE VALUE	% REC	% REC RANGE	PASS/ FAIL
Iron	10	9.2	92	80-120	PASS

QC REPORT- LCS DATA — xSW846-8260 — 8/28/00 11:48 — MP

QC BATCH ID:hp4-082800

COMPOUND	KNOWN VALUE	SPIKE VALUE	% REC	% REC RANGE	PASS/ FAIL
MTBE	50	40.68	81	70-130	PASS
BENZENE	50	40.40	81	80-126	PASS
TOLUENE	50	43.39	87	80-122	PASS
ETHYLBENZENE	50	44.02	88	64-123	PASS
M,P-XYLENE	100	92.14	92	58-122	PASS
O-XYLENE	50	44.74	90	67-124	PASS
NAPHTHLENE	50	45.94	92	65-151	PASS

Lab Report

RECEIVED
SEP 11 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **QC**
Prism Sample ID: **AB79323**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT - METHOD BLANK DATA				xSW846-8260	8/28/00 11:46	MP

QC BATCH ID:hp4-082800

COMPOUND	RESULT (ug/L)
MTBE	< 5
BENZENE	< 5
TOLUENE	< 5
EDB	< 5
ETHYLBENZENE	< 5
TOTAL XYLENES	< 5
NAPHTHALENE	< 5

QC REPORT- MS/MSD DATA — xSW846-8260 — 8/28/00 11:51 — MP

QC BATCH ID:hp4-082800 SAMPLE SPIKED:ab79171

COMPOUND	SAMPLE CONC.	MS % REC	MSD % REC	RPD	% REC RANGE	RPD RANGE	PASS/ FAIL
MTBE	50	98	98	0	70-130	<30	PASS
BENZENE	50	92	92	0	80-126	<21	PASS
TOLUENE	50	97	95	2	80-122	<39	PASS
EDB	50	105	109	4	69-125	<33	PASS
ETHYLBENZENE	50	95	91	4	64-123	<36	PASS
M,P-XYLENE	100	107	105	2	58-122	<36	PASS
O-XYLENE	50	107	106	1	67-124	<36	PASS
NAPHTHLENE	50	124	108	14	65-151	<30	PASS

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

RECEIVED
SEP 11 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **QC**
Prism Sample ID: **AB79323**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT - LCS DATA				xSW846-8270	8/25/00 13:23	CWA
PREP BATCH ID : WPAH-082400						
INSTRUMENT BATCH ID: 082500						
METHOD BLANK RESULTS:	RESULT % REC		QC LIMITS % REC			
NAPHTHALENE	45	%	40-105			
2-METHYL NAPHTHALENE	45	%	15-146			
ACENAPHTHYLENE	50	%	42-119			
ACENAPHTHENE	50	%	43-116			
FLUORENE	53	%	43-124			
PHENANTHRENE	68	%	47-129			
ANTHRACENE	69	%	49-129			
BENZO(A)ANTHRACENE	117	%	28-149			
CHRYSENE	106	%	28-150			
FLUORANTHENE	93	%	46-132			
PYRENE	87	%	44-136			
BENZO(B)FLUORANTHENE	122	%	43-136			
BENZO(K)FLUORANTHENE	82	%	43-130			
BENZO(A)PYRENE	100	%	47-128			
INDENO(1,2,3-C,D)PYRENE	101	%	35-126			
DIBENZO(A,H)ANTHRACENE	99	%	35-124			
BENZO(G,H,I)PERYLENE	98	%	33-125			

Lab Report

RECEIVED
SEP 11 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **QC**
Prism Sample ID: **AB79323**
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT - METHOD BLANK DATA				xSW846-8270	8/25/00 12:31	CWA
PREP BATCH ID : WPAH-082400						
INSTRUMENT BATCH ID: 082500						

METHOD BLANK RESULTS:	RESULT (ug/L)	DETECTION LIMIT
NAPTHALENE	<	10
2-METHYL NAPHTHALENE	<	10
ACENAPHTHYLENE	<	10
ACENAPHTHENE	<	10
FLUORENE	<	10
PHENANTHRENE	<	10
ANTHRACENE	<	10
BENZO(A)ANTHRACENE	<	10
CHRYSENE	<	10
FLUORANTHENE	<	10
PYRENE	<	10
BENZO(B)FLUORANTHENE	<	10
BENZO(K)FLUORANTHENE	<	10
BENZO(A)PYRENE	<	10
INDENO(1,2,3-C,D)PYRENE	<	10
DIBENZO (A,H) ANTHRACENE	<	10
BENZO(G,H,I)PERYLENE	<	10

Lab Report

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

RECEIVED
SEP 11 2000

9/8/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: QC
Prism Sample ID: AB79323
Login Group: MK830G11
Sample Collection Date/Time: 8/23/00
Lab Submittal Date/Time: 8/23/00 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
QC REPORT - MS/MSD DATA				xSW846-8270	8/25/00 15:06	CWA
PREP BATCH ID : WPAH-082400		SAMPLE SPIKED: AB79168				
INSTRUMENT BATCH ID: 082500						

COMPOUND	SAMPLE RESULTS (ug/L)	MS % REC	MSD % REC	QC LIMITS % REC	RPD	QC LIMIT RPD	PASS/ FAIL
NAPHTHALENE	<10	39 #	45	(40-105)	15	50	PASS
2-METHYL NAPHTHALENE	<10	44	52	(15-146)	15	50	PASS
ACENAPHTHYLENE	<10	50	51	(42-119)	3	50	PASS
ACENAPHTHENE	<10	49	52	(43-116)	6	50	PASS
FLUORENE	<10	52	55	(43-124)	7	50	PASS
PHENANTHRENE	<10	74	71	(47-129)	4	50	PASS
ANTHRACENE	<10	66	63	(49-129)	4	50	PASS
BENZO(A)ANTHRACENE	<10	126	125	(28-149)	1	50	PASS
CHRYSENE	<10	117	114	(28-150)	3	50	PASS
FLUORANTHENE	<10	100	97	(46-132)	3	50	PASS
PYRENE	<10	86	86	(44-136)	1	50	PASS
BENZO(B)FLUORANTHENE	<10	124	137 #	(43-136)	10	50	PASS
BENZO(K)FLUORANTHENE	<10	84	83	(43-130)	2	50	PASS
BENZO(A)PYRENE	<10	99	100	(47-128)	1	50	PASS
INDENO(1,2,3-C,D)PYRENE	<10	106	91	(35-126)	16	50	PASS
DIBENZO (A,H) ANTRACENE	<10	103	88	(35-124)	16	50	PASS
BENZO(G,H,I)PERYLENE	<10	103	87	(33-125)	17	50	PASS

Recoveries were not within QC limits. Matrix interference is suspected.

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

RECEIVED SEP 11 2000

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2.1	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client: CBM Environmental Services
Physical Address: 377 Carowinds Blvd, Suite 117 Fort Mill, SC 29708
Phone: 803-216-5939 Fax: 803-547-5892
P.O.#/Billing Reference: 13024
Project Name: Smith's Grocery JSG # 10629

REPORT TO: Name: Scott Ball
Address:
BILL TO: Name: CBM
Address:
Requested Due Date: Standard (5 day)

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested: NC ____ SC ✓ Other ____ NA ____
Water Chlorinated: Yes ____ No ____ NA ✓
Sample Iced Upon Collection: Yes ✓ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	*TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	BTEX + Naph + MTBE 8260	PAH's 8270	Lead	EDB	Nitrate	Sulfate	Ferrous Iron	Methane	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
MW-10	8-23-00	0910	Water	[illegible]	6/3/1/1/1	[illegible]	HCl/HNO3	✓		✓	✓	✓	✓	✓	✓			79313
MW-11	↓	1005	↓	"	5/3/1/1/1	↓	↓	✓		✓	✓	✓	✓	✓	✓			79314
MW-15		1200		"	[illegible]			✓		✓	✓	✓	✓	✓	✓			79315
MW-14		1255		"	[illegible]			✓		✓	✓	✓	✓	✓	✓			79316
MW-19		1315		"	[illegible]			✓		✓	✓	✓	✓	✓	✓			79317
MW-18		1345		"	[illegible]			✓		✓	✓	✓	✓	✓	✓			79318
MW-12		1400		"	[illegible]			✓		✓	✓	✓	✓	✓	✓			79319
MW-13		1425		"	3/3/1/1/1	[illegible]	HCl/HNO3	✓		✓	✓	✓	✓	✓	✓			79320
TW-3		1020		[illegible]	[illegible]	[illegible]	HCl/HNO3	✓	✓	✓	✓	✓	✓	✓	✓			79321
MW-9	↓	1450	↓	VOA	3	40ml	HCl	✓										79322

Sampler's Signature: Sonya Punch Sampled By (Print Name): SONYA PUNCH Affiliation: CBM QC Report 79323

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Sonya Punch			
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: Katherine Wing	8/23/00	1600
Method of Shipment: Client drop off		Log-In Group No. MK830011	

Additional Comments
* Nitrates + Sulfates *
- BTEX, MTBE, Naph by 8260
- PAH's 8270
- Lead; EDB; Ferrous Iron; Methane

NPDES: NC ____ SC ____ OTHER ____ UST: NC ____ SC ✓ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

APPENDIX C
Groundwater Sampling Data Sheets

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date/mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch		Prism (x3).	

Well # MW-1

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 35.00 ft.
Depth to GW (DGW) 26.29 ft.

Length of Water Column(LWC=TWD-DGW) 8.7 ft.

1 Csg. Volume(LWC * C) = 8.7 X 0.163 = 1.42 gals.
3 Csg. Volumes = 3 X 1.42 = 4.26 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.5	1.5					3.25
Time (military)	845	851	855	Dry				855
pH (s.u.)	5.5	5.5	5.6					5.6
Specific Cond. (umhos/cm)	65	80	72					72
Water Temp (°C)	18	18	18					18
Turbidity (*)	—	—	—					—
PID Readings	—	—	—					—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 0.87 (initial) DO_2 = 2.94 (2nd Vol) strong HC odor

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date: mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92843558

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
Sonya Punch		Prism (x3).	

Well # MW-2

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 37.80 ft.
Depth to GW (DGW) 31.90 ft.

Length of Water Column(LWC=TWD-DGW) 5.90 ft.

1 Csg. Volume(LWC * C) = 5.90 X .163 = .961 gals.
3 Csg. Volumes = 3 X .961 = 2.88 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1	1	1				3.25
Time (military)	1049	1055	1104	1113				1120
pH (s.u.)	5.9	5.4	5.2	5.2				5.2
Specific Cond. (umhos/cm)	100	98	85	80.1				80.1
Water Temp (°C)	21.5	21.5	21.5	22				22
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 3.1 mg/L (initial); 2.4 mg/L (final). Strong HC odor. Foam noticed

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CAMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3).	_____

Well # MW-3

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 35.45 ft.
Depth to GW (DGW) 29.02 ft.

Length of Water Column(LWC=TWD-DGW) 6.43 ft.

1 Csg. Volume(LWC * C) = 6.43 X 0.163 = 1.05 gals.
3 Csg. Volumes = 3 X 1.05 = 3.14 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.00	1.00	1.00				3.25
Time (military)	1732	1735	1740	1743				1750
pH (s.u.)	5.3	5.2	5.0	5.0				5.0
Specific Cond. (umhos/cm)	29	25	25	25				25
Water Temp (°C)	20.5	18.9	18	18				18
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 4.1 (initial) DO_2 = 5.3 (3rd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3).	_____

Well # MW-4

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 27.29 ft.
Depth to GW (DGW) 23.11 ft.

Length of Water Column(LWC=TWD-DGW) 4.18 ft.

1 Csg. Volume(LWC * C) = 4.18 X 0.163 = 0.68 gals.
3 Csg. Volumes = 3 X 0.68 = 2.04 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 2.5 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	0.75	0.75	0.75				2.5
Time (military)	0816	0818	0823	0825				0830
pH (s.u.)	5.5	5.2	5.0	5.0				5.0
Specific Cond. (umhos/cm)	52	50	50	50				50
Water Temp (°C)	18	17	17	17				17
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 4.55 (initial) DO_2 = 5.66 (3rd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date: mm/dd/yy) 8-21-00 · 8-22-00 · 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter:	Conductivity Meter
serial no. Comp#: 001	serial no. 92K43558
pH=4.0 _____	Standard _____
pH=7.0 _____	Standard _____
pH=10.0 _____	Standard _____

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3)	_____

Well # MW-5

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 30.35 ft.
Depth to GW (DGW) 26.90 ft.

Length of Water Column(LWC=TWD-DGW) 3.45 ft.

1 Csg. Volume(LWC * C) = 3.45 X 0.163 = 0.56 gals.
3 Csg. Volumes = 3 X 0.56 = 1.68 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 1.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	0.5	0.5					1.25
Time (military)	1020	1025	1027	DRY				1030
pH (s.u.)	6.2	5.2	5.2					5.2
Specific Cond. (umhos/cm)	35	30	30					30
Water Temp (°C)	19.9	17.9	17.5					17.5
Turbidity (*)	—	—	—					—
PID Readings	—	—	—					—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 2.57 (initial) DO_2 = 3.20 (2nd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date mm/dd/yy: 8-21-00 · 8-22 00. 8-23-00
Field Personnel: Sonya Punch & Scott Dula
General Weather Conditions: Sunny, HOT
Ambient Air Temperature: 32 °C

Facility Name: Smith's Grocery Site ID#: 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3)	_____

Well #: MW-6

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 36.69 ft.
Depth to GW (DGW) 32.10 ft.

Length of Water Column(LWC=TWD-DGW) 4.59 ft.

1 Csg. Volume(LWC * C) = 4.59 X 0.163 = 0.75 gals.
3 Csg. Volumes = 3 X 0.75 = 2.24 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 2.5 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	0.75	0.75	0.75				2.5
Time (military)	1105	1108	1112	1116				1120
pH (s.u.)	5.3	5.1	5.2	5.3				5.3
Specific Cond. (umhos/cm)	35	30	25	25				25
Water Temp (°C)	21	20	19	20				20
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks: DO_2 = 0.86 (initial) DO_2 = 1.95 (3rd Vol) mild odor

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prm (x3)	_____

Well # MW-7

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 35.45 ft.
Depth to GW (DGW) 30.89 ft.

Length of Water Column(LWC=TWD-DGW) 4.56 ft.

1 Csg. Volume(LWC * C) = 4.56 X 0.163 = 0.74 gals.
3 Csg. Volumes = 3 X 0.74 = 2.22 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 2.5 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	0.75	0.75	0.75				2.5
Time (military)	1300	1307	1315	1320				1330
pH (s.u.)	5.5	5.5	5.7	5.7				5.7
Specific Cond. (umhos/cm)	50	50	51	50				50
Water Temp (°C)	25	21	20	20				20
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 1.32 (initial) DO_2 = 1.42 (3rd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date mm/dd/yy) 8-21-00 · 8-22-00 · 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3).	_____

Well # MW-8

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 37.75 ft.
Depth to GW (DGW) 32.00 ft.

Length of Water Column(LWC=TWD-DGW) 5.75 ft.

1 Csg. Volume(LWC * C) = 5.75 X 0.163 = 0.94 gals.
3 Csg. Volumes = 3 X 0.94 = 2.81 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.00	1.00	1.00				3.25
Time (military)	1625	1635	1645	1655				1715
pH (s.u.)	5.3	5.2	5.1	5.2				5.2
Specific Cond. (umhos/cm)	55	45	40	40				40
Water Temp (°C)	23	20.2	20	19				19
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 0.7 (initial) DO_2 = 1.5 (3rd Vol) cloudy with strange smell

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prm (x3).	_____

Well # MW-9

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 36.05 ft.
Depth to GW (DGW) 29.83 ft.

Length of Water Column(LWC=TWD-DGW) 6.22 ft.

1 Csg. Volume(LWC * C) = 6.22 X 0.163 = 1.01 gals.
3 Csg. Volumes = 3 X 1.01 = 3.03 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.00	1.00	1.00				3.25
Time (military)	1333	1340	1346	1350				1355
pH (s.u.)	5.7	5.6	5.5	5.4				5.4
Specific Cond. (umhos/cm)	25	20	20	20				20
Water Temp (°C)	22	20	21	19				19
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 1.91 (initial) DO_2 = 2.78 (3rd Vol) mild PAH odor

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date mm/dd/yy: 8-21-00 · 8-22 00. 8-23-00
Field Personnel: Sonya Punch & Scott Dula
General Weather Conditions: Sunny, HOT
Ambient Air Temperature: 32 °C

Facility Name: Smith's Grocery Site ID#: 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3).	_____

Well # MW-10

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 43.53 ft.
Depth to GW (DGW) 37.77 ft.

Length of Water Column(LWC=TWD-DGW) 5.76 ft.

1 Csg. Volume(LWC * C) = 5.76 X 0.163 = 0.94 gals.
3 Csg. Volumes = 3 X 0.94 = 2.82 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 1.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.0	Dry					1.25
Time (military)	0848	0856						0910
pH (s.u.)	5.5	8.6						8.6
Specific Cond. (umhos/cm)	90	115						115
Water Temp (°C)	20	19						19
Turbidity (*)	—	—						—
PID Readings	—	—						—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks: DO_2 = 1.48 (initial) DO_2 = 1.85 (1st Vol) strong HC odor

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22-00 · 8-23-00
Field Personnel Sonya Punch & Scott Duca
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3)	_____

Well # MW-11

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 44.21 ft.
Depth to GW (DGW) 38.53 ft.

Length of Water Column(LWC=TWD-DGW) 5.68 ft.

1 Csg. Volume(LWC * C) = 5.68 X 0.163 = 0.93 gals.
3 Csg. Volumes = 3 X 0.93 = 2.78 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.0	1.0	1.0				3.25
Time (military)	0940	0946	0952	1000				1005
pH (s.u.)	7.8	7.1	6.0	5.1				5.1
Specific Cond. (umhos/cm)	80	70	72	70				70
Water Temp (°C)	20	19	18.5	19				19
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 3.05 (initial) DO_2 = 3.95 (3rd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: Conductivity Meter
serial no. CBMpH-001 serial no. 92K43558
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch		Prism (x3)	

Well # MW-12

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 44.45 ft.
Depth to GW (DGW) 37.93 ft.

Length of Water Column(LWC=TWD-DGW) 6.52 ft.

1 Csg. Volume(LWC * C) = 6.52 x 0.163 = 1.06 gals.
3 Csg. Volumes = 3 X 1.06 = 3.18 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.0	1.0	1.0				3.25
Time (military)	1350	1355	1358	1400				1400
pH (s.u.)	5.9	5.6	5.8	5.6				5.6
Specific Cond. (umhos/cm)	50	42	48	45				45
Water Temp (°C)	22	19.5	19	19				19
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 1.50 (initial) DO_2 = 2.82 (3rd Vol) strong HC odor

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3).	_____

Well # MW-13

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 47.15 ft.
Depth to GW (DGW) 41.54 ft.

Length of Water Column(LWC=TWD-DGW) 5.61 ft.

1 Csg. Volume(LWC * C) = 5.61 X 0.163 = 0.91 gals.
3 Csg. Volumes = 3 X 0.91 = 2.74 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.0	1.0	1.0				3.25
Time (military)	1415	1418	1420	1423				1425
pH (s.u.)	7.9	6.7	6.2	5.7				5.7
Specific Cond. (umhos/cm)	35	35	32	30				30
Water Temp (°C)	20	18	17.9	18				18
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 5.50 (initial) DO_2 = 6.27 (3rd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date: mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. Comph-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prm (x3).	_____

Well # MW-14

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 49.93 ft.
Depth to GW (DGW) 42.25 ft.

Length of Water Column(LWC=TWD-DGW) 7.68 ft.

1 Csg. Volume(LWC * C) = 7.68 X 0.163 = 1.25 gals.
3 Csg. Volumes = 3 X 1.25 = 3.75 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 4.0 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.25	1.25	1.25				4.0
Time (military)	1202	1245	1250	1255				1255
pH (s.u.)	5.9	6.0	6.1	5.8				5.8
Specific Cond. (umhos/cm)	48	50	45	40				40
Water Temp (°C)	22	22	20	20				20
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks $DO_2 = 5.95$ (initial) $DO_2 = 5.64$ (3rd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: Conductivity Meter
serial no. CBMpH-001 serial no. 92K43558
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3).	_____

Well # MW-15

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 49.07 ft.
Depth to GW (DGW) 43.36 ft.

Length of Water Column(LWC=TWD-DGW) 5.71 ft.

1 Csg. Volume(LWC * C) = 5.71 X 0.163 = 0.93 gals.
3 Csg. Volumes = 3 X 0.93 = 2.79 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.00	1.00	1.00				3.25
Time (military)	1133	1137	1142	1150				1200
pH (s.u.)	6.8	6.5	6.0	5.7				5.7
Specific Cond. (umhos/cm)	72	70	68	68				68
Water Temp (°C)	22	21	19.8	21				21
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 5.24 (initial) DO_2 = 5.48 (3rd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Ch'in of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3)	_____

Well # MW-16

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 37.10 ft.
Depth to GW (DGW) 30.54 ft.

Length of Water Column(LWC=TWD-DGW) 6.56 ft.

1 Csg. Volume(LWC * C) = 6.56 X 0.163 = 1.07 gals.
3 Csg. Volumes = 3 X 1.07 = 3.21 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.00	1.00	1.00				3.25
Time (military)	1511	1516	1520	1525				1525
pH (s.u.)	6.6	6.0	5.9	5.9				5.9
Specific Cond. (umhos/cm)	22	21	20	20				20
Water Temp (°C)	19	19.9	18.2	18				18
Turbidity (*)	—	—	—	—			←	—
PID Readings	—	—	—	—			—	—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks $DO_2 = 3.8$ (initial) $DO_2 = 3.9$ (3rd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22-00 · 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3)	_____

Well # MW-17

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 39.95 ft.
Depth to GW (DGW) 35.39 ft.

Length of Water Column(LWC=TWD-DGW) 4.56 ft.

1 Csg. Volume(LWC * C) = 4.56 X 0.163 = 0.74 gals.
3 Csg. Volumes = 3 X 0.74 = 2.22 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 2.5 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	0.75	0.75	0.75				2.5
Time (military)	1441	1444	1447	1450				1450
pH (s.u.)	5.9	5.5	5.3	5.3				5.3
Specific Cond. (umhos/cm)	20	15	12	15				15
Water Temp (°C)	21	18	17.2	18				18
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 2.2 (initial) DO_2 = 2.6 (3rd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. Cambrt. 001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3)	_____

Well # MW-18

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 46.10 ft.
Depth to GW (DGW) 41.32 ft.

Length of Water Column(LWC=TWD-DGW) 4.78 ft.

1 Csg. Volume(LWC * C) = 4.78 X 0.163 = 0.78 gals.
3 Csg. Volumes = 3 X 0.78 = 2.34 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 2.5 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	0.75	0.75	0.75				2.5
Time (military)	1330	1333	1335	1338				1345
pH (s.u.)	7.3	6.4	6.1	5.9				5.9
Specific Cond. (umhos/cm)	65	55	60	62				62
Water Temp (°C)	20	18	17.5	17.5				17.5
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 5.1 (initial) DO_2 = 5.09 (3rd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Duca
General Weather Conditions Sunny, +90s
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Ch#In of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3)	_____

Well # MW-19

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 50.15 ft.
Depth to GW (DGW) 43.90 ft.

Length of Water Column(LWC=TWD-DGW) 6.25 ft.

1 Csg. Volume(LWC * C) = 6.25 x 0.163 = 1.02 gals.
3 Csg. Volumes = 3 X 1.02 = 3.06 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.0	1.0	1.0				3.25
Time (military)	1250	1305	1310	1315				1315
pH (s.u.)	5.6	7.4	6.4	5.8				5.8
Specific Cond. (umhos/cm)	50	52	50	50				50
Water Temp (°C)	19	19.5	18.0	18				18
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 6.03 (initial) DO_2 = 6.01 (3rd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3).	_____

Well # MW-20

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 35.18 ft.
Depth to GW (DGW) 27.58 ft.

Length of Water Column(LWC=TWD-DGW) 7.6 ft.

1 Csg. Volume(LWC * C) = 7.6 X 0.163 = 1.24 gals.
3 Csg. Volumes = 3 X 1.24 = 3.72 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 2.75 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	1.25	1.25					2.75
Time (military)	1410	1414	1416					1425
pH (s.u.)	5.3	5.4	5.4					5.4
Specific Cond. (umhos/cm)	20	20	19					19
Water Temp (°C)	21	20	20					20
Turbidity (*)	—	—	—					—
PID Readings	—	—	—					—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 5.54 (initial) DO_2 = 5.18 (2nd Vol)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22-00 · 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: serial no. Comp#-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
Sonya Punch	_____	Prism (x3)	_____

Well # TW-1

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 60.18 ft.
Depth to GW (DGW) 32.08 ft.

Length of Water Column(LWC=TWD-DGW) 28.1 ft.

1 Csg. Volume(LWC * C) = 28.1 X 0.163 = 4.58 gals.
3 Csg. Volumes = 3 X 4.58 = 13.74 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 14.5 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	4.75	4.75	4.75				14.5
Time (military)	1606	1618	1640	1650				1700
pH (s.u.)	7.6	6.2	6.0	6.0				6.0
Specific Cond. (umhos/cm)	165	140	160	155				155
Water Temp (°C)	23	21	21	20				20
Turbidity (*)	—	—	—	—				—
PID Readings	—	—	—	—				—

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO_2 = 1.4 (initial) DO_2 = 1.4 (3rd Vol.) mild PAH odor

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 8-21-00 · 8-22 00. 8-23-00
Field Personnel Sonya Punch & Scott Dula
General Weather Conditions Sunny, HOT
Ambient Air Temperature 32 °C

Facility Name Smith's Grocery Site ID# 09322

Quality Assurance:

pH Meter: Conductivity Meter
serial no. CBmpH-001 serial no. 92K43558
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch		Prism (x3).	

Well # TW-2

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 89 ft.
Depth to GW (DGW) 32.00 ft.

Length of Water Column(LWC=TWD-DGW) 57 ft.

1 Csg. Volume(LWC * C) = 57 X .163 = 9.29 gals.
3 Csg. Volumes = 3 X 9.29 = 27.8 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 28.75 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	9.5	9.5	9.5				28.75
Time (military)	1418	1438	1456	1509				1515
pH (s.u.)	9.3	8.8	8.6	8.3				8.3
Specific Cond. (umhos/cm)	180	140	135	120				120
Water Temp (°C)	26	24	22	21				21
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 4.7 mg/L (initial); 0.4 mg/L (final). No odor.

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date mm/dd/yy: 8-21-00 · 8-22 00. 8-23-00
Field Personnel: Sonya Punch & Scott Dula
General Weather Conditions: Sunny, HOT
Ambient Air Temperature: 32 °C

Facility Name: Smith's Grocery Site ID#: 09322

Quality Assurance:

pH Meter: serial no. CBMpH-001
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 92K43558

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time
Sonya Punch	_____	Prm (x3).	_____

Well # TW-3

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 74 ft.
Depth to GW (DGW) 37.00 ft.

Length of Water Column(LWC=TWD-DGW) 37 ft.

1 Csg. Volume(LWC * C) = 37 X .163 = 6.03 gals.
3 Csg. Volumes = 3 X 6.03 = 18.09 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 18.25 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0.25	6	6	6				18.25
Time (military)	0845	0910	0945	1000				1020
pH (s.u.)	11.8	9.9	7.0	6.2				6.2
Specific Cond. (umhos/cm)	900	300	180	150				150
Water Temp (°C)	20	20	19.5	21				21
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks: Do: 2.35 mg/L (initial); 2.12 mg/L (final).

APPENDIX D
Disposal Manifest

CBM
ENVIRONMENTAL SERVICES, INC.

09322

FAX COVER SHEET

To: PAM DuBOIS
From: SCOTTBALL
Company: SCDHEC
Date: 10/31/00
Fax No.:
No. Pages: 2 (Including Cover)
Phone No.:
Regarding: VICKERY WELL - SMITHS GROCERY

____Urgent ✓For Review ____Please Comment ____Please Call Me

Notes/Comments: BARKER FILTRATION TO SHOCK CHLORINATE GAC UNIT AND INTERIOR PLUMBING AT VICKERY RESIDENCE ON 11/1/00 COST TO CONDUCT WORK IS $853.13. NEED COSTS APPROVED. JEFFREY VICKERY HAS BEEN NOTIFIED. CALL W/ ANY QUESTIONS.

SCOTT

RECEIVED
OCT 31 2000
Bureau of Underground
Storage Tank Management

Fax Number: 803 548-5892
P. O. Box 411387, Charlotte NC 28241
377 Carowinds Boulevard, Suite 118, Fort Mill SC 29708
Phone Number: 803 548-5989

FAX MESSAGE

RECEIVED
OCT 3 1 2000

DATE : 10/31/2000

NUMBER OF PAGES INCLUDING COVER PAGE 1

PLEASE DELIVER THIS FAX MESSAGE

TO : Scott Ball /CBM

fax 803-548-5892

ph-803-548-5989

FROM : ECO WATER SYSTEMS

(803-996-1205 (803)996-1223

FAX NUMBER PHONE NUMBER

Mr. Ball;

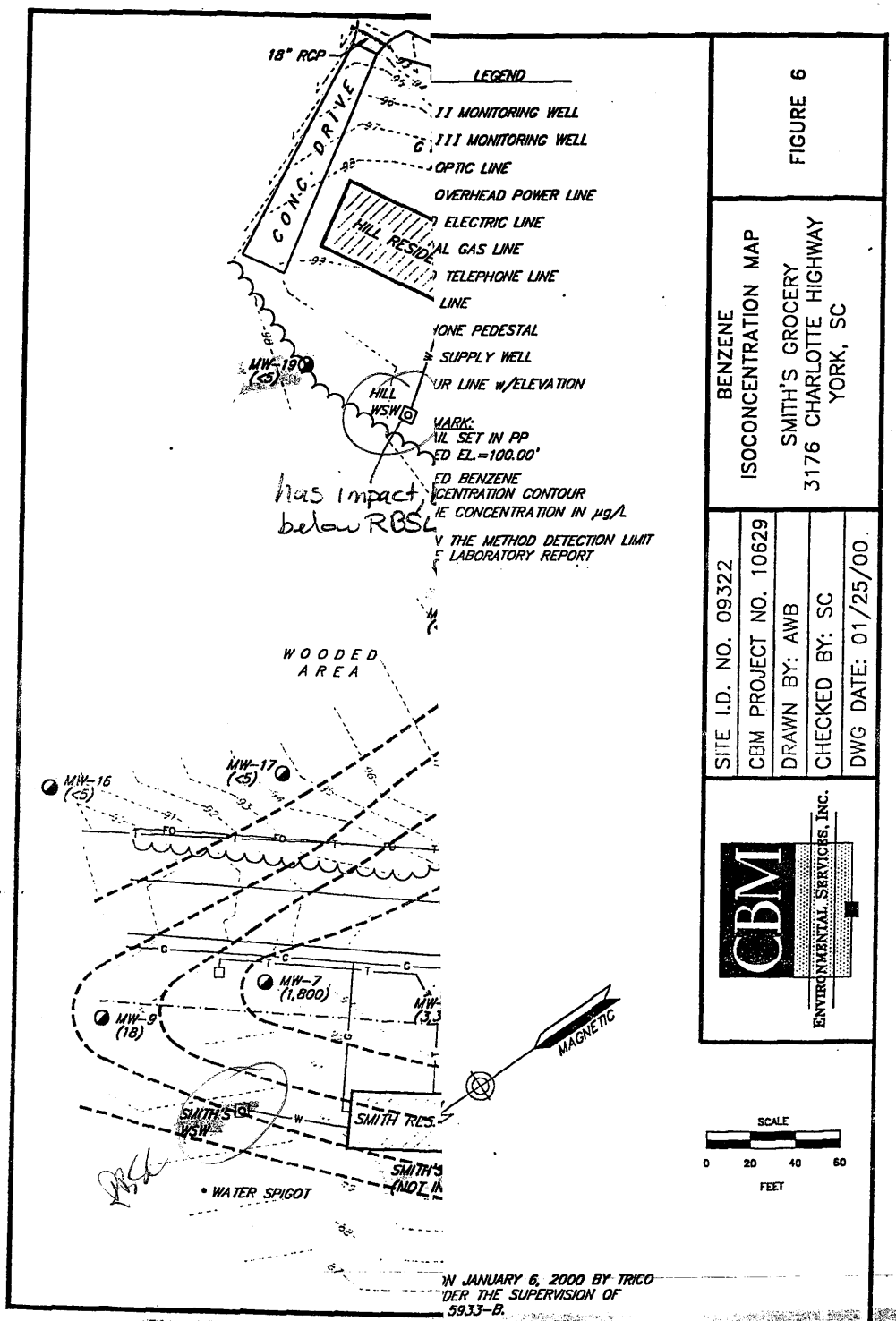
We can mobilize and proceed to the Vickery residence on 11/1/2000 between 11-12. The price will be $353.13. This breaks down to $233.13 for parts and labor, and $120.00 for mileage. For this price, we will shock chlorinate the Eco3100PF12 filter & the house.Let me know if this is satisfactory and we will proceed.Thanks for your time.

Sincerely yours;

James V. Barker

James V. Barker

Barker Filtration
4884 B Sunset Blvd.
Lexington, SC 29072


18" RCP
LEGEND
II MONITORING WELL
III MONITORING WELL
OPTIC LINE
OVERHEAD POWER LINE
ELECTRIC LINE
AL GAS LINE
TELEPHONE LINE
LINE
HONE PEDESTAL
SUPPLY WELL
UR LINE w/ELEVATION
MARK:
IL SET IN PP
ED EL.=100.00'
ED BENZENE
CENTRATION CONTOUR
IE CONCENTRATION IN µg/L
V THE METHOD DETECTION LIMIT
LABORATORY REPORT
CONC. DRIVE
HILL RESIDE
MW-19 (<5)
HILL WSW
has impact, below RBSL
WOODED AREA
MW-16 (<5)
MW-17 (<5)
MW-7 (1,800)
MW-9 (18)
SMITH RES.
SMITH'S WSW
WATER SPIGOT
MAGNETIC
SCALE
0 20 40 60
FEET
N JANUARY 6, 2000 BY TRICO
DER THE SUPERVISION OF
5933-B.
BENZENE
ISOCONCENTRATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC
FIGURE 6
SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00
CBM
ENVIRONMENTAL SERVICES, INC.

D.O. 6.27
1.42
4.85

Nitrate: 4.30
0.05
4.25

Sulfate. 12.00
0.05
11.95

Iron 17.0
1.1

Nickel. 0.026

RECEIVED
JUN 2 1 2000
Bureau of Underground Storage Tank Management

CBM ENVIRONMENTAL SERVICES INC

UST #09822

FAX COVER SHEET

To: PAM DUBOIS
From: SCOTT BALL
Company: SCDHEC
Date: 6/21/00.
Fax No.:
No. Pages: 7 (Including Cover)
Phone No.:
Regarding: SMITH'S GROCERY

____Urgent ✓ For Review ____Please Comment ____Please Call Me

Notes/Comments: ATTACHED IS THE LABORATORY INVOICE AND ANALYTICAL DATA ASSOCIATED WITH THE MAY 2000 SAMPLING OF THE VICKERY & HILL WATER SUPPLY WELLS. MY RECORDS INDICATE THAT SIMILAR INFO. HAS BEEN SUBMITTED FOR WATER SUPPLY WELL SAMPLING ACTIVITIES IN FEBRUARY, MARCH & APRIL. IF YOU NEED ANALYTICALS/ INVOICES FOR THESE MONTHS PLEASE CALL. AN UPDATED DATA TABLE OUTLINING RESULTS OF PREVIOUS SAMPLING EVENTS HAS ALSO BEEN ATTACHED.

THANKS -

SCOTT

Fax Number: 803 548-5892
P. O. Box 411387, Charlotte NC 28241
377 Carowinds Boulevard, Suite 118, Fort Mill SC 29708
Phone Number: 803 548-5989

Lab Report

RECEIVED
MAY 19 2000

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

#10627

5/18/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB68138
Login Group: MK523F2
Sample Collection Date/Time: 5/15/00 10:40
Lab Submittal Date/Time: 5/16/00 08:15

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	Not detected	ug/L	5	8260	5/16/00 21:37	MP
BENZENE	Not detected	ug/L	5	8260	5/16/00 21:37	MP
TOLUENE	Not detected	ug/L	5	8260	5/16/00 21:37	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	5/16/00 21:37	MP
XYLENES	Not detected	ug/L	10	8260	5/16/00 21:37	MP
NAPHTHALENE	Not detected	ug/L	5	8260	5/16/00 21:37	MP
SURR: DIBROMOFLUOROMETHANE	94	%	86-118	8260	5/16/00 21:37	MP
SURR: TOLUENE, D8	101	%	88-110	8260	5/16/00 21:37	MP
SURR: BROMOFLUOROBENZENE	95	%	86-115	8260	5/16/00 21:37	MP
DILUTION FACTOR	1	ug/L		8260	5/16/00 21:37	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

RECEIVED
JUN 21 2000
Bureau of Underground
Storage Tank Management

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

5/18/00

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: HILL WSW
Prism Sample ID: AB68139
Login Group: MK523F2
Sample Collection Date/Time: 5/15/00 10:50
Lab Submittal Date/Time: 5/16/00 08:15

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	Not detected	ug/L	5	8260	5/16/00 22:18	MP
BENZENE	Not detected	ug/L	5	8260	5/16/00 22:18	MP
TOLUENE	Not detected	ug/L	5	8260	5/16/00 22:18	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	5/16/00 22:18	MP
XYLENES	Not detected	ug/L	10	8260	5/16/00 22:18	MP
NAPHTHALENE	Not detected	ug/L	5	8260	5/16/00 22:18	MP
SURR: DIBROMOFLUOROMETHANE	98	%	86-118	8260	5/16/00 22:18	MP
SURR: TOLUENE, D8	103	%	88-110	8260	5/16/00 22:18	MP
SURR: BROMOFLUOROBENZENE	95	%	86-115	8260	5/16/00 22:18	MP
DILUTION FACTOR	1	ug/L		8260	5/16/00 22:18	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Jun 21 00 13:16 No.006 P.04
TEL:8035485892
CBM ENVIRONMENTAL

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 1	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

Client CBM Environmental Services Inc.
Physical Address 377 Fieldwinds Blvd. Suite 1015
Fort Mill, SC 29708
Phone 803 548 5995 Fax 803 548 5892
P.O.#/Billing Reference 1262
Project Name Sam Mc's Grocery

REPORT TO: Name Scott Bill
Address CBM
BILL TO: Name
Address
Requested Due Date Standard
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ___ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: 8260 BTEX MTBE NAPH	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
Vickery WSW	5-15-00	1040	Water	VOA	3	40 mL	HCl	✓			105138
Hill WSW	5-15-00	1050	WATER	VOA	3	40 mL	HCl	✓			105139

Sampler's Signature Chip Clergia Sampled By (Print Name) Chip Clergia Affiliation CBM

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Chip Clergia	Mark Faulkenberry	5/15/00	1700
Relinquished By: (Signature)	Received By: (Signature)	Date	
Mark Faulkenberry	Kathryn Wing	5/16/00	08:15
Method of Shipment	Received For Prism Laboratories By:	Log-In Group No.	
		MK-23352	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Full Service Analytical & Environmental Solutions

Invoice

Main Office:
449 Springbrook Road
P.O. Box 240543
Charlotte, NC 28224-0543
Phone: 704/529-6364
1/800/529-6364
Fax: 704/525-0409

Invoice Number: 48945 **Date: May 18, 2000**

Purchase Order No: 12621 **Project ID: Smith's Grocery**
Project Manager: Scott Ball

RECEIVED
MAY 19 2000

To: CBM Environmental Services
Attn: Accounts Payable
P. O. Box 411387
Charlotte, NC 28241

The following charges are due for the indicated sample(s) which was submitted to this laboratory on 05/16/00.

Lab sample I.D.: AB68138 AB68139

Login Group: MK523F2

Analysis Name	Quantity	Unit Price	Total Price
METHOD 8260	2	$85.00	$170.00
Invoice Total			$ 170.00

WE APPRECIATE YOUR BUSINESS!

Remit payment to: Prism Laboratories, Inc.
P.O. Box 240543
Charlotte, N.C. 28224-0543

SALESMAN CODE:

VENDOR ID:	PRILAB	INV. AMT:	$170.00	G/L #:	30402		
INV. #:	48945	ENTERED		JOB#	10029		
INV. DATE:	5/12/00	DATE:		COST #	~~2221~~	2232	
DUE DATE:		CHECK#:		PHASE#:	13		
APPROVED:		CHECK DATE		TASK#	N/A		
COMMENTS:	10629						

PAYMENT TERMS: NET 10 DAYS
A 1.5% interest Rate will be charged on account balances over 30 days old.
We reserve the right to withhold lab test results on delinquent accounts over 60 days

SMITH'S GROCERY
GROUNDWATER ANALYTICAL DATA[1]
WATER SUPPLY WELLS

Well ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
Vickery	10/18/99	64.6[2]	ND[3]	ND	39.82	ND	5.41
	10/27/99	ND	ND	ND	ND	ND	ND
	11/2/99	ND	ND	ND	ND	ND	25.5
	11/9/99	1.13	2.47	2.21	ND	ND	6.64
	11/11/99	ND	ND	ND	ND	ND	ND
	11/16/99	ND	ND	ND	ND	ND	ND
	11/23/99	ND	3.45	ND	ND	ND	ND
	11/30/99	ND	ND	ND	ND	ND	ND
	12/8/99	ND	ND	ND	ND	ND	ND
	12/14/99	ND	ND	ND	ND	ND	ND
	12/21/99	ND	ND	ND	ND	ND	ND
	12/27/99	ND	ND	ND	ND	ND	ND
	1/5/00	ND	ND	ND	ND	ND	ND
	1/11/00	ND	ND	ND	ND	ND	ND
	1/19/00	ND	ND	ND	ND	ND	ND
	1/24/00	ND	ND	ND	ND	ND	ND
	2/14/200	ND	ND	ND	ND	ND	ND
	3/14/00	ND	ND	ND	ND	ND	ND
	4/17/00	ND	ND	ND	ND	ND	ND
	5/15/00	ND	ND	ND	ND	ND	ND
Hill	11/5/99	1.43	ND	ND	ND	ND	2.46
	11/17/99	ND	ND	ND	ND	ND	ND
	11/23/99	1.47	2.91	ND	ND	ND	ND
	11/30/99	1.31	ND	ND	ND	ND	ND
	12/8/99	2.18	ND	ND	ND	ND	1.85
	12/14/99	ND	ND	ND	ND	ND	ND
	12/21/99	ND	ND	ND	ND	ND	ND
	12/27/99	ND	ND	ND	ND	ND	ND
	1/5/00	ND	ND	ND	ND	ND	ND
	1/11/00	ND	ND	ND	ND	ND	ND
	1/19/00	ND	ND	ND	ND	ND	ND
	1/24/00	ND	ND	ND	ND	ND	ND
	2/14/200	ND	ND	ND	ND	ND	ND
	3/14/200	ND	ND	ND	ND	ND	ND
	4/17/00	ND	ND	ND	ND	ND	ND
	5/15/00	ND	ND	ND	ND	ND	ND

SMITH'S GROCERY
GROUNDWATER ANALYTICAL DATA[1]
WATER SUPPLY WELLS

Well ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
Barnette	10/21/99	ND	ND	ND	ND	ND	ND
Beasley	10/21/99	ND	ND	ND	ND	ND	ND
	4/26/00	ND	ND	ND	ND	ND	ND
Foster	11/19/99	ND	ND	ND	ND	ND	ND
JB Norris	4/26/00	ND	ND	ND	ND	ND	ND
Steve Norris	4/26/00	ND	ND	ND	ND	ND	ND
Strife	10/21/99	ND	ND	ND	ND	ND	ND
Wood	10/21/99	ND	ND	ND	ND	ND	ND
	4/26/00	ND	ND	ND	ND	ND	ND
	RBSL[5]	5	1,000	700	10,00	40	10

Notes:

1. Analyses for BTEX constituents, MTBE, and naphthalene using Method 8260; results reported in µg/L.
2. Concentrations in bold exceed the RBSL.
3. Not detected at or above the method detection limit specified in the laboratory analytical report.
4. Barnette, Beasley, Strife and Wood water supply wells sampled by the SCDHEC.
5. Risk Based Screening Level.

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

BUREAU OF
UNDERGROUND STORAGE TANK MANAGEMENT

Phone (803) 898-4350 Fax (803) 898-4330

AUG 14 2000

Mrs. Lois Smith
3176 Charlotte Hwy.
York, SC 29745

Re: Smiths Grocery
Groundwater Sampling Approval
UST Permit # 09322, CP#11972
York County

Dear Mrs. Smith:

The Department requests that the Vickery and Hill family potable wells be resampled monthly for the next three months. A Cost Agreement has been approved for this scope of work.

Cost Agreement **#11972** is approved up to the amount of the enclosed cost agreement form. The Monitoring Report submitted at the conclusion of these activities should include the following:

- A narrative portion documenting current site conditions and noting the names of field personnel, date, time, ambient air temperature, and general weather conditions during the sampling event. The report shall also contain well purging data, pH, specific conductivity, water temperature, PID readings (where applicable) and turbidity comments. **Please be advised that only EPA Method 8260B will be accepted for purgeable aromatics.**

- Ground-water laboratory analytical data for all monitoring wells shall be presented in a tabular format.

- Manifests for any contaminated soil and/or groundwater removed from the site for treatment and/or disposal.

- The report must be signed and sealed by a professional geologist or engineer registered in the State of South Carolina.

All laboratories utilized must be certified within the state of South Carolina for the analysis used. Please note that all rehabilitation activities associated with a UST release must be performed by a SCDHEC certified site rehabilitation contractor as required by R.61-98. The Ground-water Monitoring Report and associated invoice should be submitted within **60 days from the date of this letter.** If the invoice is not submitted **within 120 days** from the date of this correspondence, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

The Bureau grants pre-approval for the transportation of the investigative derived waste (virgin petroleum contaminated soil and groundwater) from the referenced site to a permitted treatment facility. All investigative derived waste must be properly stored in labeled containers or covered with plastic as appropriate. All contaminated investigated derived waste must be accepted by the approved treatment facility. There can be no spillage or leakage in transport. A copy of the disposal manifest and approval letter from the receiving facility must be included as an appendix to the final report. If the levels of petroleum contamination based on laboratory analysis are below treatment levels, please contact the project manager for approval to dispose of the investigative waste on site. The SUPERB Account will not compensate for transportation or treatment of clean soil and/or ground water.

On all future correspondence, please reference the **UST Permit #09322.** On the Assessment Component invoice please reference the UST Permit identification number and cost agreement number **11972.** Questions concerning the above should be addressed to me at (803) 898-4334 or 1(800)826-5435 (within South Carolina).

Sincerely,

Pamela DuBois, Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Bureau of Underground Storage Tank Management

enc: Approved Assessment Component Cost Proposal
Assessment Component Invoice (SCDHEC Form 3664)

cc: CBM Environmental, 377 Carowinds Blvd., Suite 118, Fort Mill, SC 29715 (w/ACCP and AC Invoice)
Financial File (w/ approved ACCP)
Technical File

RECEIVED

MAY 11 2000

Bureau of Underground
Storage Tank Management

CBM
ENVIRONMENTAL SERVICES INC.

UST # 09322

FAX COVER SHEET

To: Pam DuBois

From: Scott Ball

Company: DHEC

Date: 5/11/00

Fax No.: _____

No. Pages: 3 (Including Cover)

Phone No.: _____

Regarding: Smith's Grocery

____Urgent ✓For Review ____Please Comment ____Please Call Me

Notes/Comments: UPDATE ON ALL WATER SUPPLY WELLS IN THE VICINITY OF SMITH'S GROCERY THAT HAVE BEEN SAMPLED. WOOD AND BEASLEY WATER SUPPLY WELLS ARE TO THE SOUTHEAST ACROSS CLOVER CIRCLE FROM THE VICKERY & HILL RESIDENCES. STEVE & J.B. NORRIS WATER SUPPLY WELLS ARE LOCATED TO THE NORTH WEST ~ 700-800 FEET FROM THE SUBJECT SITE. A FULL REPORT WILL BE SUBMITTED WHEN ADDITIONAL TYPE II & TYPE III WELLS AT THE SITE ARE COMPLETED & SAMPLED.

THANKS-

SCOTT

Fax Number: 803 548-5892

P. O. Box 411387, Charlotte NC 28241
377 Carowinds Boulevard, Suite 118, Fort Mill SC 29708

Phone Number: 803 548-5989

SMITH'S GROCERY
GROUNDWATER ANALYTICAL DATA[1]
WATER SUPPLY WELLS

Well ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
Vickery	10/18/99	64.6[2]	ND[3]	ND	39.82	ND	5.41
	10/27/99	ND	ND	ND	ND	ND	ND
	11/2/99	ND	ND	ND	ND	ND	25.5
	11/9/99	1.13	2.47	2.21	ND	ND	6.64
	11/11/99	ND	ND	ND	ND	ND	ND
	11/16/99	ND	ND	ND	ND	ND	ND
	11/23/99	ND	3.45	ND	ND	ND	ND
	11/30/99	ND	ND	ND	ND	ND	ND
	12/8/99	ND	ND	ND	ND	ND	ND
	12/14/99	ND	ND	ND	ND	ND	ND
	12/21/99	ND	ND	ND	ND	ND	ND
	12/27/99	ND	ND	ND	ND	ND	ND
	1/5/00	ND	ND	ND	ND	ND	ND
	1/11/00	ND	ND	ND	ND	ND	ND
	1/19/00	ND	ND	ND	ND	ND	ND
	1/24/00	ND	ND	ND	ND	ND	ND
	2/14/200	ND	ND	ND	ND	ND	ND
	3/14/00	ND	ND	ND	ND	ND	ND
	4/17/00	ND	ND	ND	ND	ND	ND
Hill	11/5/99	1.43	ND	ND	ND	ND	2.46
	11/17/99	ND	ND	ND	ND	ND	ND
	11/23/99	1.47	2.91	ND	ND	ND	ND
	11/30/99	1.31	ND	ND	ND	ND	ND
	12/8/99	2.18	ND	ND	ND	ND	1.85
	12/14/99	ND	ND	ND	ND	ND	ND
	12/21/99	ND	ND	ND	ND	ND	ND
	12/27/99	ND	ND	ND	ND	ND	ND
	1/5/00	ND	ND	ND	ND	ND	ND
	1/11/00	ND	ND	ND	ND	ND	ND
	1/19/00	ND	ND	ND	ND	ND	ND
	1/24/00	ND	ND	ND	ND	ND	ND
	2/14/200	ND	ND	ND	ND	ND	ND
	3/14/200	ND	ND	ND	ND	ND	ND
	4/17/200	ND	ND	ND	ND	ND	ND

SMITH'S GROCERY
GROUNDWATER ANALYTICAL DATA[1]
WATER SUPPLY WELLS

Well ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
Barnette	10/21/99	ND	ND	ND	ND	ND	ND
Beasley	10/21/99	ND	ND	ND	ND	ND	ND
	4/26/00	ND	ND	ND	ND	ND	ND
Foster	11/19/99	ND	ND	ND	ND	ND	ND
JB Norris	4/26/00	ND	ND	ND	ND	ND	ND
Steve Norris	4/26/00	ND	ND	ND	ND	ND	ND
Strife	10/21/99	ND	ND	ND	ND	ND	ND
Wood	10/21/99	ND	ND	ND	ND	ND	ND
	4/26/00	ND	ND	ND	ND	ND	ND
	RBSL[5]	5	1,000	700	10,00	40	10

Notes:

1. Analyses for BTEX constituents, MTBE, and naphthalene using Method 8260; results reported in µg/L.
2. Concentrations in bold exceed the RBSL.
3. Not detected at or above the method detection limit specified in the laboratory analytical report.
4. Barnette, Beasley, Strife and Wood water supply wells sampled by the SCDHEC.
5. Risk Based Screening Level.

RX RESULT REPORT

NAME:DIV UST MGMT
TEL :18038984330
DATE:MAY.11'2000 11:48

SESSION	FUNCTION	NO.	DESTINATION STATION	DATE	TIME	PAGE	DURATION	MODE	RESULT
7849	RX	01	0000	MAY.11	11:45	003	00H03'41"	ECM	NG
			004B:ERROR DURING RX						

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

BUREAU OF
UNDERGROUND STORAGE TANK MANAGEMENT

Phone (803) 898-4350 Fax (803) 898-4330

MAR 09 2000

Mrs. Lois Smith
3176 Charlotte Hwy.
York, SC 29745

Re: Smith's Grocery
UST Permit #09322; CP #10647, MWA #12578
Groundwater Sampling Approval
York County

Dear Mrs. Smith:

After review of the Rapid Assessment Report dated February 3, 2000, the Department requests the installation of additional monitoring wells and resampling of only the three newly installed monitoring wells. A Cost Agreement has been approved for this scope of work.

Cost Agreement **#10647** is approved up to the amount of the enclosed cost agreement form. The Monitoring Report submitted at the conclusion of these activities should include the following:

- A comprehensive round of ground water sampling of all wells associated with the release utilizing intrinsic parameters (nitrate, sulfate, ferrous iron, methane).
- A narrative portion documenting current site conditions and noting the names of field personnel, date, time, ambient air temperature, and general weather conditions during the sampling event. The report shall also contain well purging data, pH, specific conductivity, water temperature, PID readings (where applicable) and turbidity comments.
- Ground-water elevations, depth to groundwater, measurable free product thickness (where applicable), total well depth and screened interval for all monitoring wells associated with the site shall be presented in tabular form, unless otherwise directed by the Department. Ground-water laboratory analytical data for all monitoring wells shall be presented in a tabular format.
- A ground-water elevation contour map of the site based on current ground-water potentiometric data.
- A CoC map based on current ground-water laboratory analytical data. The ground-water data should be adjacent to the relevant monitoring well.

DHEC/UST/030800

- Manifests for any contaminated soil and/or groundwater removed from the site for treatment and/or disposal.

- The report must be signed and sealed by a professional geologist or engineer registered in the State of South Carolina.

All laboratories utilized must be certified within the state of South Carolina for the analysis used. Please note that all rehabilitation activities associated with a UST release must be performed by a SCDHEC certified site rehabilitation contractor as required by R.61-98. The Ground-water Monitoring Report and associated invoice should be submitted within **60 days from the date of this letter.** If the invoice is not submitted **within 120 days** from the date of this correspondence, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

The Bureau grants pre-approval for the transportation of the investigative derived waste (virgin petroleum contaminated soil and groundwater) from the referenced site to a permitted treatment facility. All investigative derived waste must be properly stored in labeled containers or covered with plastic as appropriate. All contaminated investigated derived waste must be accepted by the approved treatment facility. There can be no spillage or leakage in transport. A copy of the disposal manifest and approval letter from the receiving facility must be included as an appendix to the final report. If the levels of petroleum contamination based on laboratory analysis are below treatment levels, please contact the project manager for approval to dispose of the investigative waste on site. The SUPERB Account will not compensate for transportation or treatment of clean soil and/or ground water.

On all future correspondence, please reference the **UST Permit #09322.** On the Assessment Component invoice please reference the UST Permit identification number and cost agreement number **10647.** Questions concerning the above should be addressed to me at (803) 898-4334 or 1(800)826-5435 (within South Carolina).

Sincerely,

Pamela DuBois

Pamela DuBois, Hydrogeologist
Assessment and Corrective Action Division
Bureau of Underground Storage Tank Management
Owner/Operator Assistance Section

enc: Approved Assessment Component Cost Proposal
Monitor Well Approval Form
Assessment Component Invoice
cc: CBM Environmental, 377 Carowinds Blvd., Suite 118, Fort Mill, SC 29715 (w/ACCP, AC Invoice, and original MWA)
Financial File (w/ Approved Assessment Component Cost Proposal)
Technical File

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

Monitoring Well Installation Approval Form

Date of Issue: March 8, 2000 Approval No.: 12578

Approval is hereby granted to: CBM Environmental Services, Inc.
(On behalf of): Lois Smith
UST Permit #: **09322**
County: York

This approval is for the construction of 3 permanent monitoring wells in accordance with the construction plans and technical specifications outlined in the **Rapid Assessment** Document. The wells are to be constructed within the surficial aquifer for the intended purpose of monitoring ground-water quality and/or water level(s) at the referenced facility. Approval is provided with the following conditions:

1. The latitude and longitude, surveyed elevations, boring and/or geologist logs and actual (as built) construction details for each well will be submitted with the technical report.

2. Each well will be labeled with an identification plate constructed of a durable material affixed to the casing or surface pad where it is readily visible. The plate will provide monitoring well I.D.#, date of construction, static water level, and driller name and state certification #.

3. Well construction and sampling derived waste including, but not necessarily limited to, drill cuttings, drilling fluids, development and purge water should be managed properly and in compliance with applicable requirements. If containerized, each vessel should be clearly labeled with regard to contents, source, and date of activity.

4. A minimum of forty-eight (48) hours prior to initiation of drilling activities, please provide notice to Pamela DuBois at (803) 898-4334 or duboispm@columb26.dhec.state.sc.us.

5. Please provide ground-water quality analytical data (chemical analysis and/or water level(s)) and associated measurements (i.e., in-situ field measurements) to Pamela DuBois with the technical report.

6. Monitoring wells will be installed by or under the direct supervision of a licensed well driller certified by the State of South Carolina.

7. Monitoring wells and temporary monitoring wells will be abandoned by or under the direct supervision of a licensed well driller certified by the State of South Carolina. Temporary monitoring wells shall not remain in place for longer than 30 days from the date of installation. Monitoring wells may be abandoned only upon concurrence by this Division.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Health and Environmental Control Regulations R.61-71. Please remember to have a copy of this approval on the site during well installation.

Approved by: Pamela DuBois

Pamela DuBois, Hydrogeologist
Owner/Operator Assistance Section
Bureau of UST Management

cc: Trident District EQC
Mrs. Lois Smith, 3176 Charlotte Hwy., York, SC 29745
Technical File

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

BUREAU OF
UNDERGROUND STORAGE TANK MANAGEMENT

Phone (803) 898-4350 Fax (803) 898-4330

FEB 22 2000

Mrs. Lois Smith
3176 Charlotte Hwy.
York, SC 29745

Re: Smith's Grocery
Rapid Assessment Report received February 3, 2000
UST Permit # 09322
York County

Dear Mrs. Smith:

The Bureau of Underground Storage Tank Management of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the Rapid Assessment Report for the referenced site. The next scope of work to be implemented is installation of additional telescoping monitoring wells near TW-1 and MW-10, and additional shallow monitoring wells downgradient of MW-10 to better define the plume, and resampling of all monitoring wells. Our records indicate that you have selected CBM Environmental Services, Inc. as your contractor to perform assessment activities at the site.

Please have your contractor complete and submit the Assessment Component Cost Proposal form within thirty days of the date of this letter. The plan should include a comprehensive round of ground water sampling of all wells associated with the release and computer modeling, utilizing intrinsic parameters (nitrate, sulfate, ferrous iron, methane), to determine site specific target levels for all CoC. The SUPERB (State Underground Petroleum Environmental Response Bank) allowable cost for each component is included on the Assessment Component Cost Proposal form. All site rehabilitation activities associated with the UST release must be performed by a SCDHEC certified site rehabilitation contractor in accordance with R.61-98.

On all correspondence or inquiries regarding this project, please reference **UST Permit #09322.** If you have any questions, please feel free to contact me at (803) 898-4334 or 1-800-826-5435 (within South Carolina only).

Sincerely,

Pamela DuBois, Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Bureau of Underground Storage Tank Management

enc: Assessment Component Cost Proposal Form

cc: Technical File
CBM Environmental, 377 Carowinds Blvd., Suite 118, Fort Mill, SC 29715 (W/ CP form)

DHEC/UST/021800

CBM

ENVIRONMENTAL SERVICES, INC.

January 28, 2000

RECEIVED

FEB 03 2000

Bureau of Underground
Storage Tank Management

Ms. Pam DuBois
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Re: Rapid Assessment Report
Smith's Grocery
York, York County
Site ID No. 09322
CBM Project No. 10629

Ms. DuBois:

Please find enclosed a copy of the Rapid Assessment Report for the above referenced site. If you have any questions please do not hesitate to contact Scott Ball or John Hess at (803) 548-5989.

Sincerely,
CBM Environmental Services, Inc.

Mary Moss

Mary Moss
Environmental Services Coordinator

/mm

enclosure

- needs 2-3 more deep wells
- needs shallow & deep delineation at front entrance of subdivision
MW-10

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RAPID ASSESSMENT REPORT
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK COUNTY, SOUTH CAROLINA
SITE ID NO. 09322
CBM PROJECT NO. 10629

Prepared For:

Smith's Grocery
3176 Charlotte Highway
York, South Carolina 29745

Prepared By:

CBM Environmental Services, Inc.
377 Carowinds Boulevard, Suite 118
Fort Mill, South Carolina 29708

January 28, 2000

W. Scott Ball
Senior Project Manager

JOHN F. HESS, JR. REGISTERED NO. 1170 SOUTH CAROLINA PROFESSIONAL GEOLOGIST

John F. Hess, Jr., P.G.
License No. 1170

TABLE OF CONTENTS

1.0 INTRODUCTION 1

1.1 Background 1
1.2 Regional Geology/Hydrogeology 1
1.3 Receptor Survey 2

2.0 ASSESSMENT INFORMATION 2

2.1 Assessment Activities 2
2.2 Site Geology/Hydrogeology 3
2.3 Soil Quality 4
2.4 Groundwater Quality 4
2.4.1 Monitoring Wells 4
2.4.2 Water Supply Wells 4

3.0 TIER I EVALUATION 5

3.1 Comparison with RBSLs 5
3.2 Site Conceptual Exposure Model 6

4.0 TIER II RISK EVALUATION 6

4.1 Exposure Pathways 6
4.2 Points of Compliance 7
4.3 Soil Leachability Model 7
4.4 Fate and Transport Model 7
4.5 Groundwater SSTL Calculations 8

5.0 CONCLUSIONS AND RECOMMENDATIONS 8

6.0 LIMITATIONS 10

FIGURES

Figure 1: USGS Topographic Map
Figure 2: Site Map
Figure 3: Field Screening Map
Figure 4: Water Table Surface Map
Figure 5: Soil COC Map
Figure 6: Benzene Isoconcentration Map
Figure 7: Toluene Isoconcentration Map
Figure 8: Ethylbenzene Isoconcentration Map
Figure 9: Xylenes Isoconcentration Map
Figure 10: MTBE Isoconcentration Map
Figure 11: Naphthalene Isoconcentration Map
Figure 12: EDB Isoconcentration Map
Figure 13: Cross-Section A-A'
Figure 14: Cross-Section B-B'

TABLES

Table 1: Summary of Field Screening Results
Table 2: Summary of Groundwater Elevation Data
Table 3: Summary of Results – Slug Test Analyses
Table 4: Summary of Laboratory Analyses – Soil Samples
Table 5: Summary of SSTLs for Soil
Table 6: Summary of Groundwater Analytical Data – Monitoring Wells
Table 7: Summary of Groundwater Analytical Data – Natural Attenuation Parameters
Table 8: Summary of Groundwater Analytical Data – Water Supply Wells
Table 9: Summary of Fate and Transport Model Input Parameters
Table 10: Summary of Results – Fate and Transport Model
Table 11: Summary of SSTLs for Groundwater

APPENDICES

Appendix A: Surveyed Site Map
Appendix B: Soil Boring Logs
Appendix C: GC Screening Reports
Appendix D: Well Construction Records
Appendix E: Certificates of Disposal
Appendix F: Slug Test Data
Appendix G: Laboratory Reports – Soil Samples
Appendix H: Groundwater Sampling Data Sheets
Appendix I: Laboratory Report – Groundwater Samples
Appendix J: Laboratory Reports – Water Supply Well Samples
Appendix K: In–Situ Soil Risk Evaluation Data Sheets
Appendix L: Fate and Transport Model
Appendix M: SSTL Calculations

1.0 INTRODUCTION

1.1 Background

The purpose of this report is to present the results of rapid assessment (RA) activities conducted at the Smith's Grocery site. The activities were conducted in accordance with the scope of work outlined in the Rapid Assessment Plan dated August 11, 1999 by CBM Environmental Services, Inc. (CBM) and approved in correspondence from the SCDHEC dated September 22, 1999. The site operated as a convenience store/retail petroleum facility until March 1996. The site currently operates as a convenience store. No petroleum products for retail distribution are currently stored on-site.

Two underground storage tanks (USTs) were removed from the site on March 27, 1996. The USTs consisted of one 6,000-gallon gasoline UST and one 8,000-gallon gasoline UST. A UST Closure Report was submitted to the SCHDEC in April 1996. One Type II monitoring well (MW-1) was installed during Initial Groundwater Assessment (IGWA) activities conducted at the site in January 1999. The IGWA report was submitted to the SCDHEC on February 19, 1999.

Please note that a petroleum retail facility/country store known as the former Smith's Store was located across Highway 49 approximately 200 feet to the southeast of the site where the entrance to The Pines subdivision is presently located. The facility contained two unregistered 1,000-gallon gasoline USTs that were reportedly installed in 1947 and in service until 1977. The USTs were reportedly emptied and taken out of service when the store closed in 1977. The USTs were removed from the site on October 13, 1994 by the Royster Oil Company, Inc. of Shelby, North Carolina. No detectable concentrations of gasoline-range TPH were reported in soil samples collected from the UST excavations during closure activities. Information concerning the removal of the USTs and associated closure sampling at the site is contained in the October 27, 1994, Earth Management Systems, Inc. report titled, *"Environmental Assessment Report, Campbell Property, York County, South Carolina"* and the Royster Oil Company, Inc. report titled, *"Underground Storage Tank Removals, Campbell Property aka formerly Smith's Store"* last dated October 29, 19994.

1.2 Regional Geology/Hydrogeology

The site is located in the Charlotte Belt of the Piedmont Physiographic Province. As reported by Butler (1966), the Charlotte Belt includes medium- to high-grade metamorphic rocks and a complicated sequence of intrusive igneous rocks. The metamorphic rocks are mainly schist, gneiss, amphibolite and meta-gabbro. The igneous rocks range in composition from granite to gabbro. The older intrusive rocks are commonly foliated and conformable to regional structures; the younger rocks are massive and cross-cutting. Large intrusions of adamellite, granite, syenite and gabbro are among the most conspicuous of the younger series. Age determinations by radiometric methods generally indicate emplacement in the Paleozoic, and the younger intrusions are probably of late Paleozoic age.

The mantle that covers the underlying fractured bedrock in most places provides an intergranular medium through which recharge and discharge of water from the fractured rocks commonly occur, resulting in a composite two-media system which characterizes groundwater flow. The top of the system is the water table

surface, which is typically located in saprolite. The fractured bedrock generally grades downward into unfractured rock below a depth of approximately 300 feet. Thus, the base of the groundwater system is indistinct.

1.3 Receptor Survey

The Smith's Grocery site is located in a rural/residential area in York County (**Figure 1**). Potable water to the structure on-site is provided by a water supply well approximately 140 feet deep. A shallower water supply well (approximately 30 feet deep) that was affected by the release and is no longer in service is also located on-site. In addition to the two water supply wells located on-site, 26 other water supply wells were identified within a 1,000-foot radius of the site. Of these 26 wells, 23 were identified in The Pines, a single family residential subdivision located to the east of the site across Highway 49. The water supply wells identified in The Pines subdivision are located at distances ranging from approximately 220 feet to 950 feet from the subject site. The three remaining water supply wells were identified approximately 800 feet to 900 feet to the north of the subject site. None of the properties on which these water supply wells are located currently have access to municipal water.

Underground utility conduits present on-site and in the immediate vicinity include natural gas lines, fiber optic lines, telephone lines and electrical lines. The natural gas lines are located on-site and along the west side of Highway 49. Additional natural gas lines as well as telephone, electric and fiber optic lines are located along the east side of Highway 49 and extend east along Southern Pines Road into The Pines subdivision. The underground utilities are located at depths of approximately three to four feet. The utility conduits do not intersect known areas of soil contamination and are located above the seasonal high water table. A Site Map showing the locations of the utilities, the former UST area and pump island, the water supply wells on-site and on adjacent properties, and the approximate location of the former Smith's Store has been included as **Figure 2**. The Surveyed Site Map on which **Figure 2** was based has been included as **Appendix A**.

2.0 ASSESSMENT INFORMATION

2.1 Assessment Activities

Twelve soil borings (SB-1 through SB-12) were installed during RA activities between October 22 and November 19, 1999. The soil borings were advanced in the vicinity of the former USTs, product lines, pump island and background area to determine the extent of affected soil in the vadose zone. Soil samples were collected at five-foot intervals and field screened with an organic vapor analyzer (OVA). The soil sample that exhibited the highest OVA reading or the sample collected at the maximum depth above the seasonal high water table was submitted for laboratory analyses. Soil boring logs and field screening results have been included as **Appendix B**.

In order to determine the horizontal extent of groundwater contamination, 32 temporary groundwater-sampling points (S-1 through S-32) were installed between October 11 and November 4, 1999 to depths ranging from 30 to 44 feet using solid stem augers. Screening was performed on the groundwater samples for BTEX constituents and MTBE using either a portable or laboratory gas chromatograph (GC). The locations of the temporary sampling points along with BTEX constituent and MTBE concentrations are shown on **Figure 3**. The results of GC screening have been summarized in **Table 1**. Complete reports of GC screening have been included as **Appendix C**.

Based on the GC screening results, a total of 18 Type II monitoring wells (MW-2 through MW-19) were installed between November 11 and November 19, 1999 along the inferred perimeter of the plume in order to monitor plume migration and within the plume to evaluate contaminant trends. On November 23, 1999 one Type III monitoring well (TW-1) was completed to determine the vertical extent of the plume. The locations of the monitoring wells are shown on **Figure 2**. Well construction records for the monitoring wells installed during IGWA and RA activities have been included as **Appendix D**. All soil and purge water generated during RA activities was placed in 55-gallon drums and transported to a licensed facility for disposal. Certificates of Disposal have been included as **Appendix E**.

2.2 Site Geology/Hydrogeology

Based on information obtained during assessment activities conducted to date, the site is underlain at shallow depths by undifferentiated, reddish brown to tan silty clays grading to saprolitic silty sands. Thin veins of partially weathered quartz were encountered at depths of approximately 15 to 20 feet in several of the borings. The percentages of gravel, sand, silt and clay in a soil sample (SB-8) collected at a depth of eight to ten feet were 2%, 56%, 28% and 16%, respectively.

Depths to groundwater measured on December 1, 1999 in the Type II monitoring wells ranged from 22.76 to 43.51 feet. Water table elevations ranged from 54.76 to 63.44 feet relative to a temporary benchmark with an assumed elevation of 100.00 feet. Based on this data groundwater flow was toward the east. The horizontal hydraulic gradient ranged from less than 0.01 feet per foot beneath the site to approximately 0.04 feet per foot to the east approaching The Pines subdivision. A Water Table Surface Map based on the December 1999 data has been included as **Figure 4**. A summary of groundwater elevation data is presented in **Table 2**.

Slug tests were performed on monitoring wells MW-2, MW-5 and MW-10 during RA activities. Hydraulic conductivities, calculated using the Bouwer and Rice method, ranged from 7.89×10^{-5} to 1.98×10^{-4} feet per minute (0.11 to 0.29 feet per day). Seepage velocities, calculated using the equation $V = K (dh/dl)/n_e$, ranged from 0.004 to 0.012 feet per day (1.46 to 4.38 feet per year). A summary of the results of slug test analyses performed during RA activities is presented in **Table 3**. Calculations and raw data from the slug tests have been included as **Appendix F**. Please note that the seepage velocity calculated from the results of the slug test conducted on MW-5 was used in the fate and transport model in order to provide the most conservative estimate of contaminant movement.

2.3 Soil Quality

The soil samples collected during RA activities were submitted for laboratory analyses for BTEX constituents and naphthalene using Method 8260 with Method 5035 preparation, and for PAHs using Method 8270. Soil samples SB-8 and SB-12 were also analyzed for diesel-range TPH and TOC using Method 3550/8015M and SW846 Method 9060M, respectively. Concentrations of one or more BTEX constituents and/or naphthalene that exceeded the applicable RBSLs were reported in soil samples collected from SB-4, SB-5, SB-7, SB-9 and SB-10. The soil boring locations and individual BTEX constituent and naphthalene concentrations in soil samples collected during RA activities are shown on **Figure 5.** A summary of the results of laboratory analyses of soil samples is presented in **Table 4.** Complete reports of laboratory analyses of soil samples collected during RA activities have been included as **Appendix G.**

2.4 Groundwater Quality

2.4.1 Monitoring Wells

All of the monitoring wells were developed and sampled on December 1-2, 1999. Analyses were performed for BTEX constituents, MTBE, naphthalene and EDB using Method 8260, PAHs using Method 8270, and total lead using EPA Method 200.7. Analyses were also performed for natural attenuation parameters that included total iron using EPA Method 200.7, nitrate using Standard Method 4500, sulfate using EPA Method 375.2 and methane using EPA Method 3810M. Concentrations of one or more dissolved phase BTEX constituents, MTBE and/or naphthalene that exceeded the RBSLs were reported in monitoring wells MW-1, MW-2, MW-6 through MW-10, MW-12 and TW-1. In addition, concentrations of total lead that exceeded the RBSL were reported in MW-2, MW-5 through MW-7, MW-10, MW-11, MW-15, MW-18 and MW-19. Inferred isoconcentration contours for individual BTEX constituents, MTBE, naphthalene and EDB are shown on **Figures 6** through **12,** respectively. The inferred vertical extent of total organic COC in groundwater is shown on the cross-sections, **Figures 13** and **14.** Please note that, due to the lack of precise information regarding construction details, groundwater quality data from water supply wells has not been used in the preparation of these figures. A summary of groundwater analytical data from the monitoring wells is presented in **Table 6.** A summary of groundwater analyses for natural attenuation parameters is presented in **Table 7.** Groundwater sampling data sheets have been included as **Appendix H.** A complete report of laboratory analyses of groundwater samples collected from the monitoring wells in December 1999 is included as **Appendix I.**

2.4.2 Water Supply Wells

On October 15, 1999, during discussions with the owners of the Vickery property, Mrs. Vickery mentioned that the water to the residence provided by the water supply well on the property had an unusual odor and taste. Based on this information, and with the approval of the SCDHEC, CBM sampled the Vickery well on October 18, 1999. Laboratory analyses were performed for BTEX constituents, MTBE and

naphthalene using Method 8260. Detectable concentrations of benzene (64.6 µg/L), xylenes (39.82 µg/L) and naphthalene (5.41 µg/L) were reported in the groundwater sample. The concentration of benzene exceeded the RBSL. On October 26, 1999, after approval was received from the SCDHEC, a granular activated carbon (GAC) unit was placed on the Vickery well by Barker Filtration, Inc. Four other water supply wells (Barnette, Beasley, Strife and Wood) located in The Pines subdivision were sampled by SCDHEC personnel on October 21, 1999. Laboratory analyses were performed for volatile organics using Method 8260B. No detectable concentrations of requested method constituents were reported in these four water supply wells. The Hill and Foster water supply wells, also located in The Pines subdivision, were sampled by CBM personnel on November 5 and November 19, 1999, respectively. Laboratory analyses were performed for BTEX constituents, MTBE and naphthalene using Method 8260. ~~No detectable concentrations of requested method constituents were reported in the Foster well. Detectable concentrations of benzene (1.43 µg/L) and naphthalene (2.46 µg/L) were reported in the Hill well.~~ Neither of the concentrations exceeded the RBSLs. However, as a precaution and with the approval of the SCDHEC, a ~~GAC unit was installed~~ on the Hill well on November 16, 1999 by Barker Filtration, Inc.

In order to monitor the quality of the groundwater being used at the residences, the Vickery and Hill water supply wells have been sampled and laboratory analyses performed for BTEX constituents, MTBE and naphthalene on a weekly basis since the installation of the GAC units. After some initial difficulties with the GAC units, including replacement of the carbon on the Vickery well, and shock chlorination of the unit on the Hill well, no detectable concentrations of BTEX constituents, MTBE or naphthalene have been reported in the wells after December 14, 1999. Please note that the well which currently provides water to the Smith residence was sampled during IGWA activities in January 1999 and during RA activities in December 1999. No detectable concentrations of requested Method 8260 constituents have been reported in the Smith well to date.

The locations of the Smith, Vickery, Hill and Strife water supply wells are shown on **Figure 2.** A historical summary of the results of the laboratory analyses of groundwater samples collected from the water supply wells is presented in **Table 8.** A complete report of laboratory analyses of water supply well samples collected between October 18, 1999 and January 5, 2000 is included as **Appendix J.**

3.0 TIER I EVALUATION

3.1 Comparison with RBSLs

Concentrations of dissolved phase benzene, toluene, ethylbenzene, xylenes, MTBE, naphthalene, EDB and total lead that exceeded the RBSLs were reported in groundwater samples collected RA activities. In addition, concentrations of each of the BTEX constituents and naphthalene reported in one or more of the soil samples collected at the site exceeded the RBSLs.

3.2 Site Conceptual Exposure Model

The site currently operates as a convenience store. The site is approximately 1.53 acres in size and is located in a rural/residential area in York County, South Carolina. South Carolina Highway 49 borders the site to the east. To the east of Highway 49 is The Pines, a medium density, single family subdivision. Undeveloped agricultural property borders the site to the south and west. A residential structure occupied by the Smith family borders the site to the north. Undeveloped and wooded property is located to the north of the Smith residence. Please note that the former Smith's Store was previously located across Highway 49 to the east of the site. The facility was reportedly used as a petroleum retail facility and country store and was reportedly closed in 1977.

As referenced in **Section 2.2**, the soils underlying the site consist primarily of undifferentiated silty clays grading to saprolitic silty sands with common veins of partially weathered quartz. Based on data collected in December 1999, the average depth to groundwater was 34.13 feet. Groundwater flow at the site was toward the east at calculated seepage velocities ranging from 1.46 to 4.38 feet per year. The groundwater plume is located on-site in the vicinity of the former pump island and UST basin and extends to the north beneath and parallel to Highway 49 and to the vicinity of the former Smith's Store to the east.

The subject site and surrounding properties are served by water supply wells. A municipal water supply is not currently available to the area. Therefore, exposure routes currently exist for ingestion, dermal contact or volatile inhalation of groundwater affected by the release. Concentrations of COC that exceeded the RBSLs were reported in soil samples collected in the on-site source area. However, the soil samples were collected from depths greater than six feet. Therefore, no exposure routes currently appear to exist for ingestion, dermal contact or volatile inhalation unless the soil is disturbed. The USTs at the site have been removed and there are no known plans for any excavation. However, since concentrations of COC in soil in the unsaturated zone exceeded the RBSLs and groundwater has been affected by the release, it is apparent that COC are leaching to the water table.

4.0 TIER II RISK EVALUATION

4.1 Exposure Points/Pathways

A total of 28 private potable wells were identified within a 1,000-foot radius of the site. Since no municipal water supply is available in the area, each of these wells represents a potential exposure point to groundwater affected by the release. One of the two water supply wells located on-site is currently in use. Potable water to residences in The Pines subdivision, located hydraulically down-gradient from the source area, is provided by 23 water supply wells. Three other water supply wells were identified approximately 800 to 900 feet north and hydraulically cross-gradient from the source area. Three of the wells are known to have been or currently are affected by the release. The original Smith well was replaced by the current water supply well after hydrocarbon contamination was initially reported at the site. Petroleum hydrocarbon constituents were detected in the Vickery and Hill wells during RA activities. However, as discussed in **Section 2.4.2**,

GAC units have been placed on these wells. Recent analytical results of groundwater samples collected from the Vickery and Hill wells after the GAC units do not indicate that the residents are being exposed to selected COC in groundwater. The underground utility lines at the site and on the adjoining properties to the east are located above the seasonal high water table and do not intersect known areas of soil contamination. Therefore, these utility lines do not appear to represent exposure points. Based on this information, the primary exposure pathway appears to be the migration of aqueous phase COC in groundwater to water supply wells in the area.

4.2 Points of Compliance

No alternative to groundwater as a source of potable water is available in the area. Two water supply wells, one inactive and one currently in use, are located on-site. In addition, detectable concentrations of petroleum hydrocarbon constituents have been reported in two of the water supply wells located hydraulically down-gradient from the site. Based on this information, the point of compliance should be established immediately down-gradient from the on-site source area

4.3 Soil Leachability Model

The risk of contaminants in soil leaching to the groundwater table was calculated using the SCDHEC Leachability Model for Petroleum Contaminated Soil. The results indicated that the concentrations of benzene, toluene, ethylbenzene, xylenes and naphthalene in the source area were above the calculated SSTLs. Benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and dibenzo(a,h)anthracene were not detected in soil at the site. Therefore, leachability data for these compounds were not calculated by the model. The results of soil leachability modeling are summarized in **Table 5**. The In-Situ Soil Risk Evaluation data forms are presented as **Appendix K**.

4.4 Fate and Transport Model

A fate and transport model based on the Domenico equations and modified by CBM was run to determine the risk posed by the release to potential receptors. For modeling purposes, Receptor 1 is the Vickery water supply well located approximately 220 feet east from the center of the source area, Receptor 2 is a water supply well located approximately 600 feet from the center of the source area and Receptor 3 is the down-gradient limit of the 1,000-foot receptor search radius. With the exception of MTBE and EDB, the fate and transport model was performed for each COC that exceeded the RBSL. No K_{oc} values for MTBE or EDB are presented in the SCDHEC RBCA guidance documents to account for retardation. Therefore, although concentrations of MTBE and EDB also exceeded the RBSLs, the fate and transport simulation was not performed for these COC. A summary of the fate and transport model input parameters and assumptions is presented in **Table 9**.

The results of the model indicate that concentrations of benzene would exceed the RBSL for groundwater at Receptor 1 in 5 to 6 years, toluene in 16 to 17 years, ethylbenzene in 68 to 69 years, and naphthalene in 20 to 21 years. The concentration of xylenes would not exceed the RBSL at Receptor 1 during

the simulation period of 1,000 years. The results of the model indicate that concentrations of benzene would exceed the RBSL for groundwater at Receptor 2 in 35 to 36 years, toluene in 95 to 96 years and naphthalene in 125 to 126 years. The model also indicated that the concentrations of benzene would exceed the RBSL for groundwater at Receptor 3 in 84 to 85 years, toluene in 211 to 212 years and naphthalene in 278 to 279 years. The concentrations of ethylbenzene and xylenes would not exceed the RBSL at Receptor 2 or Receptor 3 during the simulation period of 1,000 years. A summary of the results of the fate and transport model is presented in **Table 10**. The equations and calculations used in the model have been included as **Appendix L**.

4.5 Groundwater SSTL Calculations

Based on the results of the fate and transport model, the SSTLs for groundwater for each COC, with the exception of MTBE and EDB, that exceeded the RBSLs and three down-gradient receptors were calculated. The calculations indicated that the concentrations of benzene, toluene, ethylbenzene and naphthalene in the source area exceed the SSTLs necessary to maintain concentrations below the RBSLs at Receptor 1. The calculations also indicated that the concentrations of benzene, toluene and naphthalene in the source area exceed the SSTLs necessary to maintain concentrations below the RBSLs at Receptor 2 and Receptor 3. However, it is important to note that the model does not account for any reduction in source concentrations by natural attenuation during the simulation period. It is probable that natural attenuation would play an important role in reduction of source concentrations. A summary of the SSTLs for groundwater is presented in **Table 11**. The input parameters and equations used to calculate the SSTLs have been included as **Appendix M**.

5.0 CONCLUSIONS AND RECOMMENDATIONS

- Concentrations of benzene, toluene, ethylbenzene, xylenes and/or naphthalene that exceeded the calculated SSTLs were reported in five of the soil samples collected at the site. Although the worst case soil sample was collected beneath the former UST basin, it appears that releases also occurred from the former pump island and along the product lines. Because groundwater has been affected by the release, it is apparent that contaminated soil extends to the water table. Due to the depth to groundwater beneath the source area (approximately 30 feet) the affected soil represents a significant secondary source of groundwater contamination and remediation should be required.
- Concentrations of dissolved phase benzene, toluene, ethylbenzene, xylenes, MTBE, naphthalene and EDB that exceeded the RBSLs were reported in groundwater samples collected from Type II monitoring wells at the site and on adjacent properties. Based on the concentrations of benzene and naphthalene reported in MW-9, the cross-gradient extent of the groundwater plume to the north has not been adequately defined. Therefore, one additional Type II monitoring well should be installed to the north of MW-9 along Highway 49.

- Concentrations of lead that exceeded the RBSL were reported in groundwater samples collected from monitoring wells at the site and on adjacent properties. However, the concentrations of lead do not clearly correlate with levels of organic hydrocarbon constituents. Therefore, the extent to which lead is present as a result of the release or occurs at background levels is not clear at this time.
- Concentrations of each of the BTEX constituents and naphthalene that exceeded the RBSLs were reported in the groundwater sample collected from the Type III monitoring well (TW-1). Therefore, the vertical extent of groundwater contamination has not been adequately defined. However, prior to the installation of an additional Type III monitoring well, TW-1 should be resampled to determine if COC levels can be significantly reduced after extensive redevelopment.
- There is no alternative to groundwater as the source of potable water currently available in the area. A total of 28 water supply wells, including two wells located on-site, were identified within a 1,000-foot radius of the site. One of the water supply wells on-site has been affected by the release and is not currently in use. Based on available data, the well that provides water to the residence on-site has not been affected by the release. Two of the 23 water supply wells identified in The Pines subdivision, located hydraulically down-gradient from the on-site source area, have been affected by the release. GAC units have been installed on these wells. In addition, the results of fate and transport modeling indicate that receptors located down-gradient and within a 1,000-foot radius of the site are at risk from the release. Based on local hydrogeologic conditions, these receptors include many of the other 21 water supply wells identified in The Pines subdivision.
- Based on available data, the inferred configuration of the groundwater contaminant plume is not consistent with either the direction of groundwater flow or the surficial topography at the site. The plume extends from the on-site source area, and from the vicinity of MW-10 located adjacent to the former Smith's Store, along an elongated axis oriented north/south, parallel to Highway 49. Data obtained during RA activities indicates that the direction of groundwater flow is relatively uniform to the east, toward The Pines subdivision. The presence of hydrocarbon constituents in the Hill and Vickery wells indicates that a hydraulic connection exists between these wells and the surficial aquifer. In addition, groundwater quality data obtained from both temporary screening points and water supply wells indicates that the plume extends to the vicinity of the Hill and Vickery residences. This extent is not supported by groundwater quality data from the monitoring wells. Development of The Pines subdivision was completed within the last five years. It is possible that relatively recent withdrawals of groundwater from the water supply wells in the subdivision is inducing movement of the contaminant plume horizontally toward the east. In addition, it is possible that the withdrawal is inducing a vertical hydraulic gradient, causing the contaminant plume to move beneath some monitoring wells. Please note that the extent to which the withdrawal from water supply wells in the area is influencing the movement of the contaminant plume is conjectural. Additional information, including specific construction details of the water supply wells and

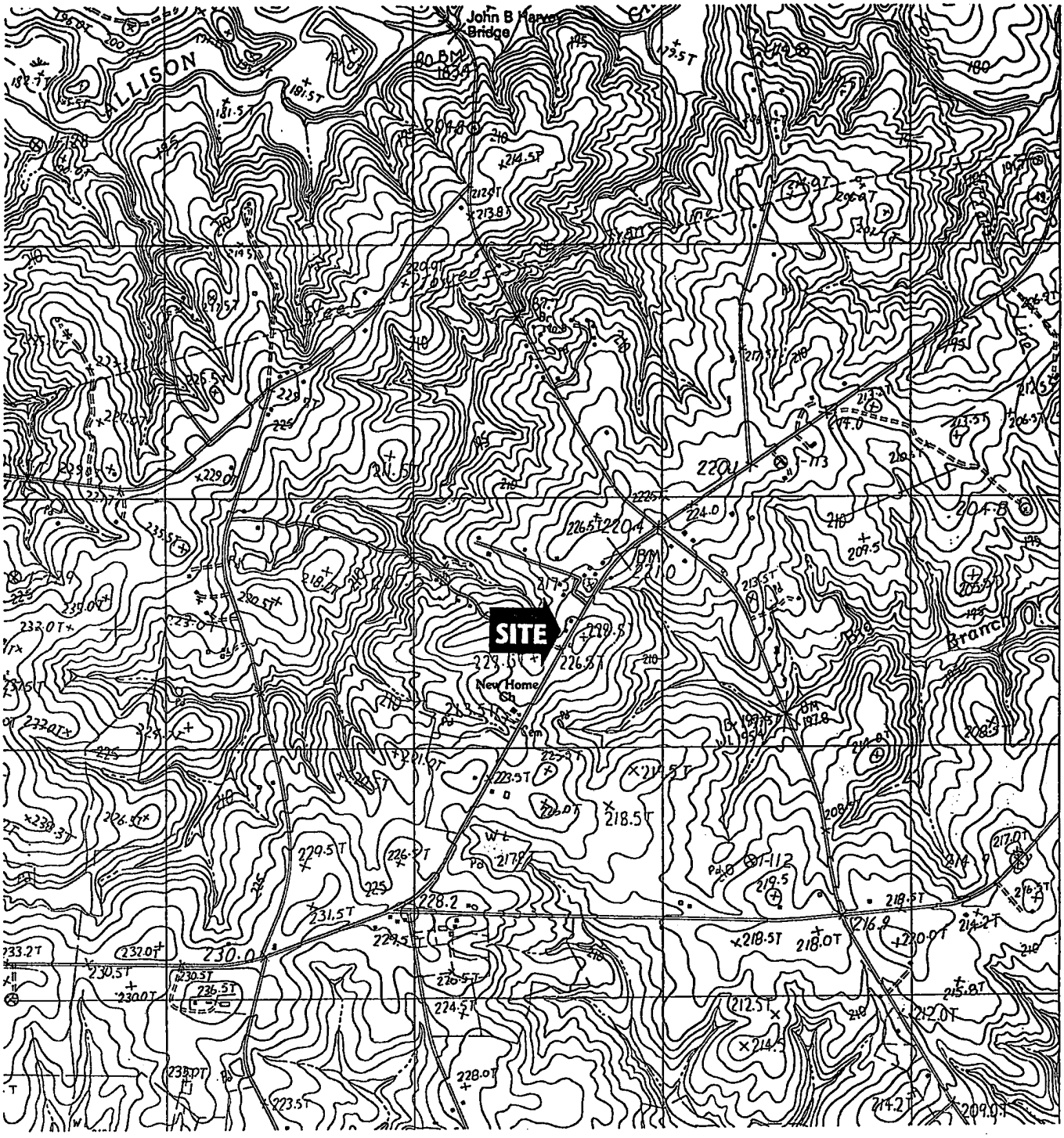
more complete potentiometric data during planned periods of withdrawal would be necessary to support this conjecture, and was beyond the scope of work for this RA.

- Due to the presence of numerous private water supply wells in the area, and the absence of an alternative water source, active remediation of groundwater contaminants will be required. Groundwater remediation should be initiated as rapidly as possible to reduce the risk from the release to additional water supply wells.
- Based on this information, the GAC units should remain in service on the Hill and Vickery wells until an alternative water source is made available to the area or until groundwater contaminants are reduced to acceptable levels. Post treatment water samples should be collected on a monthly basis in order to monitor groundwater quality until a carbon breakthrough time based on contaminant concentrations and water consumption can be established. A more infrequent monitoring program should also be established for those water supply wells considered to be at greatest risk from the release.
- The water supply well on-site that is not currently in use should be properly abandoned to ensure that it does not become an exposure point in the future.

6.0 LIMITATIONS

This report has been prepared for the exclusive use of Smith's Grocery for specific application to the referenced site in York County, South Carolina. The assessment was conducted based on the scope of work and level of effort desired by the client and with resources adequate only for that scope of work. Our findings have been developed in accordance with generally accepted standards of geology and hydrogeology practices in the State of South Carolina, available information, and our professional judgment. No other warranty is expressed or implied.

The data that is presented in this report are indicative of conditions that existed at the precise locations sampled and at the time the samples were collected. Additionally, the data obtained from samples would be interpreted as being meaningful with respect to parameters indicated in the laboratory report. No additional information can logically be inferred from this data.



CLOVER, SC QUADRANGLE

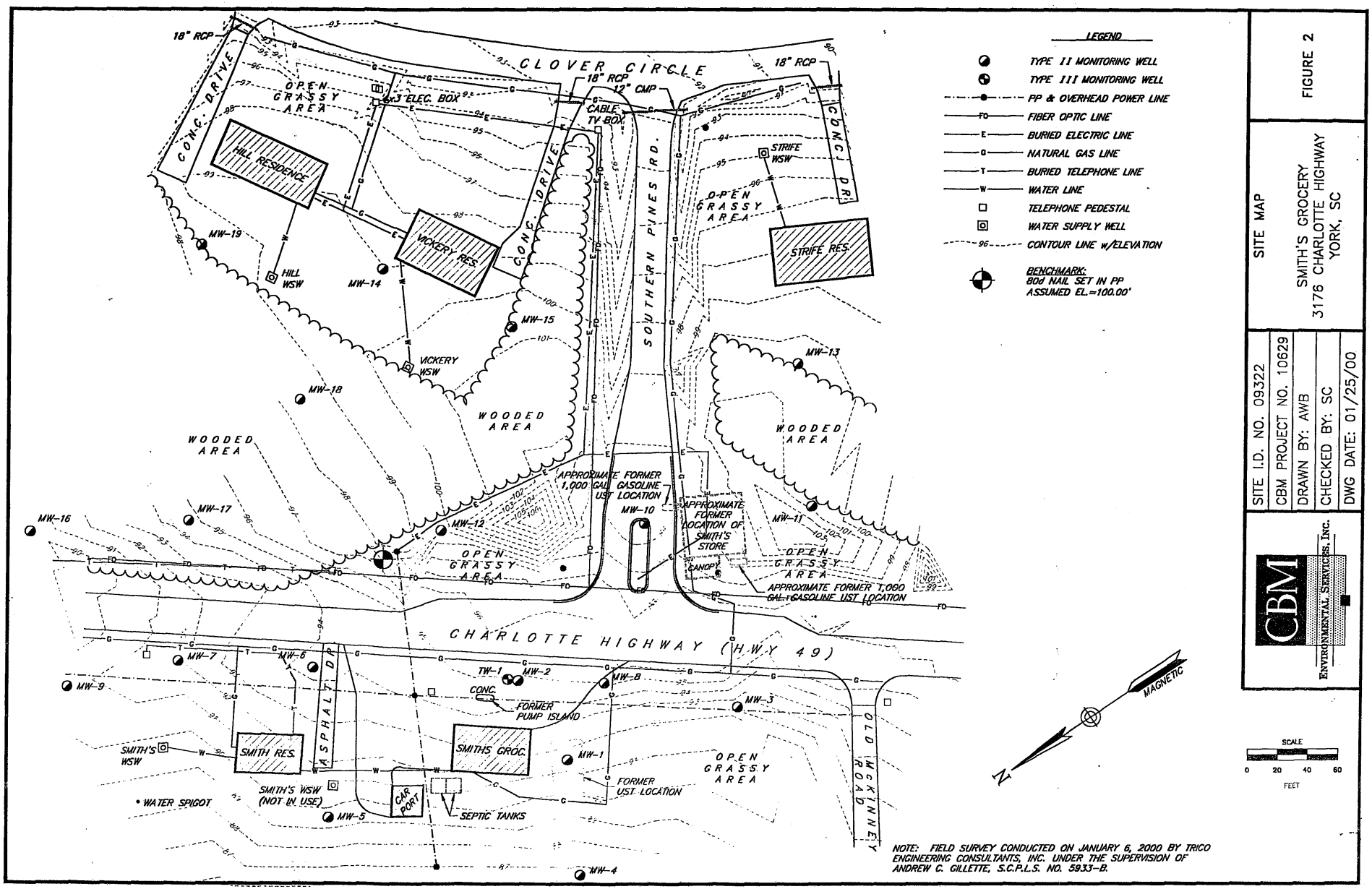
CBM ENVIRONMENTAL SERVICES, INC.

LATITUDE: 35° 02' 30" N	SMITH'S GROCERY 3176 CHARLOTTE HIGHWAY YORK, SC
LONGITUDE: 81° 08' 48" W	
DRAWN BY: AWB	
CHECKED BY: WSB	
DATE: 01/10/00	SITE I.D. NO. 09322

FIGURE 1

7.5 MINUTE SERIES USGS TOPOGRAPHIC MAP

CBM PROJECT NO. 10629



LEGEND

- TYPE II MONITORING WELL
- TYPE III MONITORING WELL
- PP & OVERHEAD POWER LINE
- FO — FIBER OPTIC LINE
- E — BURIED ELECTRIC LINE
- G — NATURAL GAS LINE
- T — BURIED TELEPHONE LINE
- W — WATER LINE
- TELEPHONE PEDESTAL
- WATER SUPPLY WELL
- 96 — CONTOUR LINE w/ELEVATION

BENCHMARK:
80d NAIL SET IN PP
ASSUMED EL.=100.00'

NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

FIGURE 2

SITE MAP

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM ENVIRONMENTAL SERVICES, INC.

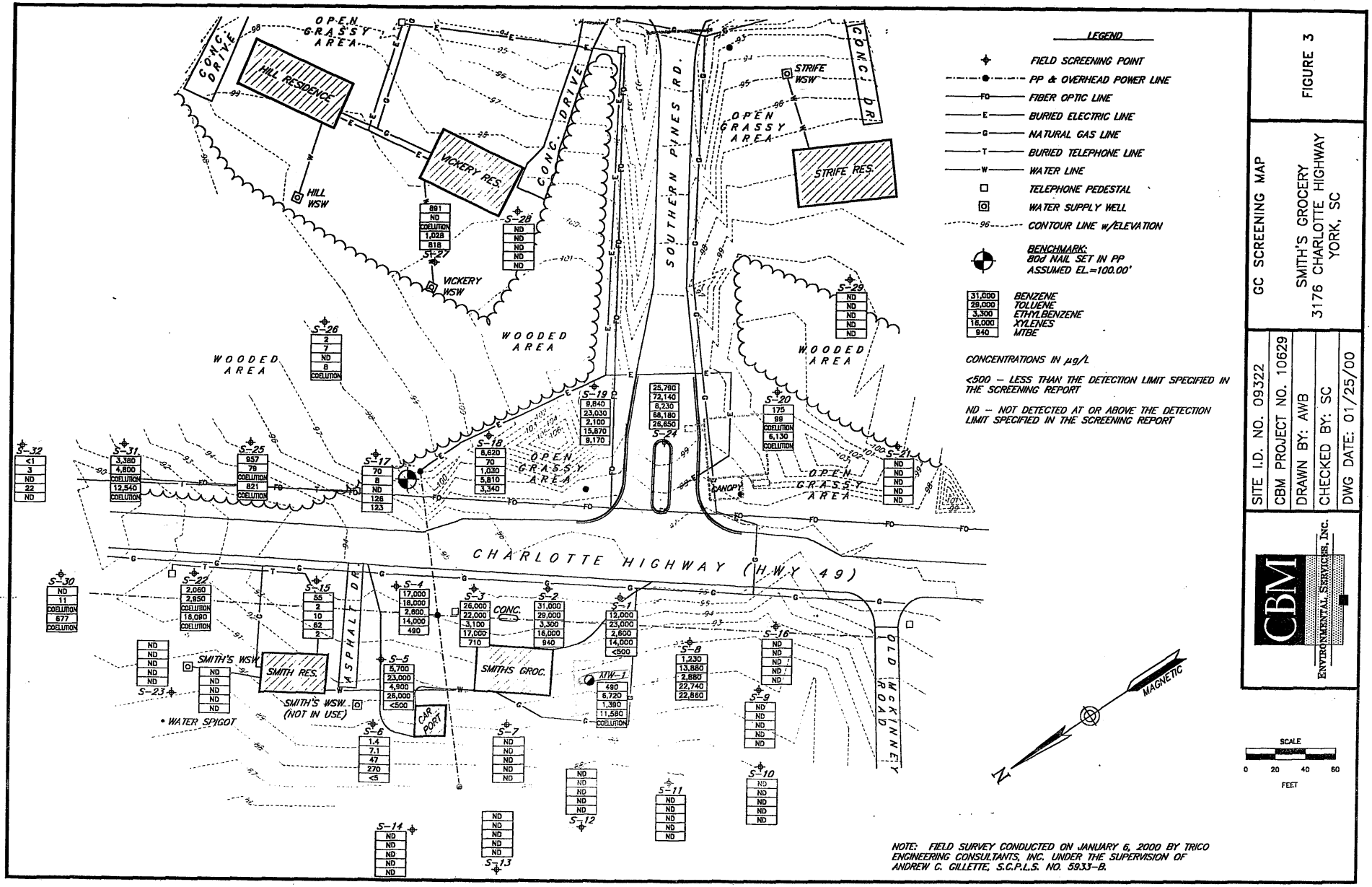


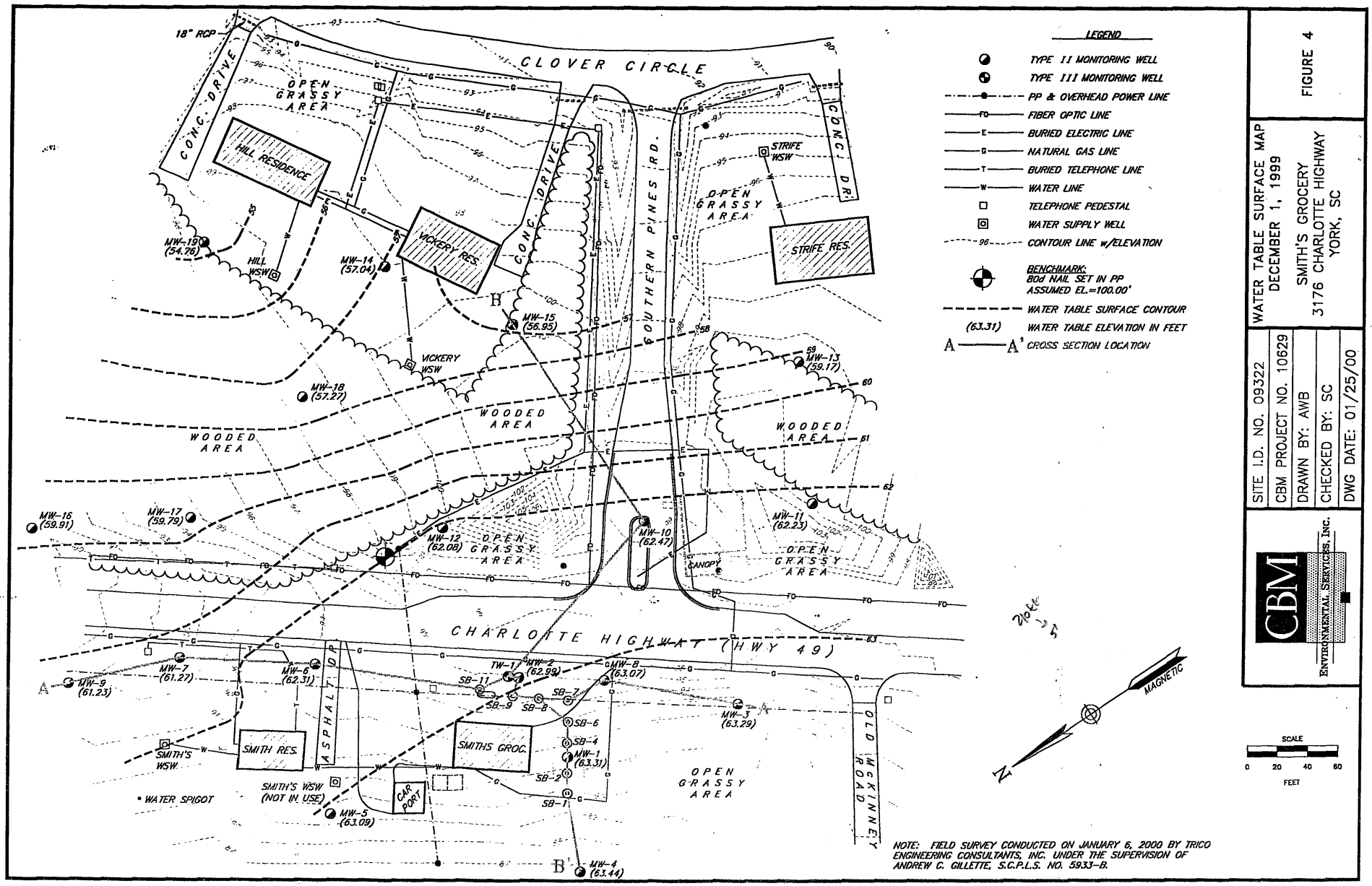
FIGURE 3

GC SCREENING MAP

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM
ENVIRONMENTAL SERVICES, INC.



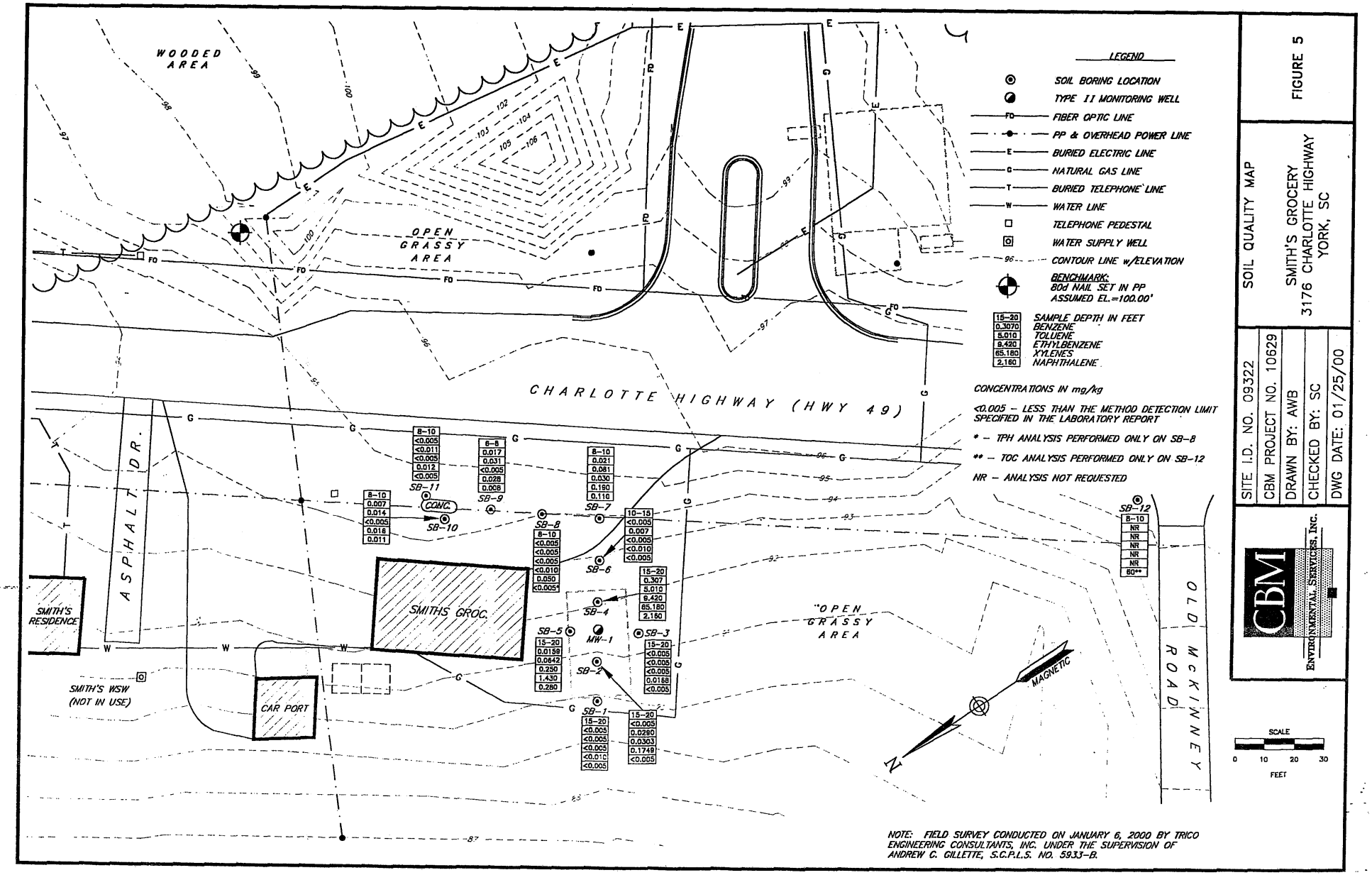
NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

FIGURE 4

WATER TABLE SURFACE MAP
DECEMBER 1, 1999
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM
ENVIRONMENTAL SERVICES, INC.



NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

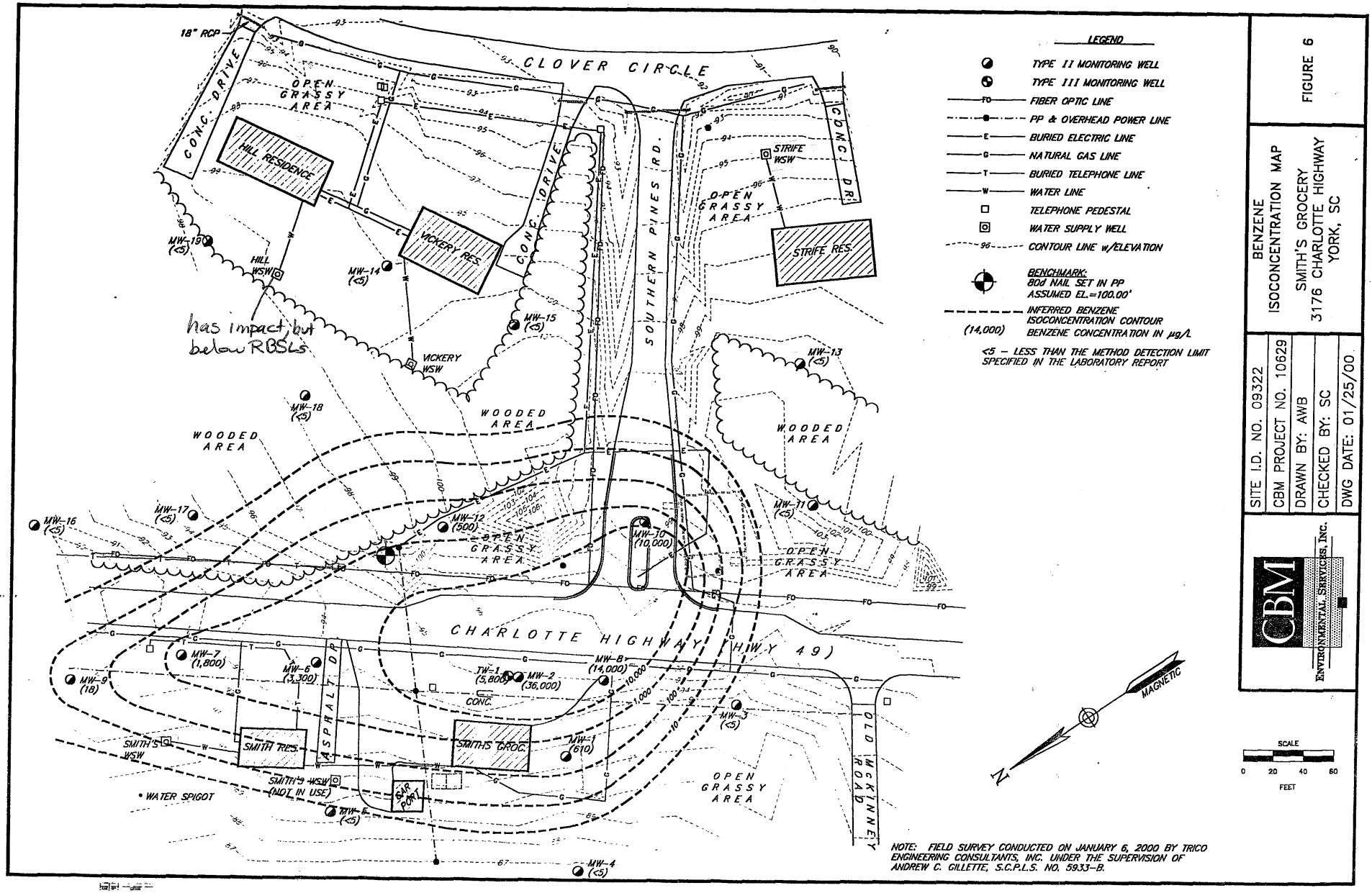
FIGURE 5

SOIL QUALITY MAP

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM ENVIRONMENTAL SERVICES, INC.



LEGEND

- TYPE II MONITORING WELL
- TYPE III MONITORING WELL
- FO — FIBER OPTIC LINE
- PP & OVERHEAD POWER LINE
- E — BURIED ELECTRIC LINE
- G — NATURAL GAS LINE
- T — BURIED TELEPHONE LINE
- W — WATER LINE
- TELEPHONE PEDESTAL
- WATER SUPPLY WELL
- 96 — CONTOUR LINE w/ELEVATION
- BENCHMARK: 80d NAIL SET IN PP ASSUMED EL.=100.00'
- INFERRED BENZENE ISOCONCENTRATION CONTOUR
- (14,000) BENZENE CONCENTRATION IN µg/L

<5 – LESS THAN THE METHOD DETECTION LIMIT SPECIFIED IN THE LABORATORY REPORT

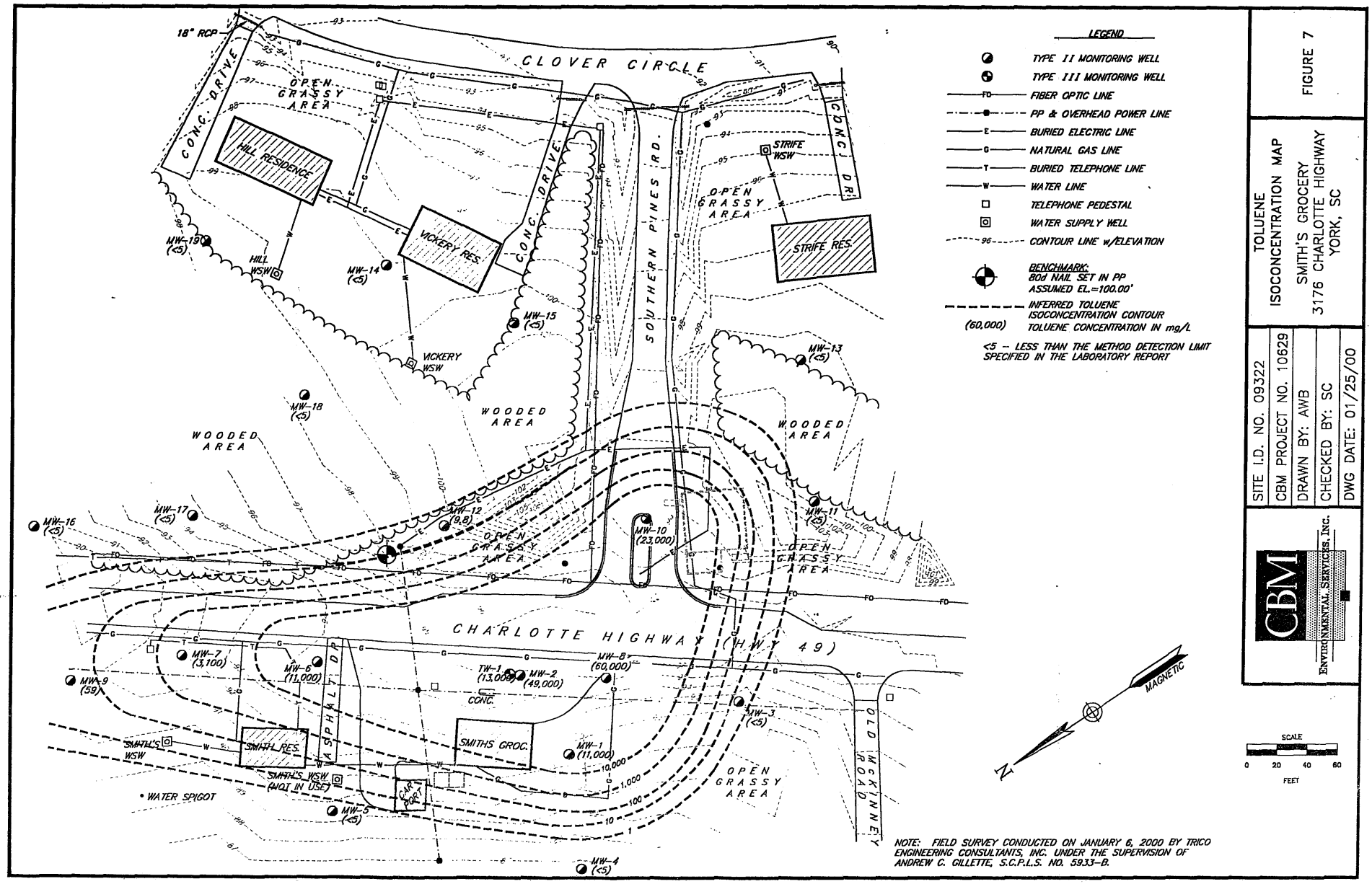
NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

FIGURE 6

BENZENE ISOCONCENTRATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM ENVIRONMENTAL SERVICES, INC.



LEGEND

- TYPE II MONITORING WELL
- TYPE III MONITORING WELL
- FO — FIBER OPTIC LINE
- PP & OVERHEAD POWER LINE
- E — BURIED ELECTRIC LINE
- G — NATURAL GAS LINE
- T — BURIED TELEPHONE LINE
- W — WATER LINE
- TELEPHONE PEDESTAL
- WATER SUPPLY WELL
- 96 — CONTOUR LINE w/ELEVATION
- BENCHMARK: 80d NAIL SET IN PP ASSUMED EL.=100.00'
- INFERRED TOLUENE ISOCONCENTRATION CONTOUR
- (60,000) TOLUENE CONCENTRATION IN mg/L

<5 – LESS THAN THE METHOD DETECTION LIMIT SPECIFIED IN THE LABORATORY REPORT

NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

FIGURE 7

TOLUENE ISOCONCENTRATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM ENVIRONMENTAL SERVICES, INC.

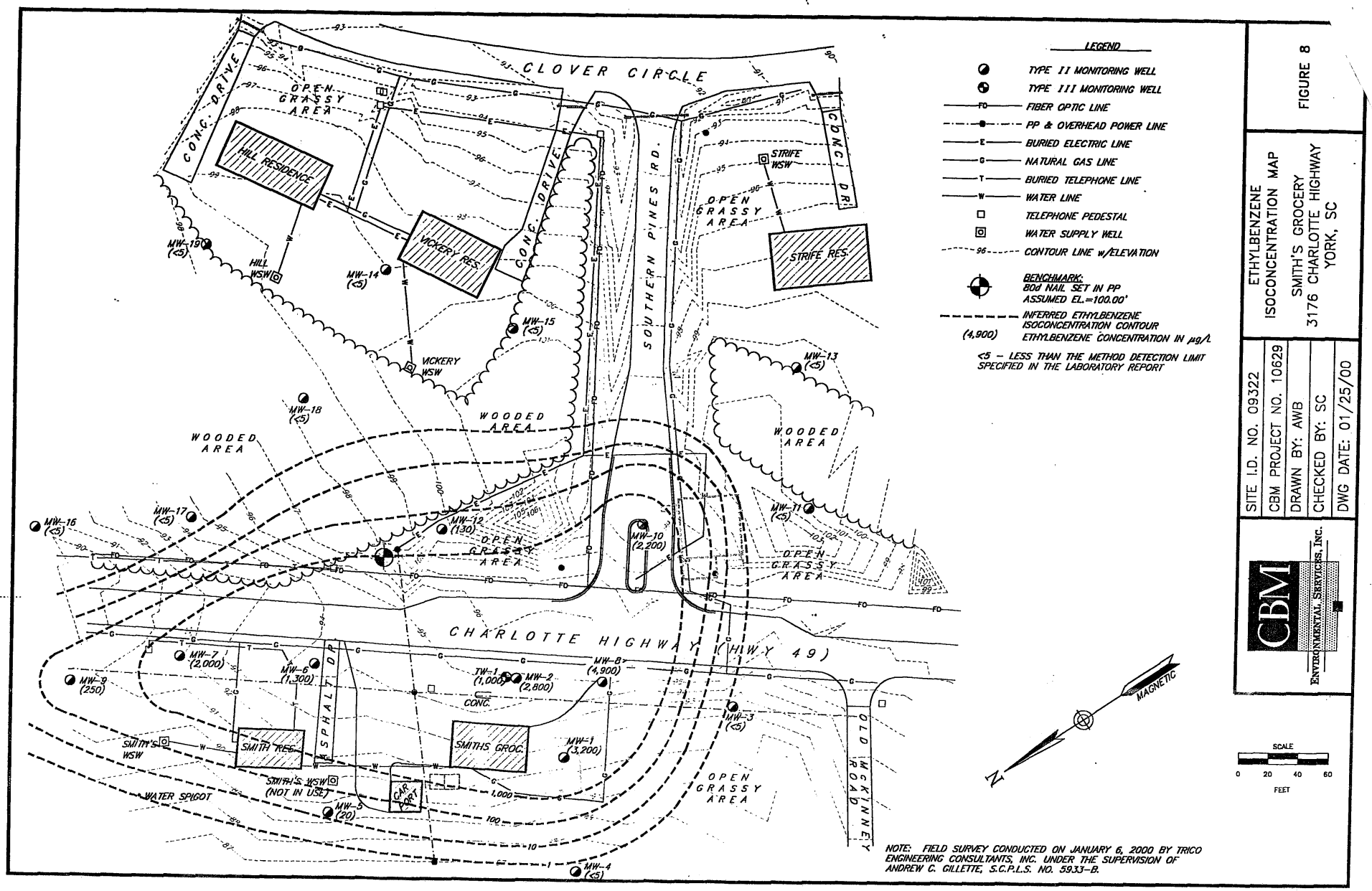


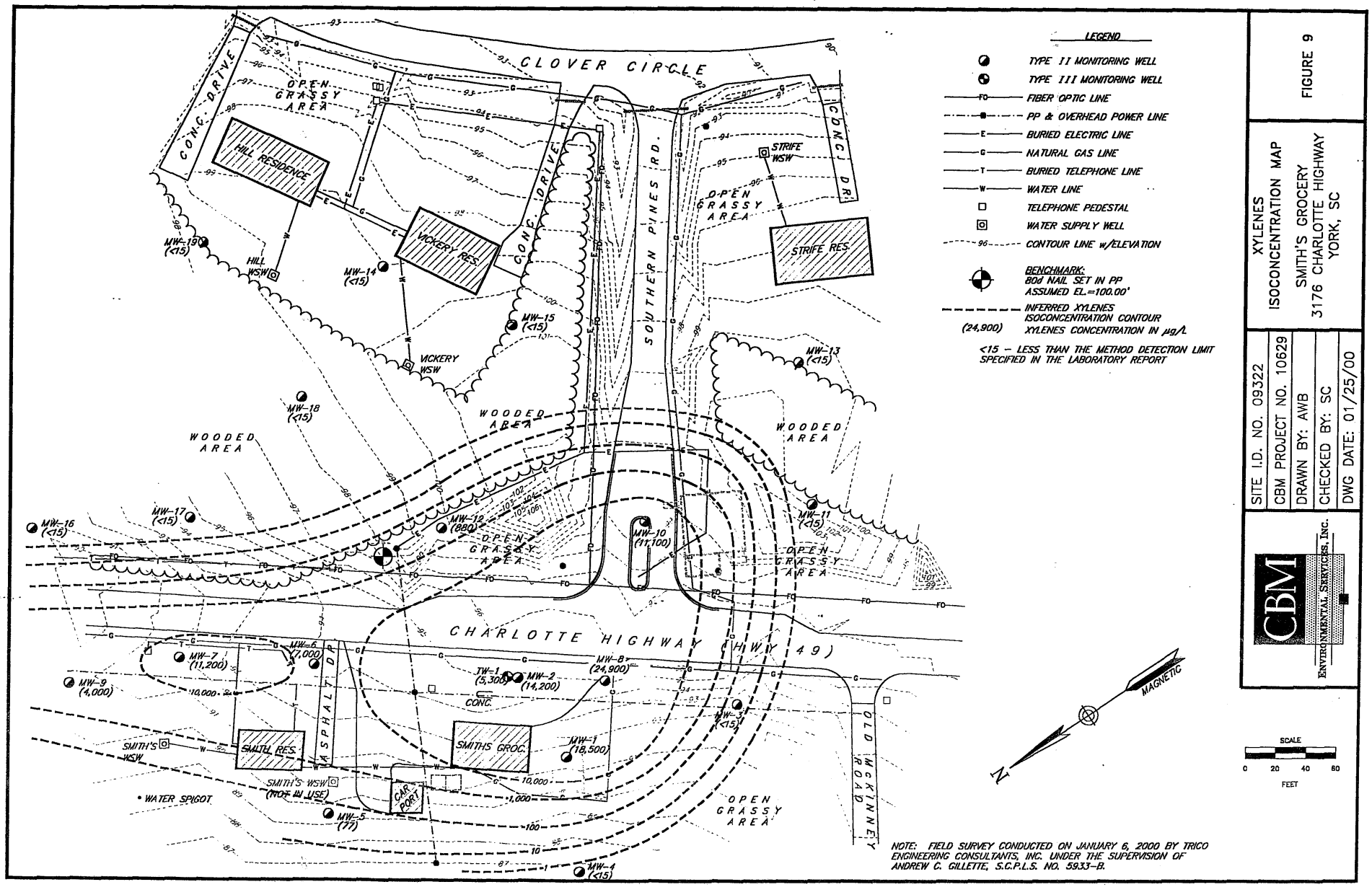
FIGURE 8

ETHYLBENZENE
ISOCONCENTRATION MAP

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM
ENVIRONMENTAL SERVICES, Inc.



LEGEND

- TYPE II MONITORING WELL
- TYPE III MONITORING WELL
- FO — FIBER OPTIC LINE
- PP & OVERHEAD POWER LINE
- E — BURIED ELECTRIC LINE
- G — NATURAL GAS LINE
- T — BURIED TELEPHONE LINE
- W — WATER LINE
- TELEPHONE PEDESTAL
- WATER SUPPLY WELL
- 96 — CONTOUR LINE w/ELEVATION
- BENCHMARK: 80d NAIL SET IN PP ASSUMED EL.=100.00'
- INFERRED XYLENES ISOCONCENTRATION CONTOUR
- (24,900) XYLENES CONCENTRATION IN µg/L

<15 – LESS THAN THE METHOD DETECTION LIMIT SPECIFIED IN THE LABORATORY REPORT

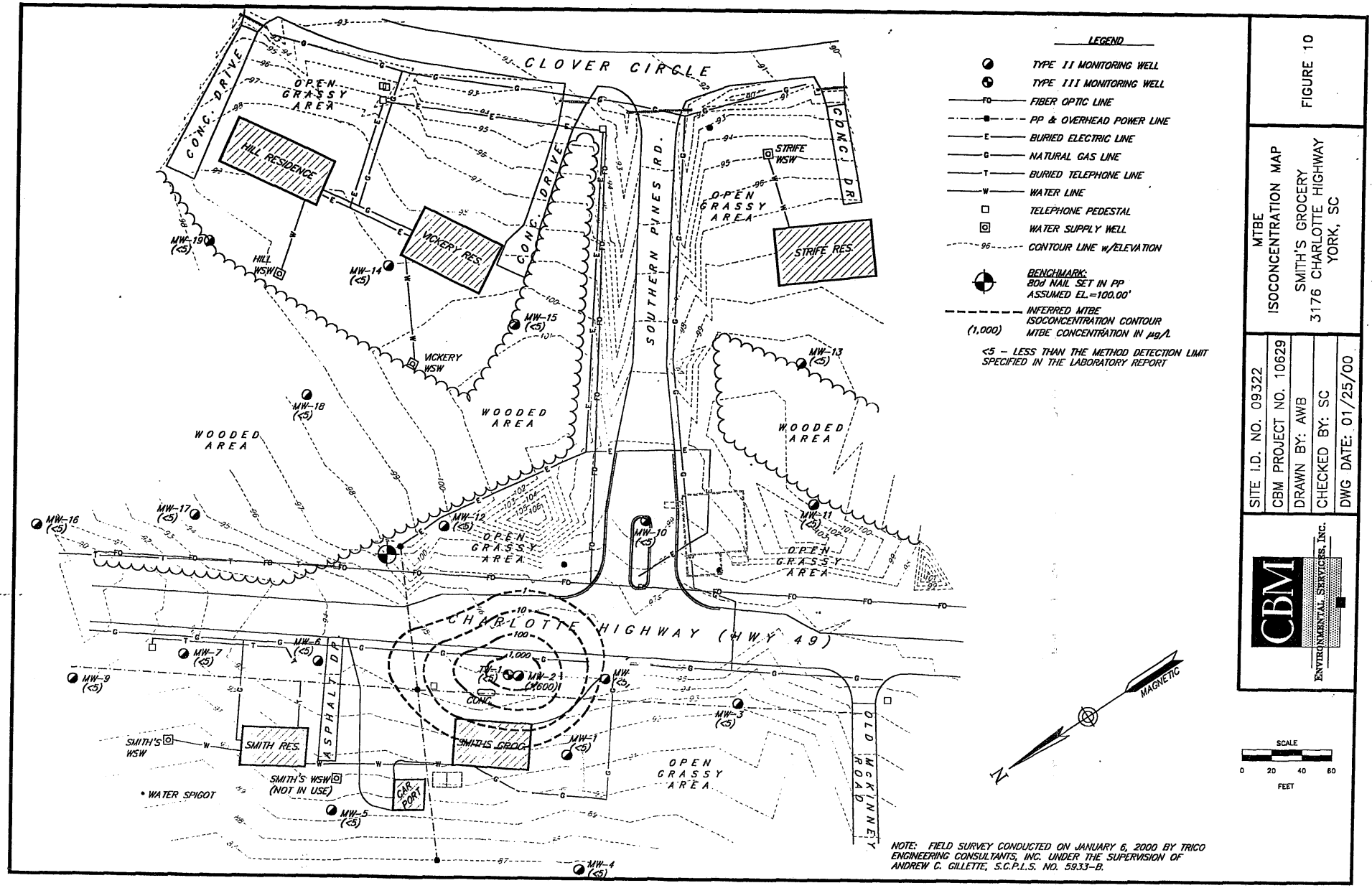
NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

FIGURE 9

XYLENES
ISOCONCENTRATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM
ENVIRONMENTAL SERVICES, INC.



LEGEND

- TYPE II MONITORING WELL
- TYPE III MONITORING WELL
- FO — FIBER OPTIC LINE
- PP & OVERHEAD POWER LINE
- E — BURIED ELECTRIC LINE
- G — NATURAL GAS LINE
- T — BURIED TELEPHONE LINE
- W — WATER LINE
- TELEPHONE PEDESTAL
- WATER SUPPLY WELL
- 96 — CONTOUR LINE w/ELEVATION
- BENCHMARK: 80d NAIL SET IN PP ASSUMED EL.=100.00'
- INFERRED MTBE ISOCONCENTRATION CONTOUR
- (1,000) MTBE CONCENTRATION IN µg/L

<5 – LESS THAN THE METHOD DETECTION LIMIT SPECIFIED IN THE LABORATORY REPORT

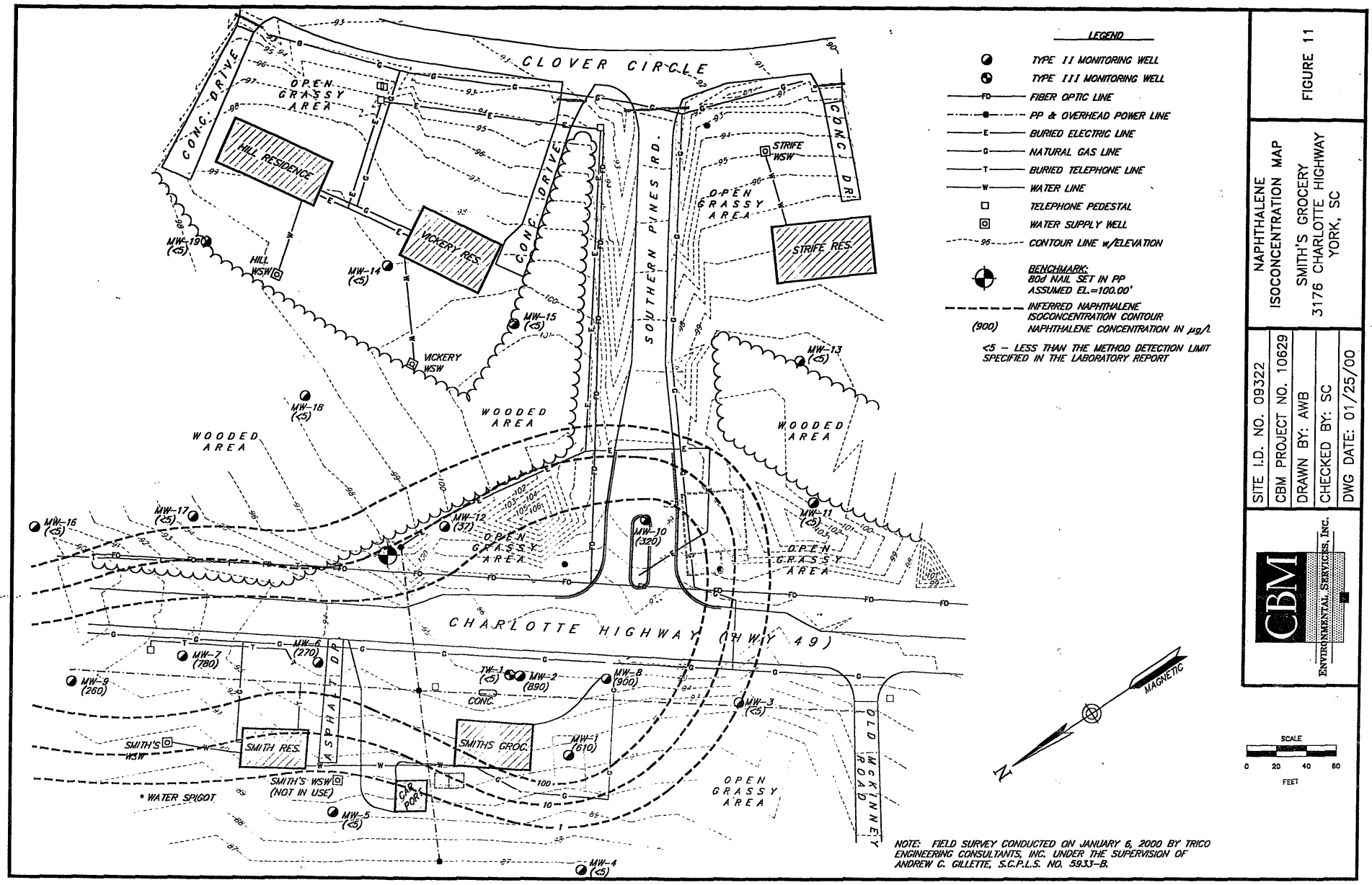
NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

FIGURE 10

MTBE ISOCONCENTRATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM ENVIRONMENTAL SERVICES, INC.



LEGEND

- TYPE II MONITORING WELL
- TYPE III MONITORING WELL
- FO — FIBER OPTIC LINE
- PP & OVERHEAD POWER LINE
- E — BURIED ELECTRIC LINE
- G — NATURAL GAS LINE
- T — BURIED TELEPHONE LINE
- W — WATER LINE
- TELEPHONE PEDESTAL
- WATER SUPPLY WELL
- 96 — CONTOUR LINE w/ELEVATION
- BENCHMARK: 80d NAIL SET IN PP ASSUMED EL.=100.00'
- INFERRED NAPHTHALENE ISOCONCENTRATION CONTOUR
- (900) NAPHTHALENE CONCENTRATION IN µg/L

<5 – LESS THAN THE METHOD DETECTION LIMIT SPECIFIED IN THE LABORATORY REPORT

NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.

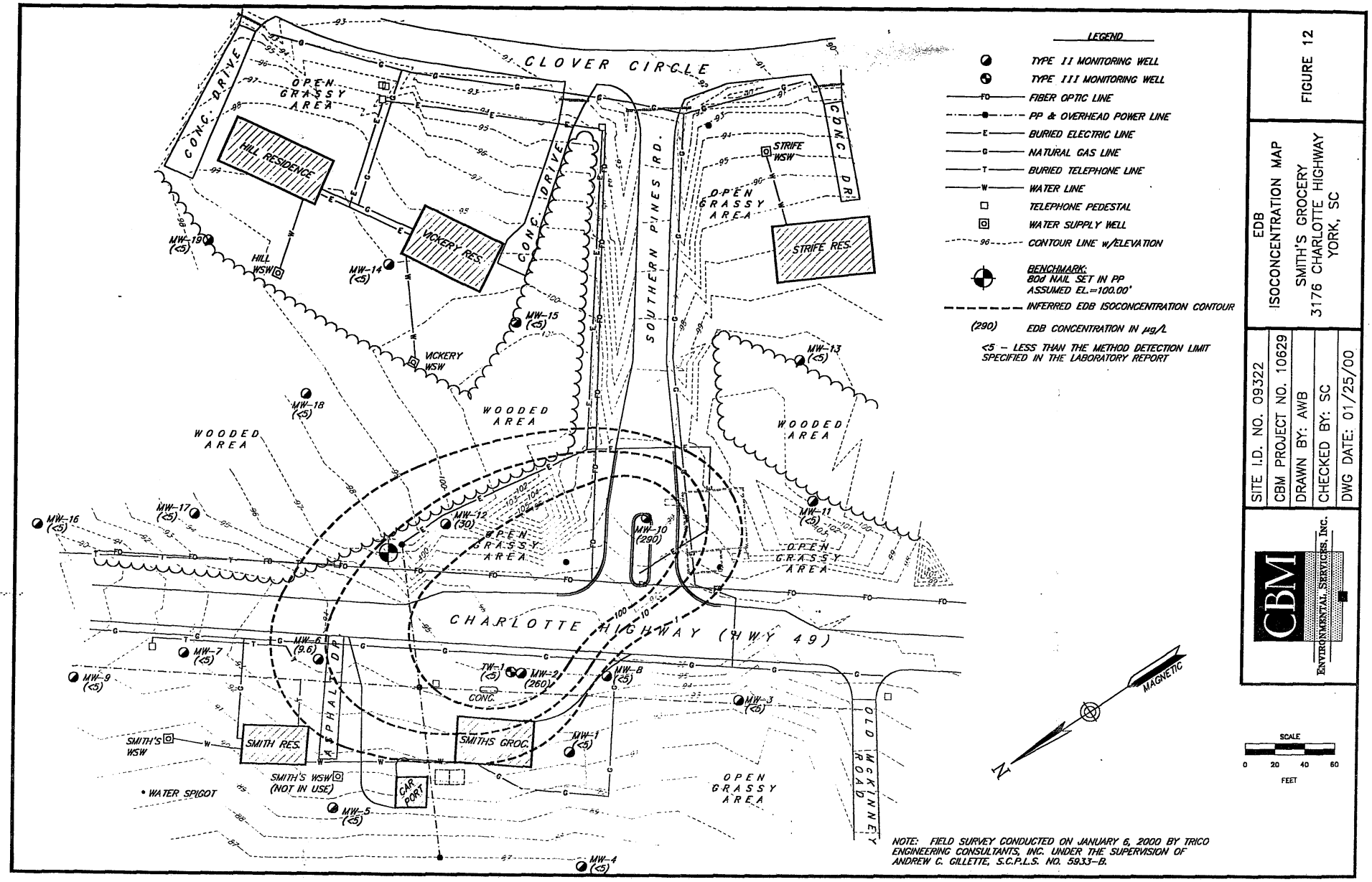
FIGURE 11

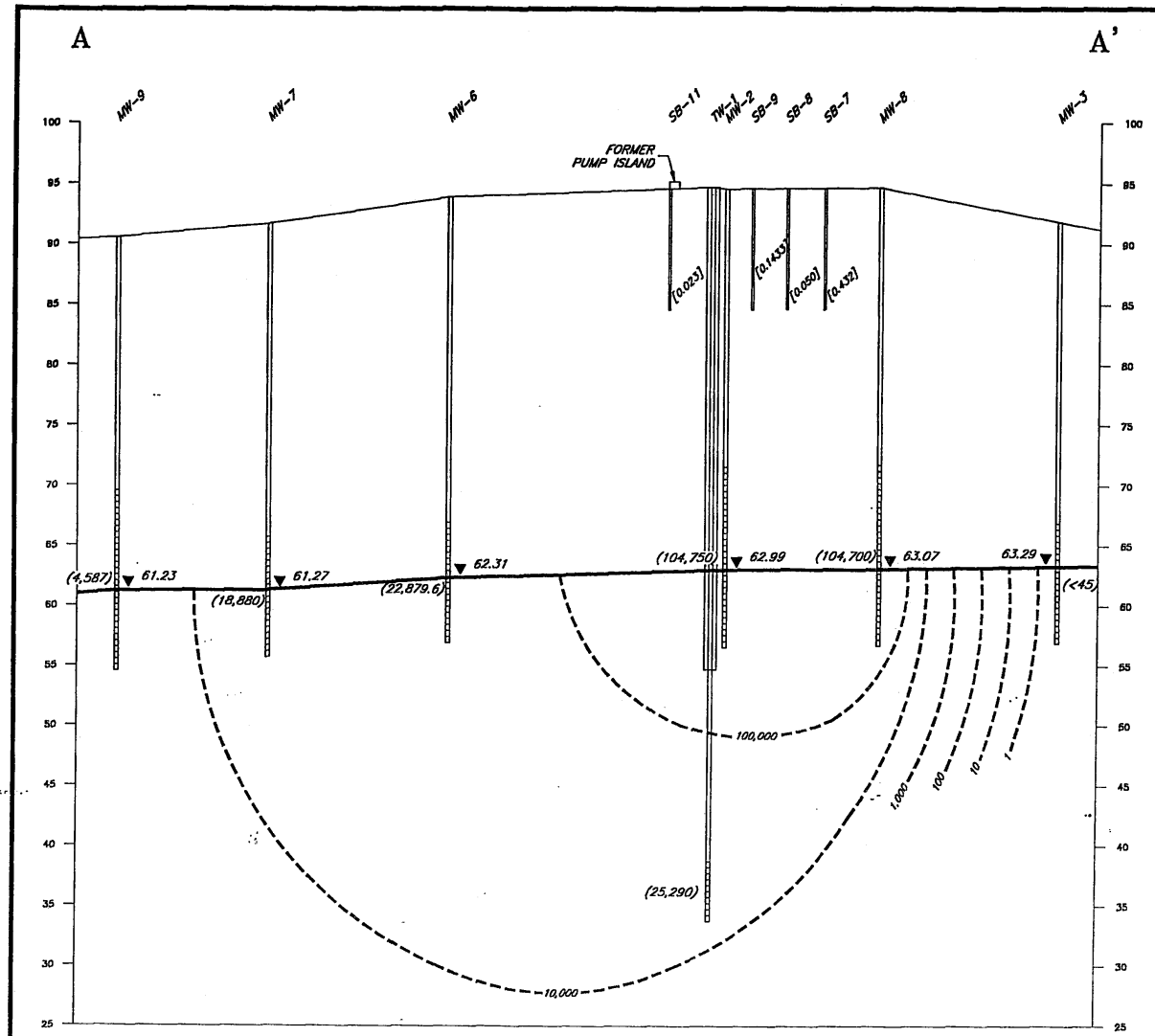
NAPHTHALENE ISOCONCENTRATION MAP

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM
ENVIRONMENTAL SERVICES, INC.


CLOVER CIRCLE
CONC. DRIVE
OPEN GRASSY AREA
HILL RESIDENCE
VICKERY RES.
CONC. DRIVE
SOUTHERN PINES RD.
STRIFE WSW
CONC. DR.
OPEN GRASSY AREA
STRIFE RES.
MW-19 (<5)
HILL WSW
MW-14 (<5)
MW-15 (<5)
VICKERY WSW
MW-13 (<5)
MW-18 (<5)
WOODED AREA
WOODED AREA
WOODED AREA
MW-16 (<5)
MW-17 (25)
MW-12 (30)
MW-10 (290)
MW-11 (25)
OPEN GRASSY AREA
OPEN GRASSY AREA
CHARLOTTE HIGHWAY (HWY 49)
MW-6 (9.6)
MW-7 (<5)
MW-9 (<5)
TW-1 (<5)
MW-2 (260)
MW-8 (<5)
MW-3 (<5)
CONC.
ASPHALT DR.
SMITH RES.
SMITHS GROC.
MW-1 (<5)
OLD McKINNEY ROAD
SMITH'S WSW
SMITH'S WSW (NOT IN USE)
CAR PORT
• WATER SPIGOT
MW-5 (<5)
OPEN GRASSY AREA
MW-4 (<5)
LEGEND
TYPE II MONITORING WELL
TYPE III MONITORING WELL
FIBER OPTIC LINE
PP & OVERHEAD POWER LINE
BURIED ELECTRIC LINE
NATURAL GAS LINE
BURIED TELEPHONE LINE
WATER LINE
TELEPHONE PEDESTAL
WATER SUPPLY WELL
CONTOUR LINE w/ELEVATION
BENCHMARK:
80d NAIL SET IN PP
ASSUMED EL.=100.00'
INFERRED EDB ISOCONCENTRATION CONTOUR
(290) EDB CONCENTRATION IN µg/L
<5 – LESS THAN THE METHOD DETECTION LIMIT SPECIFIED IN THE LABORATORY REPORT
MAGNETIC
N
SCALE
0 20 40 60
FEET
NOTE: FIELD SURVEY CONDUCTED ON JANUARY 6, 2000 BY TRICO ENGINEERING CONSULTANTS, INC. UNDER THE SUPERVISION OF ANDREW C. GILLETTE, S.C.P.L.S. NO. 5933-B.
FIGURE 12
EDB ISOCONCENTRATION MAP
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC
SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00
CBM
ENVIRONMENTAL SERVICES, INC.



LITHOLOGY: UNDIFFERENTIATED SILTY CLAYS GRADING TO SAPROLITIC SILTY SANDS WITH COMMON THIN VEINS OF PARTIALLY WEATHERED QUARTZ

VERTICAL SCALE: 1" = 10'
0 2 4 6 8 10

HORIZONTAL SCALE: 1" = 60'
0 10 20 30 40 50 60

LEGEND

- INFERRED TOTAL ORGANIC GROUNDWATER COC ISOCONCENTRATION CONTOUR
- (104,750) TOTAL ORGANIC COC CONCENTRATION IN GROUNDWATER
- [0.432] TOTAL ORGANIC COC CONCENTRATION IN SOIL
- WATER TABLE SURFACE
- ▼ 62.99 WATER TABLE ELEVATION IN FEET
- SOIL SAMPLE

NOTES:
TOTAL ORGANIC COC IN GROUNDWATER INCLUDES BTEX CONSTITUENTS, MTBE, NAPHTHALENE & EDB; RESULTS REPORTED IN µg/L.
TOTAL ORGANIC COC IN SOIL INCLUDES BTEX CONSTITUENTS & NAPHTHALENE; RESULTS REPORTED IN mg/kg.

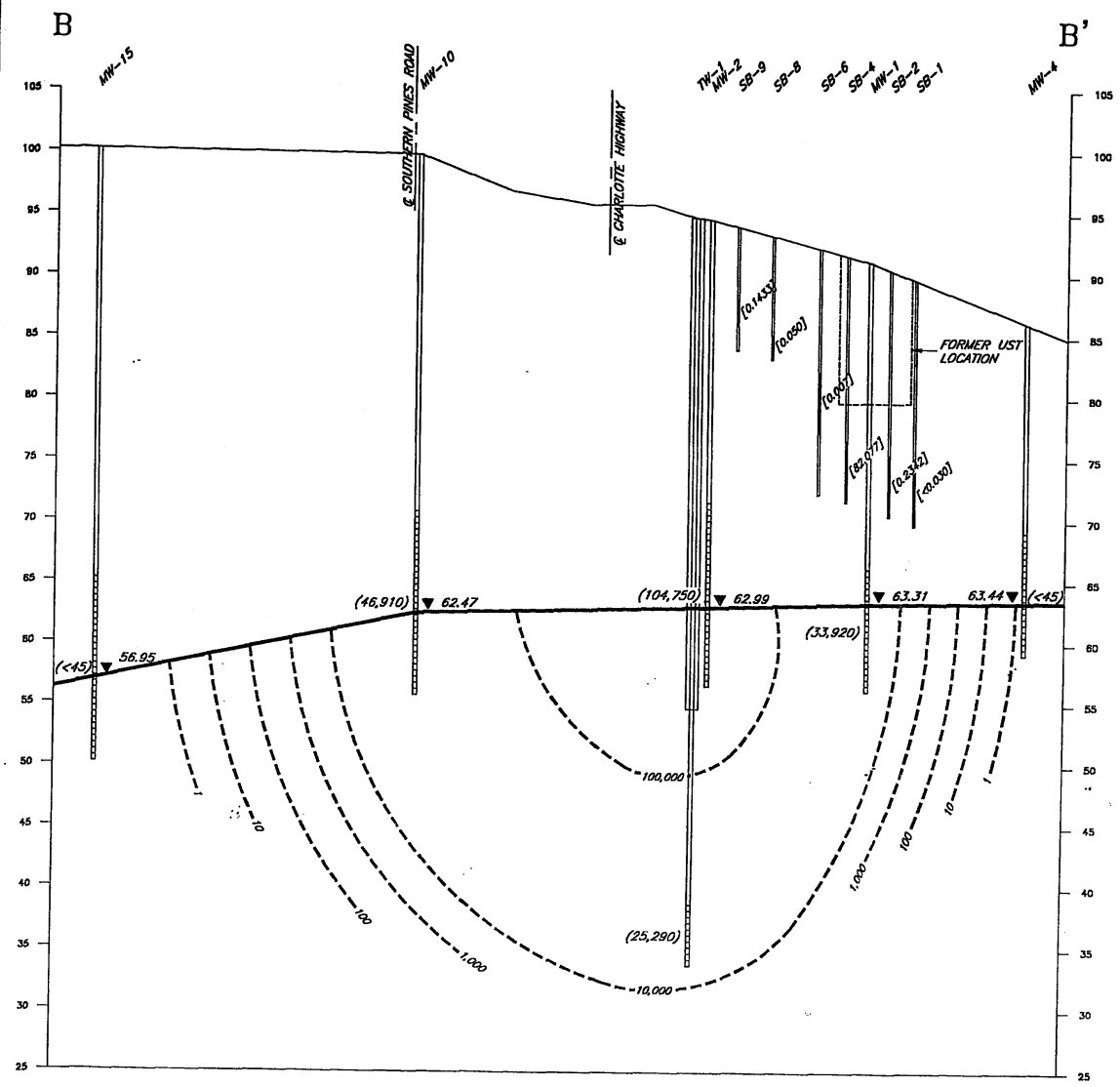
FIGURE 13

CROSS SECTION A-A'

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM ENVIRONMENTAL SERVICES, INC.



LITHOLOGY: UNDIFFERENTIATED SILTY CLAYS GRADING TO SAPROLITIC SILTY SANDS WITH COMMON THIN VEINS OF PARTIALLY WEATHERED QUARTZ

VERTICAL SCALE: 1" = 10'
0 2 4 6 8 10
HORIZONTAL SCALE: 1" = 60'
0 10 20 30 40 50 60

LEGEND

- INFERRED TOTAL ORGANIC GROUNDWATER COC ISOCONCENTRATION CONTOUR
- (104,750) TOTAL ORGANIC COC CONCENTRATION IN GROUNDWATER
- [82.077] TOTAL ORGANIC COC CONCENTRATION IN SOIL
- WATER TABLE SURFACE
- ▼ 56.95 WATER TABLE ELEVATION IN FEET
- SOIL SAMPLE

NOTES:
TOTAL ORGANIC COC IN GROUNDWATER INCLUDES BTEX CONSTITUENTS, MTBE, NAPHTHALENE & EDB; RESULTS REPORTED IN µg/L.
TOTAL ORGANIC COC IN SOIL INCLUDES BTEX CONSTITUENTS & NAPHTHALENE; RESULTS REPORTED IN mg/kg.

FIGURE 14

CROSS SECTION B-B'

SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SC

SITE I.D. NO. 09322
CBM PROJECT NO. 10629
DRAWN BY: AWB
CHECKED BY: SC
DWG DATE: 01/25/00

CBM ENVIRONMENTAL SERVICES, INC.

TABLE 1
SUMMARY OF FIELD SCREENING RESULTS
SMITH'S GROCERY

Sample Number	Installation Date	Depth (ft.)	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
S-1	10/11/99	35	10/12/99	**12,000**[1]	**23,000**	**2,600**	**14,000**	<500[2]
S-2	10/11/99	35	10/12/99	**31,000**	**29,000**	**3,300**	**16,000**	**940**
S-3	10/11/99	35	10/12/99	**26,000**	**22,000**	**3,100**	**17,000**	**710**
S-4	10/11/99	35	10/12/99	**17,000**	**18,000**	**2,600**	**14,000**	**490**
S-5	10/11/99	35	10/12/99	**5,700**	**23,000**	**4,900**	**26,000**	<500
S-6	10/11/99	35	10/12/99	1.4	7.1	47	270	<5
S-7	11/1/99	30	11/2/99	ND[3]	ND	ND	ND	ND
S-8	11/1/99	35	11/2/99	**1,230**	**13,880**	**2,880**	**22,740**	**22,860**
S-9	11/1/99	35	11/2/99	ND	ND	ND	ND	ND
S-10	11/1/99	30	11/2/99	ND	ND	ND	ND	ND
S-11	11/1/99	30	11/2/99	ND	ND	ND	ND	ND
S-12	11/1/99	30	11/2/99	ND	ND	ND	ND	ND
S-13	11/1/99	30	11/2/99	ND	ND	ND	ND	ND
S-14	11/1/99	30	11/2/99	ND	ND	ND	ND	ND
S-15	11/1/99	35	11/2/99	**55**	2	10	62	2
S-16	11/1/99	35	11/2/99	ND	ND	ND	ND	ND
S-17	11/2/99	40	11/2/99	**70**	8	ND	126	**123**
S-18	11/2/99	44	11/2/99	**8,620**	70	1,030	5,810	**3,340**
S-19	11/2/99	44	11/2/99	**9,840**	**23,030**	**2,100**	**15,870**	**9,170**
S-20	11/2/99	40	11/2/99	**175**	99	Coelution	6,130	Coelution
S-21	11/2/99	44	11/2/99	ND	ND	ND	ND	ND
S-22	11/2/99	35	11/2/99	**2,060**	**2,950**	Coelution	**16,090**	Coelution
S-23	11/3/99	35	11/4/99	ND	ND	ND	ND	ND
S-24	11/3/99	44	11/4/99	**25,790**	**72,140**	**8,230**	**68,180**	**26,650**
S-25	11/3/99	44	11/4/99	**957**	79	Coelution	821	Coelution
S-26	11/3/99	42	11/4/99	2	7	ND	8	Coelution
S-27	11/3/99	44	11/5/99	**891**	ND	Coelution	1,028	**818**
S-28	11/3/99	44	11/5/99	ND	ND	ND	ND	ND
S-29	11/3/99	42	11/4/99	ND	ND	ND	ND	ND
S-30	11/4/99	35	11/4/99	ND	11	Coelution	677	Coelution
S-31	11/4/99	44	11/4/99	**3,380**	**4,800**	Coelution	**12,540**	Coelution
S-32	11/4/99	39	11/4/99	<1	3	ND	22	ND
MW-1	---	35	11/2/99	**490**	**6,720**	**1,390**	**11,580**	Coelution
Smith	---	---	11/2/99	ND	ND	ND	ND	ND
			RBSL[4]	5	1,000	700	10,000	40

1225 180 490 252

Notes:

1. Concentrations in bold face type exceeded the January 1998 RBSLs.
2. Less than the detection limit specified in the screening report.
3. Not detected at or above the detection limit specified in the screening report.
4. Risk-Based Screening Level.

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA[1]
SMITH'S GROCERY
DECEMBER 1, 1999

Well No.	Date Completed	Top of Casing Elevation	Depth to Water	Water Table Elevation	Well Depth	Screened Interval
MW-1	1/16/99	91.16	27.85	63.31	35	25-35
MW-2	11/15/99	94.57	31.58	62.99	38	23-38
MW-3	11/12/99	91.91	28.62	63.29	35	25-35
MW-4	11/11/99	86.20	22.76	63.44	27	17-27
MW-5	11/11/99	89.29	26.20	63.09	30	20-30
MW-6	11/12/99	93.91	31.60	62.31	37	27-37
MW-7	11/12/99	91.68	30.41	61.27	36	26-36
MW-8	11/16/99	94.72	31.65	63.07	38	23-38
MW-9	11/16/99	90.54	29.31	61.23	36	21-36
MW-10	11/16/99	99.77	37.30	62.47	44	29-44
MW-11	11/16/99	100.46	38.23	62.23	44	29-44
MW-12	11/17/99	99.61	37.53	62.08	44	29-44
MW-13	11/17/99	100.39	41.22	59.17	47	32-47
MW-14	11/18/99	98.89	41.85	57.04	50	35-50
MW-15	11/18/99	100.18	43.23	56.95	50	35-50
MW-16	11/18/99	89.91	30.00	59.91	37	22-37
MW-17	11/19/99	94.46	34.67	59.79	40	25-40
MW-18	11/19/99	98.14	40.87	57.27	46	31-46
MW-19	11/19/99	98.27	43.51	54.76	50	35-50
TW-1	11/15/99	94.72	32.00[2]	62.72	61	56-61

729

Notes:
1. Elevations relative to a temporary benchmark with an assumed datum of 100.00 feet; data reported in feet.
2. Depth to groundwater measured on January 24, 2000.

TABLE 3
SUMMARY OF RESULTS
SLUG TEST ANALYSES[1]
SMITH'S GROCERY

Well No.	Hydraulic Conductivity		Seepage Velocity[2]	
	ft/min	ft/day	ft/day	ft/year
MW-2	1.04×10^{-4}	0.15	0.006	2.19
MW-5	1.98×10^{-4}	0.29	0.012	4.38
MW-10	7.89×10^{-5}	0.11	0.004	1.46

Notes:
1. Slug tests conducted on December 1, 1999.
2. Seepage velocities calculated using the equation $V = K(dh/dl)/n_e$, where:
   K = hydraulic conductivity
   dh/dl = hydraulic gradient = 0.01 ft/ft.
   n_e = effective porosity = 0.25

TABLE 4
SUMMARY OF LABORATORY ANALYSES[1]
SOIL SAMPLES[2]
SMITH'S GROCERY

Soil Boring	Sample Depth	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	TPH 3550	TOC
SB-1	15 – 20'	<0.005	<0.005	<0.005	<0.010	<0.005	NR[3]	NR
SB-2	15 – 20'	<0.005	0.0290	0.0303	0.1749	<0.005	NR	NR
SB-3	15 – 20'	<0.005	<0.005	<0.005	0.0168	<0.005	NR	NR
SB-4	15 – 20'	**0.307**	**5.010**	**9.420**	**65.180**	**2.160**	NR	NR
SB-5	15 – 20'	**0.0159**	0.0642	0.250	1.430	**0.280**	NR	NR
SB-6	10 – 15'	<0.005	0.007	<0.005	<0.010	<0.005	NR	NR
SB-7	8 – 10'	**0.021**	0.081	0.030	0.190	0.110	NR	NR
SB-8	8 – 10'	<0.005	<0.005	<0.005	<0.010	0.050	<0.005	NR
SB-9	6 – 8'	**0.017**	0.031	<0.005	0.028	0.008	NR	NR
SB-10	8 – 10'	**0.007**	0.014	<0.005	0.016	0.011	NR	NR
SB-11	8 – 10'	<0.005	0.011	<0.005	0.012	<0.005	NR	NR
SB-12	8 – 10'	NR	NR	NR	NR	NR	NR	60
	RBSL[5]	0.005	1.666	1.337	43.503	0.213	----	----

173

Notes:

1. Analyses for BTEX constituents and naphthalene by Method 8260 with Method 5035 preparation; analyses for PAHs by Method 8270; analysis for TPH 3550 by Method 8015M; analysis for TOC by SW846 Method 9060M; all results reported in mg/kg.
2. Samples SB-1 through SB-5 were collected on November 19, 1999; samples SB-6 through SB-12 were collected on October 22, 1999.
3. Analysis not requested.
4. Concentrations in bold face type exceeded the RBSLs.
5. January 1998 Risk-Based Screening Levels for sandy soil where the vertical separation between the "worst case" soil sample and the water table is between 10 and 15 feet.

TABLE 5
SUMMARY OF SSTLs FOR SOIL
SMITH'S GROCERY

COC	Source Concentration (mg/kg)[1]	RBSL[2] (mg/kg)	SSTL (mg/kg)	Comments
Benzene	0.307	0.005	0.0032	SSTL exceeded
Toluene	5.010	1.666	0.832	SSTL exceeded
Ethylbenzene	9.420	1.337	0.448	SSTL exceeded
Xylenes	65.180	43.503	10.1	SSTL exceeded
Naphthalene	2.160	0.213	0.024	SSTL exceeded

Notes:
1. "Worst case" BTEX constituent and naphthalene concentrations based on analysis of a soil sample collected from SB-4 at a depth of 15-20 feet; no detectable concentrations of PAHs were reported.
2. January 1998 Risk-Based Screening Levels for sandy soils where the vertical separation between the "worst case" soil sample and the water table is between 10 and 15 feet.

TABLE 6
SUMMARY OF GROUNDWATER ANALYTICAL DATA[1]
MONITORING WELLS
SMITH'S GROCERY
DECEMBER 1 - 2, 1999

Well No.	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	EDB	Naphthalene	Total Lead
MW-1	**610**[2]	**11,000**	**3,200**	**18,500**	<5[3]	<5	**610**	7.3
MW-2	**36,000**	**49,000**	**2,800**	**14,200**	**1,600**	**260**	**890**	**1,300**
MW-3	<5	<5	<5	<15	<5	<5	<5	<5
MW-4	<5	<5	<5	<15	<5	<5	<5	6.3
MW-5	<5	<5	20	77	<5	<5	<5	**18**
MW-6	**3,300**	**11,000**	**1,300**	7,000	<5	**9.6**	**270**	**32**
MW-7	**1,800**	**3,100**	**2,000**	**11,200**	<5	<5	**780**	**59**
MW-8	**14,000**	**60,000**	**4,900**	**24,900**	<5	<5	**900**	14
MW-9	**18**	59	250	4,000	<5	<5	**260**	11
MW-10	**10,000**	**23,000**	**2,200**	**11,100**	<5	**290**	**320**	**22**
MW-11	<5	<5	<5	<15	<5	<5	<5	**16**
MW-12	**500**	9.8	130	880	<5	**30**	**37**	7.7
MW-13	<5	<5	<5	<15	<5	<5	<5	<5
MW-14	<5	<5	<5	<15	<5	<5	<5	<5
MW-15	<5	<5	<5	<15	<5	<5	<5	**16**
MW-16	<5	<5	<5	<15	<5	<5	<5	7.9
MW-17	<5	<5	<5	<15	<5	<5	<5	15
MW-18	<5	<5	<5	<15	<5	<5	<5	**50**
MW-19	<5	<5	<5	<15	<5	<5	<5	**83**
TW-1	**5,800**	**13,000**	**1,000**	5,300	<5	<5	**190**	8
RBSL[4]	5	1,000	700	10,000	40	5	10	15

Notes:
1. Analyses for BTEX constituents, MTBE, EDB and naphthalene by Method 8260; analyses for PAHs by Method 8270; analyses for total lead by EPA Method 200.7; all results reported in µg/L.
2. Concentrations in bold face type exceeded the RBSLs.
3. Less than the method detection limit specified in the laboratory report.
4. January 1998 Risk-Based Screening Levels.

TABLE 7
SUMMARY OF GROUNDWATER ANALYTICAL DATA[1]
NATURAL ATTENUATION PARAMETERS
SMITH'S GROCERY
DECEMBER 1 - 2, 1999

Well No.	Total Iron (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Methane (ug/L)
MW-1	2.6	<0.05[2]	6.2	27
MW-2	8.2	<0.05	20	<8.6
MW-3	1.2	1.0	6.6	<8.6
MW-4	0.28	2.1	<5	<8.6
MW-5	1.4	0.72	5.0	<8.6
MW-6	0.63	<0.05	<5	<8.6
MW-7	0.70	0.052	6.7	<8.6
MW-8	0.44	<0.05	<5	<8.6
MW-9	0.57	<0.05	5.3	<8.6
MW-10	0.17	<0.05	7.2	<8.6
MW-11	0.81	3.8	5.7	<8.6
MW-12	0.36	0.62	<5	<8.6
MW-13	0.065	0.80	7.1	<8.6
MW-14	0.23	0.80	35	<8.6
MW-15	0.66	3.4	5.5	<8.6
MW-16	0.79	0.059	10	<8.6
MW-17	0.90	<0.05	12	<8.6
MW-18	18	1.9	<5	<8.6
MW-19	10	2.6	<5	<8.6
TW-1	0.92	0.19	15	<8.6
Smith	<0.05	2.2	<5	<8.6

Notes:
1. Analyses for total iron by EPA Method 200.7; analyses for nitrate by Standard Method 4500; analyses for sulfate by EPA Method 375.2; analyses for methane by EPA Method 3810 Modified.
2. Less than the method detection limit specified in the laboratory report.

TABLE 8
SUMMARY OF GROUNDWATER ANALYTICAL DATA[1]
WATER SUPPLY WELLS
SMITH'S GROCERY

DHEC personnell sampling of Vickery

Well ID	Date Sampled	Benzene (109)	Toluene (ND)	Ethylbenzene (ND)	Xylenes (38.3)	MTBE	Naphthalene
Vickery	10/18/99	**64.6**[2]	<1.00[3]	<1.00	39.82	<1.00	5.41
	10/27/99	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00
	11/2/99	<1.00	<1.00	<1.00	<1.00	<1.00	**25.5**
	11/9/99	1.13	2.47	2.21	<2.00	<1.00	6.64
	11/11/99	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00
	11/16/99	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00
	11/23/99	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00
	11/30/99	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00
	12/8/99	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00
	12/14/99	<5	<5	<5	<10	<5	<5
	12/21/99	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00
	12/27/99	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00
	1/5/00	<5	<5	<5	<10	<5	<5
Hill	11/5/99	1.43	<1.00	<1.00	<2.00	<1.00	2.46
	11/17/99	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00
	11/23/99	1.47	2.91	<1.00	<2.00	<1.00	<1.00
	11/30/99	1.31	<1.00	<1.00	<2.00	<1.00	<1.00
	12/8/99	2.18	<1.00	<1.00	<2.00	<1.00	1.85
	12/14/99	<5	<5	<5	<10	<5	<5
	12/21/99	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00
	12/27/99	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00
	1/5/00	<5	<5	<5	<10	<5	<5
Barnette	10/21/99	<2	<2	<2	<2	NR	<2
Beasley	10/21/99	<2	<2	<2	<2	NR	<2
Smith	12/2/99	<5	<5	<5	<15	<5	<5
Strife	10/21/99	<2	<2	<2	<2	NR	<2
Wood	10/21/99	<2	<2	<2	<2	NR	<2
Foster	11/19/99	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00
	RBSL[5]	5	1,000	700	10,000	40	10

Notes:

1. Analyses for BTEX constituents, MTBE and naphthalene by Method 8260; results reported in µg/L.
2. Concentrations in bold face type exceeded the RBSLs.
3. Less than the method detection limit specified in the laboratory report.
4. Barnette, Beasley, Strife and Wood water supply wells sampled by the SCDHEC.
5. January 1998 Risk-Based Screening Levels.

TABLE 9
SUMMARY OF FATE AND TRANSPORT MODEL INPUT PARAMETERS
DOWN-GRADIENT RECEPTORS
SMITH'S GROCERY

GENERAL INPUT PARAMETERS	
Source Width (ft)[1]	150
Vertical Thickness of Source (ft)[2]	38
Distance of Assumed Receptor (ft)[3]	220, 600, 1,000
Groundwater Flow Velocity (ft/yr)[4]	4.38
Time of Simulation (yrs)	1,000
Longitudinal Dispersivity (ft)	100
Transverse Dispersivity (ft)	33.33
Vertical Dispersivity (ft)	5.0
Total Organic Carbon (mg/kg)[5]	60
TPH 3550 (mg/kg)[6]	0.004
Effective Porosity (%)[7]	25
Bulk Density (g/cc)	1.53

CONTAMINANT SPECIFIC INPUT PARAMETERS					
Parameter	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene
Source Area Concentration (µg/L)[8]	**36,000**	**60,000**	**4,900**	**24,900**	**900**
K_{oc} (ml/g)	81	133	176	639	1,543

Notes:

1. Based on the width of the hydrocarbon plume in the site vicinity, extended to include the former USTs, dispenser islands, product piping, and monitoring wells MW-1, MW-2, MW-8, MW-10 and TW-1; the monitoring wells with the overall highest hydrocarbon impact were incorporated into the source area.
2. Based on the approximate height of the water column in the Type III monitoring well (TW-1).
3. Receptor 1 is the Vickery water supply well located approximately 220 feet east from the center of the source area; Receptor 2 is a water supply well located approximately 600 feet east from the center of the source area; and Receptor 3 is the down-gradient limit of the 1,000-foot receptor search radius.
4. Based on the seepage velocity calculated using slug test data from MW-5 obtained in December 1999.
5. Based on the results of analyses of a soil sample collected from SB-12 in October 1999.
6. Based on the results of analyses of a soil sample collected from SB-8 in October 1999.
7. Referenced in Scott, 1969.
8. Source concentrations for benzene are based on the results of analyses of a groundwater sample collected from MW-2 in December 1999; source concentrations for toluene, ethylbenzene, xylenes and naphthalene are based on the results of analyses of a groundwater sample collected from MW-8 in December 1999.

TABLE 10
SUMMARY OF RESULTS
FATE AND TRANSPORT MODEL
SMITH'S GROCERY

COC	RBSL (µg/L)	Time[1] Receptor 1	Time Receptor 2	Time Receptor 3
Benzene	5	between 5 and 6	between 35 and 36	between 84 and 85
Toluene	1,000	between 16 and 17	between 95 and 96	between 211 and 212
Ethylbenzene	700	between 68 and 69	greater than 1,000	greater than 1,000
Xylenes	10,000	greater than 1,000	greater than 1,000	greater than 1,000
Naphthalene	10	between 20 and 21	between 125 and 126	between 278 and 279

Note:
1. Time in years for COC concentration at receptor to exceed the RBSL.

TABLE 11
SUMMARY OF SSTLs FOR GROUNDWATER
CLOSEST DOWN-GRADIENT RECEPTOR
SMITH'S GROCERY

COC	Source Area Concentration[1]	RBSL	Minimum SSTL at the Source	Comments
Benzene	36,000	5	18.5	SSTL exceeded
Toluene	60,000	1,000	3,700.06	SSTL exceeded
Ethylbenzene	4,900	700	2,590.06	SSTL exceeded
Xylenes	24,900	10,000	37,006.20	SSTL not exceeded
Naphthalene	900	10	37.04	SSTL exceeded

Note:

1. Source concentrations for benzene are based on the results of analyses of a groundwater sample collected from MW-2 in December 1999; source concentrations for toluene, ethylbenzene, xylenes and naphthalene are based on the results of analyses of a groundwater sample collected from MW-8 in December 1999; concentrations reported in µg/L.

APPENDIX A
SURVEYED SITE MAP

APPENDIX B
SOIL BORING LOGS

SOIL BORING LOGS
SMITH'S GROCERY

Borehole SB-1 Sampling Date: 11/19/99 Sample Depth: 15 – 20'

Sampling Interval	Field Screening Results (ppm)	Lithology	Soil Conditions
0 – 5	0	Reddish brown silty clay	---
5 – 10	0	Reddish brown silty clayey sand	---
10 – 15	0	Reddish brown silty clayey sand	---
15 – 20	15	Reddish brown silty, clayey sand w/ quartz fragments	hydrocarbon odor

Borehole SB-2 Sampling Date: 11/19/99 Sample Depth: 15 – 20'

Sampling Interval	Field Screening Results (ppm)	Lithology	Soil Conditions
0 – 5	0	Reddish brown silty clay	---
5 – 10	10	Reddish brown silty micaceous clayey sand w/ quartz fragments	hydrocarbon odor
10 – 15	21	Reddish brown silty micaceous clayey sand w/ quartz fragments	hydrocarbon odor
15 – 20	135	Brown/tan silty, clayey sand	hydrocarbon odor

Borehole SB-3 Sampling Date: 11/19/99 Sample Depth: 15 – 20'

Sampling Interval	Field Screening Results (ppm)	Lithology	Soil Conditions
0 – 5	0	Reddish brown silty clay	---
5 – 10	0	Reddish brown silty clayey sand	hydrocarbon odor
10 – 15	0	Reddish brown silty clayey sand	hydrocarbon odor
15 – 20	2	Tan micaceous silty clayey sand	hydrocarbon odor

Borehole SB-4 Sampling Date: 11/19/99 Sample Depth: 15 – 20'

Sampling Interval	Field Screening Results (ppm)	Lithology	Soil Conditions
0 – 5	0	Reddish brown silty clay	---
5 – 10	12	Reddish brown silty micaceous clayey sand w/ white clay lenses	hydrocarbon odor
10 – 15	37	Reddish brown silty micaceous clayey sand w/ white clay lenses	hydrocarbon odor

Borehole SB-5 Sampling Date: 11/19/99 Sample Depth: 15 – 20'

Sampling Interval	Field Screening Results (ppm)	Lithology	Soil Conditions
0 – 5	0	Reddish brown silty clay	hydrocarbon odor
5 – 10	0	Reddish brown silty clayey sand	hydrocarbon odor
10 – 15	0	Reddish brown silty clayey sand	hydrocarbon odor
15 – 20	12	Reddish brown silty micaceous clayey sand w/ white clay lenses	slight hydrocarbon odor

Borehole SB-6 Sampling Date: 10/22/99 Sample Depth: 10 – 15'

Sampling Interval	Field Screening Results (ppm)	Lithology	Soil Conditions
0 – 5	5	Reddish brown clayey silt w/ quartz fragments	---
5 – 10	1,800	Reddish brown clayey silt w/ quartz fragments	hydrocarbon odor
10 – 15	3,800	Tan clayey silty sand w/ quartz fragments	hydrocarbon odor
15 – 20	340	Tan clayey silty sand w/ quartz fragments	hydrocarbon odor

Borehole SB-7 Sampling Date: 10/22/99 Sample Depth: 8 – 10'

Sampling Interval	Field Screening Results (ppm)	Lithology	Soil Conditions
0 – 2	8	Brown silty clay	---
2 – 4	37	Reddish brown silty clayey sand	---
4 – 6	No sample	No sample	---
6 – 8	600	Reddish brown silty clayey sand	hydrocarbon odor
8 - 10	10,000	Reddish brown/tan silty clayey sand	hydrocarbon odor

Borehole SB-8 Sampling Date: 10/22/99 Sample Depth: 8 – 10'

Sampling Interval	Field Screening Results (ppm)	Lithology	Soil Conditions
0 – 2	4	Gravel	---
2 – 4	1,000	Brown silt	hydrocarbon odor
4 – 6	2,300	Reddish brown silty clayey sand	hydrocarbon odor
6 – 8	4,000	Reddish brown/tan silty clayey sand	hydrocarbon odor
8 - 10	10,000	Reddish brown/tan silty clayey sand	hydrocarbon odor

Borehole SB-9 Sampling Date: 10/22/99 Sample Depth: 6 – 8'

Sampling Interval	Field Screening Results (ppm)	Lithology	Soil Conditions
0 – 2	5	Brown clayey silt	---
2 – 4	39	Reddish brown silty clay	---
4 – 6	1,350	Reddish brown silty clayey sand	hydrocarbon odor
6 – 8	4,000	Reddish brown/tan silty clayey sand	hydrocarbon odor
8 - 10	3,800	Reddish brown/tan silty clayey sand	hydrocarbon odor

Borehole SB-10 Sampling Date : 10/22/99 Sample Depth: 8 – 10'

Sampling Interval	Field Screening Results (ppm)	Lithology	Soil Conditions
0 – 2	0	Brown clayey silt	---
2 – 4	32	Reddish brown silty clay	---
4 – 6	1,200	Reddish brown silty clay	hydrocarbon odor
6 – 8	2,200	Reddish brown/tan silty clayey sand	hydrocarbon odor
8 - 10	3,200	Reddish brown/tan silty clayey sand	hydrocarbon odor

Borehole SB-11 Sampling Date: 10/22/99 Sample Depth: 8 – 10'

Sampling Interval	Field Screening Results (ppm)	Lithology	Soil Conditions
0 – 2	0	Reddish brown silty clay	---
2 – 4	2	Reddish brown silty clay	---
4 – 6	10	Reddish brown silty clay	---
6 – 8	25	Reddish brown/tan silty clayey sand	---
8 - 10	28	Reddish brown/tan silty clayey sand	---

Borehole SB-12 Sampling Date: 10/22/99 Sample Depth: 8 – 10'

Sampling Interval	Field Screening Results (ppm)	Lithology	Soil Conditions
0 – 2	0	Brown clayey silt	---
2 – 4	0	Reddish brown silty clay	---
4 – 6	4	Reddish brown silty clayey sand	---
6 – 8	18	Reddish brown silty clayey sand	---
8 - 10	38	Reddish brown/tan silty clayey sand	---

APPENDIX C
GC SCREENING REPORTS

Lab Report

RECEIVED
OCT 14 1999

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

10/13/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: S-1
Prism Sample ID: AB44799
Login Group: PGO13F6
Sample Collection Date/Time: 10/12/99 13:55
Lab Submittal Date/Time: 10/12/99 14:40

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	Not detected	ug/L	500	602	10/13/99 09:14	CMB
BENZENE	12000	ug/L	100	602	10/13/99 09:14	CMB
TOLUENE	23000	ug/L	100	602	10/13/99 09:14	CMB
ETHYLBENZENE	2600	ug/L	100	602	10/13/99 09:14	CMB
XYLENES	14000	ug/L	300	602	10/13/99 09:14	CMB

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

10/13/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **S-2**
Prism Sample ID: **AB44800**
Login Group: PGO13F6
Sample Collection Date/Time: 10/12/99 12:20
Lab Submittal Date/Time: 10/12/99 14:40

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	940	ug/L	500	602	10/13/99 10:06	CMB
BENZENE	31000	ug/L	100	602	10/13/99 10:06	CMB
TOLUENE	29000	ug/L	100	602	10/13/99 10:06	CMB
ETHYLBENZENE	3300	ug/L	100	602	10/13/99 10:06	CMB
XYLENES	16000	ug/L	300	602	10/13/99 10:06	CMB

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

10/13/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **S-3**
Prism Sample ID: **AB44801**
Login Group: PGO13F6
Sample Collection Date/Time: 10/12/99 12:35
Lab Submittal Date/Time: 10/12/99 14:40

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	710	ug/L	300	602	10/13/99 06:35	CMB
BENZENE	26000	ug/L	50	602	10/13/99 06:35	CMB
TOLUENE	22000	ug/L	50	602	10/13/99 06:35	CMB
ETHYLBENZENE	3100	ug/L	50	602	10/13/99 06:35	CMB
XYLENES	17000	ug/L	200	602	10/13/99 06:35	CMB

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

10/13/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **S-4**
Prism Sample ID: **AB44802**
Login Group: PGO13F6
Sample Collection Date/Time: 10/12/99 12:45
Lab Submittal Date/Time: 10/12/99 14:40

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	490	ug/L	300	602	10/13/99 07:29	CMB
BENZENE	17000	ug/L	50	602	10/13/99 07:29	CMB
TOLUENE	18000	ug/L	50	602	10/13/99 07:29	CMB
ETHYLBENZENE	2600	ug/L	50	602	10/13/99 07:29	CMB
XYLENES	14000	ug/L	200	602	10/13/99 07:29	CMB

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

10/13/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: S-5
Prism Sample ID: AB44803
Login Group: PGO13F6
Sample Collection Date/Time: 10/12/99 12:50
Lab Submittal Date/Time: 10/12/99 14:40

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	Not detected	ug/L	500	602	10/13/99 08:21	CMB
BENZENE	5700	ug/L	100	602	10/13/99 08:21	CMB
TOLUENE	23000	ug/L	100	602	10/13/99 08:21	CMB
ETHYLBENZENE	4900	ug/L	100	602	10/13/99 08:21	CMB
XYLENES	26000	ug/L	300	602	10/13/99 08:21	CMB

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

10/13/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **S-6**
Prism Sample ID: **AB44804**
Login Group: PGO13F6
Sample Collection Date/Time: 10/12/99 12:58
Lab Submittal Date/Time: 10/12/99 14:40

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	Not detected	ug/L	5	602	10/13/99 05:42	CMB
BENZENE	1.4	ug/L	1	602	10/13/99 05:42	CMB
TOLUENE	7.1	ug/L	1	602	10/13/99 05:42	CMB
ETHYLBENZENE	47	ug/L	1	602	10/13/99 05:42	CMB
XYLENES	270	ug/L	3	602	10/13/99 05:42	CMB

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 18.8	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client CBM Environmental Services
Physical Address 277 Gardendale Blvd
Suite 115 Fort Mill, SC 29708
Phone (803) 548-5989 Fax (803) 548-5892
P.O.#/Billing Reference 10948
Project Name Shell - Carolina
PM# 1062-9

REPORT TO: Name Scott Ball
Address
BILL TO: Name CBM
Address
Requested Due Date 24 hour Turnaround

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ___ Other ___ NA ___
Water Chlorinated Yes ___ No ___ NA ___
Sample Iced Upon Collection Yes ___ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED BTEX + MTBE 5xx.2m	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
S-1	10-12-99	13:55	Water	VOA	2	40ml	—	✓			44799
S-2	10-12-99	12:20					—	✓			44800
S-3	10-12-99	12:35					—	✓			44801
S-4	10-12-99	12:45					—	✓			44802
S-5	10-12-99	12:50					—	✓			44803
S-6	10-12-99	12:58					—	✓			44804

Sampler's Signature Sonya Punch Sampled By (Print Name) SONYA PUNCH Affiliation CBM

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) Sonya Punch	Received For Prism Laboratories By: Kathryn Wing	Date 10/12/99	14:40
Method of Shipment		Log-In Group No. PG0137F6	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Gas Chromatograph Report

Field Analysis of Groundwater Headspace Samples
Smith's Grocery, York, S.C.

November 2nd, 4th and 5th, 1999

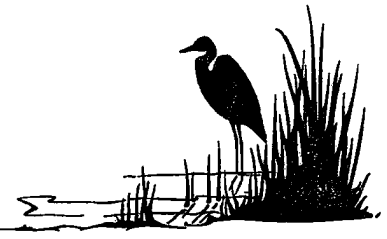
Prepared for

CBM Environmental Services, Inc.

Prepared by

JKServices Inc.

13209 White Birch Terrace
Davidson, N.C. 28036
(704) 896-0265



11 November 1999

Field Procedures

A PE Photovac Voyager Gas Chromatograph (GC) equipped with a Photo Ionization Detector (PID) was used to screen groundwater headspace samples prior to installation of permanent groundwater monitoring wells at Smith's Grocery, located in York, S.C. This "real time" field screening data aides in the horizontal and vertical delineation of dissolved phase hydrocarbon plumes and the placement of groundwater monitoring wells. Field screening usually results in minimizing drilling costs and increases the accuracy of monitoring well placement.

Prior to analyzing groundwater samples, the portable GC was calibrated by preparing a field standard consisting of MTBE, Benzene, Toluene, Ethylbenzene, M-Xylene and O-Xylene. On a daily basis, an individual laboratory prepared glass ampule with all six of the target constituents at a preanalyzed concentration of 1000 μg/mL (PPM) in methanol was used to produce a calibration standard. Five μl of this solution was added to a 100 mL volumetric flask of distilled water to produce a 50 μg/L stock solution.[1] Once the stock solution was completed, 20 mL of this solution was decanted into a nonpreserved VOA bottle and allowed to equilibrate in a 29.4° C water bath. Prior to analysis, the sample vial was shaken vigorously for a minimum of one minute to maximize stripping of the dissolved phase compounds into the vial headspace.[2,3] Following sample equalization, a syringe was used to perforate the septa in the sample container and remove vapors from the vial headspace. These vapors were then injected directly into the GC. Once the VOA headspace was analyzed, the GC was calibrated to the initial concentration of the compounds in the standard solution. The compounds chosen to calibrate the portable GC are listed in Table 1.

Table 1. Calibration Compounds

Calibration Compound	Concentration in μg/mL (PPM)
MTBE	0.05
Benzene	0.05
Toluene	0.05
E-Benzene	0.05
M-Xylene	0.05
O-Xylene	0.05

Following analysis of the calibration standard, a syringe blank or distilled water blank was analyzed to assure that cross contamination was not present in the injection syringe or GC column. In addition, distilled water blanks, syringe blanks and GC recalibration was carried out as field conditions dictated.

Groundwater samples were collected from approximately 40 - 45 feet below land surface from a temporary well installed using an auger rig (Figure 1). Once the auger was advanced to the desired depth, it was withdrawn and a 1" diameter PVC screen was inserted into the boring

(Figure 2). After groundwater entered the boring, a disposable bailer was used to collect groundwater samples and fill a 40 mL non preserved sample vial with 20 mL of groundwater. The vial was then brought back to the GC (Figure 3) and allowed to equilibrate in a 29.4° C water bath. Sample analysis is performed in the same manner as the initial standard analysis. For samples containing high levels of dissolved phase hydrocarbons, a field dilution was performed to avoid saturation of the GC detector, and minimize coelution of individual peaks.

Using these calibration techniques, analysis of groundwater headspace will yield comparative results but will not duplicate laboratory analysis due to differences in sample preparation/analysis methods. If representative groundwater samples are split with a laboratory at the time GC analysis is performed, a calibration curve can be produced to better estimate actual groundwater dissolved phase hydrocarbon concentrations.

Groundwater Results

On November 2nd, 4th and 5th 1999, 27 groundwater samples and two water well samples were collected and field screened using a PE Photovac Voyager GC. Field screening results are presented in Table 2.

TABLE 2. FIELD SCREENING RESULTS

ALL RESULTS IN μg/mL (PPM)

SAMPLE	DATE	MTBE	BENZENE	TOLUENE	ETHYL-BENZENE	M-XYLENE	O-XYLENE
S-11	11/2/99	ND	ND	ND	ND	ND	ND
S-12	11/2/99	ND	ND	ND	ND	ND	ND
S-13	11/2/99	ND	ND	ND	ND	ND	ND
S-14	11/2/99	ND	ND	ND	ND	ND	ND
S-15	11/2/99	0.002	0.055	0.002	0.010	0.050	0.012
S-7	11/2/99	ND	ND	ND	ND	ND	ND
S-10	11/2/99	ND	ND	ND	ND	ND	ND
S-16	11/2/99	ND	ND	ND	ND	ND	ND
Smith Well	11/2/99	ND	ND	ND	ND	ND	ND
S-9	11/2/99	ND	ND	ND	ND	ND	ND
S-17	11/2/99	0.123	0.070	0.008	ND	0.097	0.029
S-8	11/2/99	22.86	1.23	13.88	2.88	17.85	4.89

SAMPLE	DATE	MTBE	BENZENE	TOLUENE	ETHYL-BENZENE	M-,P-XYLENE	O-XYLENE
S-18	11/2/99	3.34	8.62	0.070	1.03	5.10	0.710
S-19	11/2/99	9.17	9.84	23.03	2.10	12.27	3.60
S-21	11/2/99	ND	ND	ND	ND	ND	ND
Vicery Well (Post Carbon)	11/2/99	ND	ND	ND	ND	ND	ND
S-20	11/2/99	Possible Coelution	0.175	0.099	Coelution	5.04	1.09
MW-1	11/2/99	Possible Coelution	0.490	6.72	1.39	8.90	2.68
S-22	11/2/99	Possible Coelution	2.06	2.95	Coelution	12.80	3.29
S-29	11/4/99	ND	ND	ND	ND	ND	ND
S-23	11/4/99	ND	ND	ND	ND	ND	ND
S-25	11/4/99	Possible Coelution	0.957	0.079	Coelution	0.582	0.239
S-24	11/4/99	26.65	25.79	72.14	8.23	52.52	15.66
S-30	11/4/99	Possible Coelution	ND	0.011	Coelution	0.437	0.240
S-31	11/4/99	Possible Coelution	3.83	4.80	Coelution	9.94	2.60
S-32	11/4/99	ND	<0.001	0.003	ND	0.014	0.008
S-26	11/4/99	Possible Coelution	0.002	0.007	ND	0.008	ND
S-27	11/5/99	0.818	0.891	ND	Coelution	0.895	0.133
S-28	11/5/99	ND	ND	ND	ND	ND	ND

References:

1) Preparation of Aqueous Standards for Groundwater Analysis Using the PE Photovac Voyager Portable Gas Chromatograph, TECHTIPs, Volume 4, Number 1, 1998

2) Screening of Ground Water Samples for Volatile Organic Compounds Using a Portable Gas Chromatograph, Buchmiller, GWMR 1989

3) EPA Compendium of ET Field Analytical Procedures, SOP #2108. May 1992. Pp. 31-38

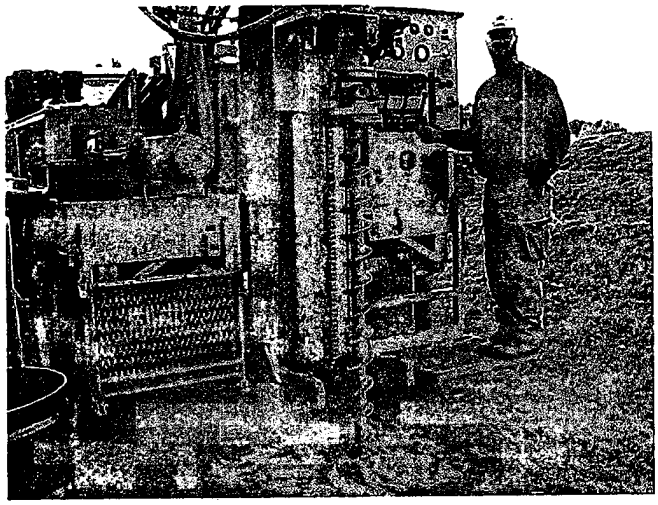


Figure 1.

Figure 2.

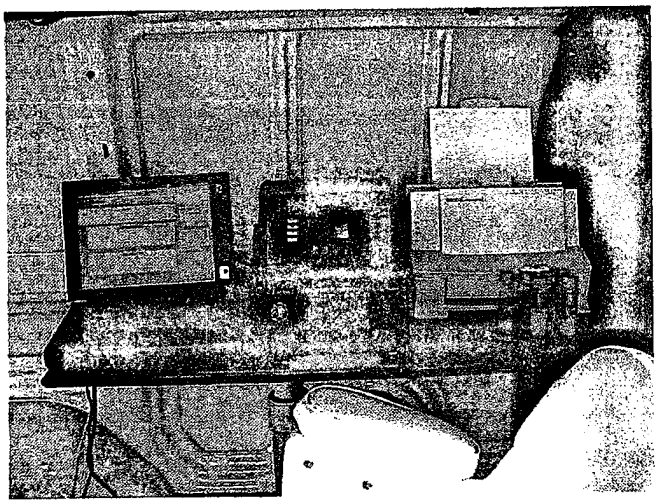
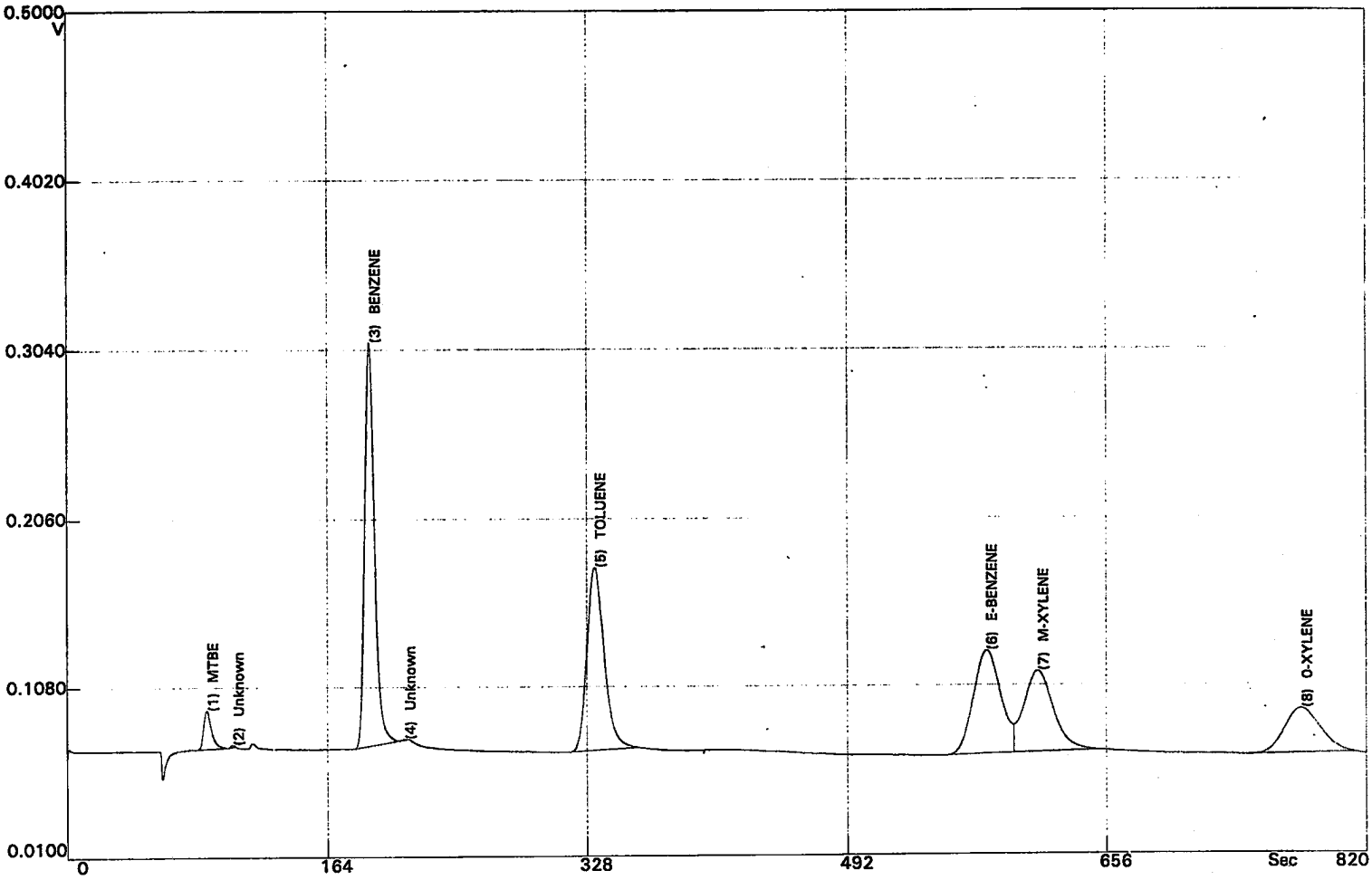


Figure 3.

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	09:42:37	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	1	
Tag	STND	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	27.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

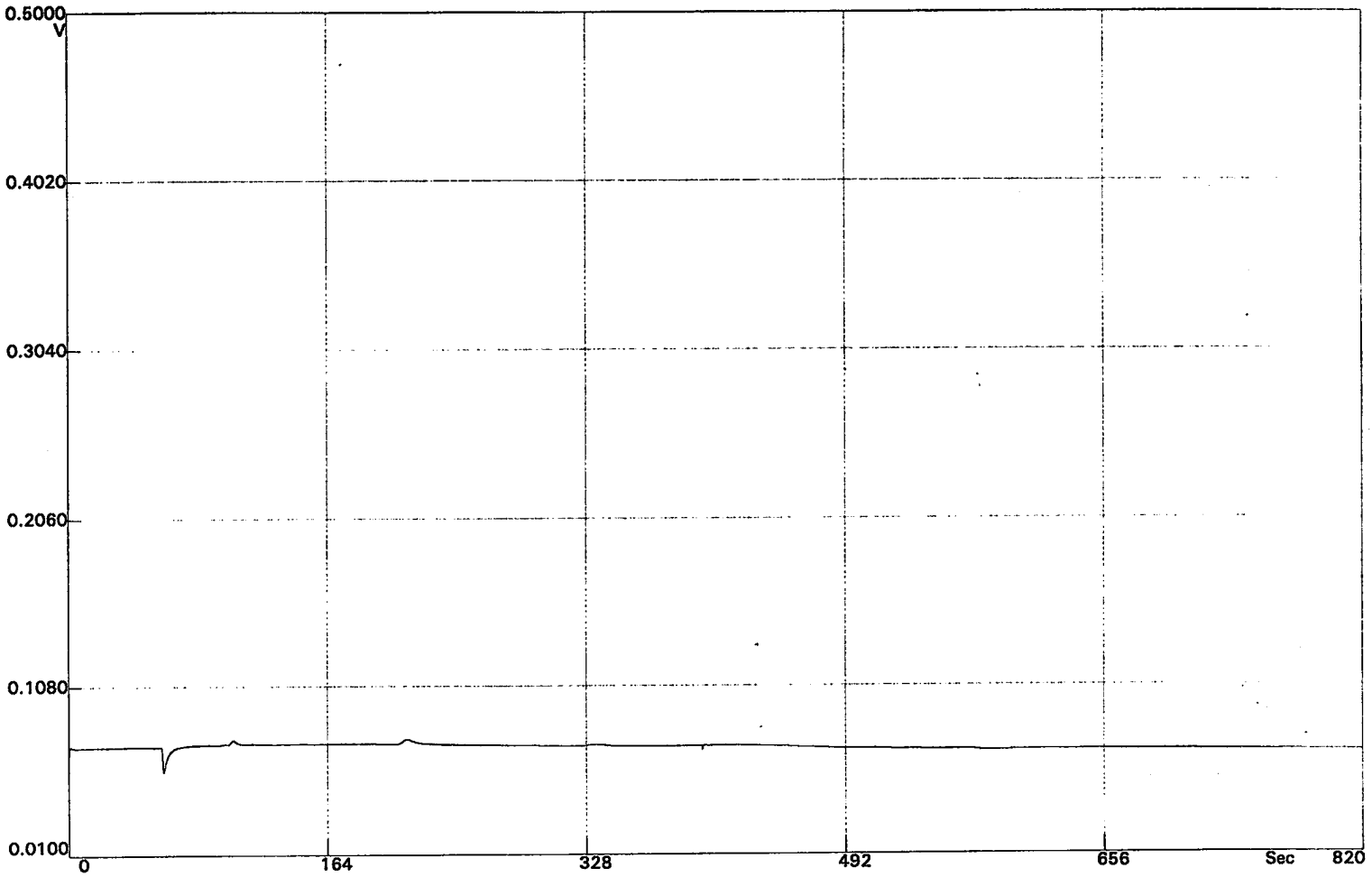
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	MTBE	0.050	128	22.5	88.3	Cal
2	Unknown		2.536	1.587	104.5	
3	BENZENE	0.050	1666	236	190.4	Cal
4	Unknown		1.221	0.855	212.2	
5	TOLUENE	0.050	1333	107	332.5	Cal
6	E-BENZENE	0.050	1207	61.1	579.2	Cal
7	M-XYLENE	0.050	1038	31.0	611.7	Cal

Date: 99/11/02 09:58

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	09:58:33	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	2	
Tag	BLNK	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	27.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

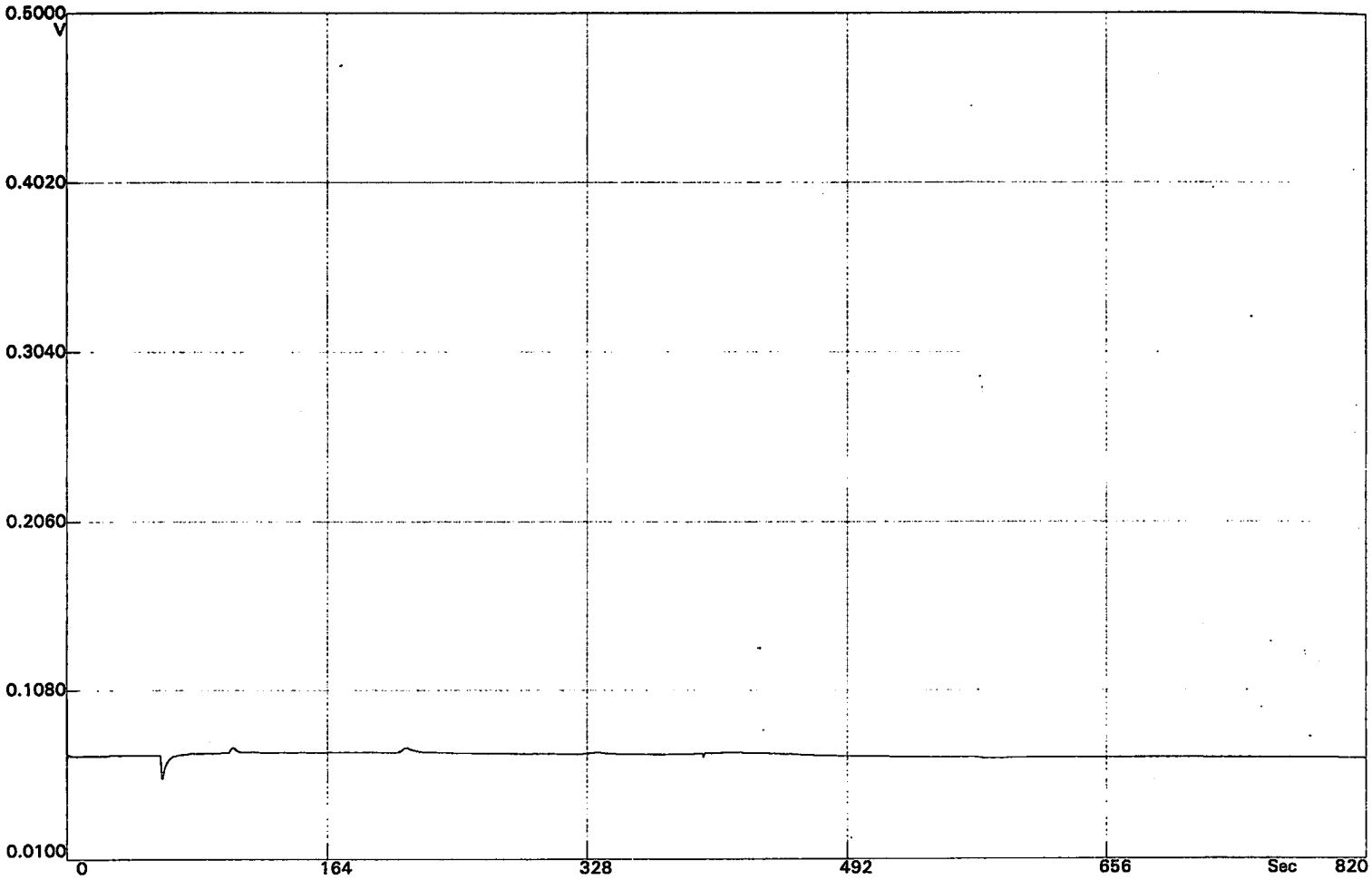
INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/02 10:14

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	10:20:56	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	3	
Tag	S-11	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	27.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

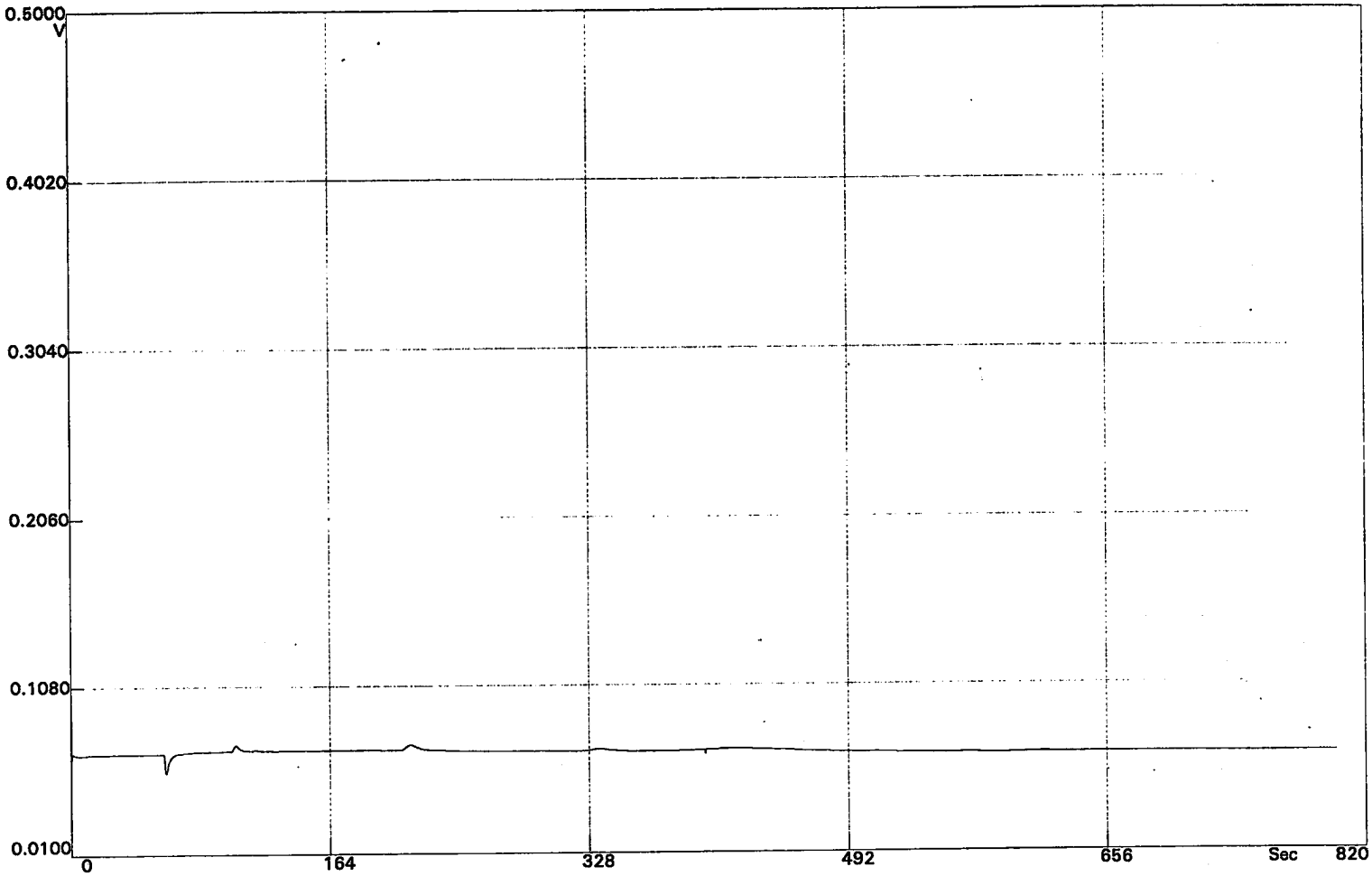
INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/02 10:38

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	10:39:24	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	4	
Tag	S-12	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	27.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

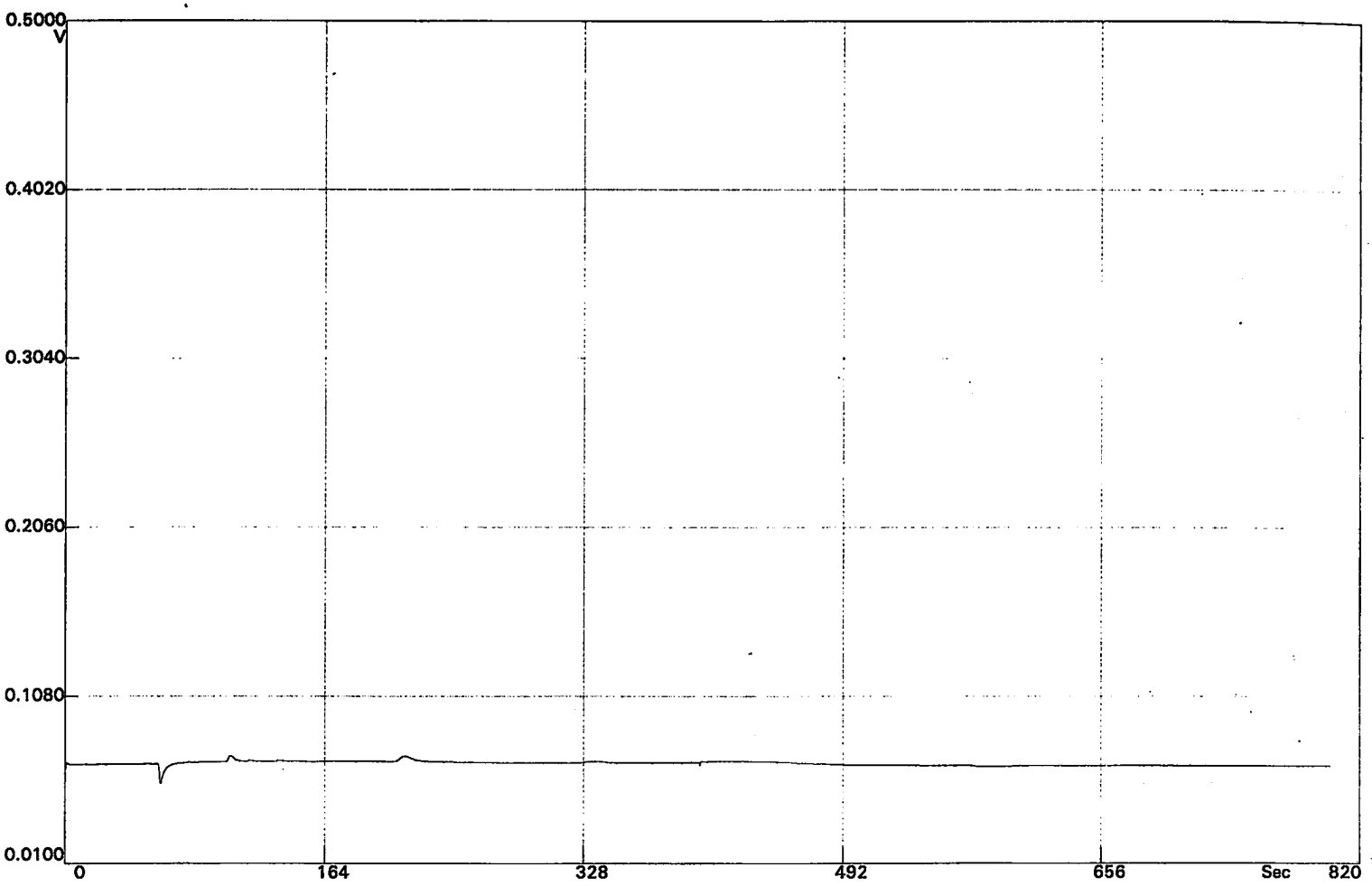
INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/02 10:53

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	10:53:27	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	5	
Tag	S-13	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	27.0	C

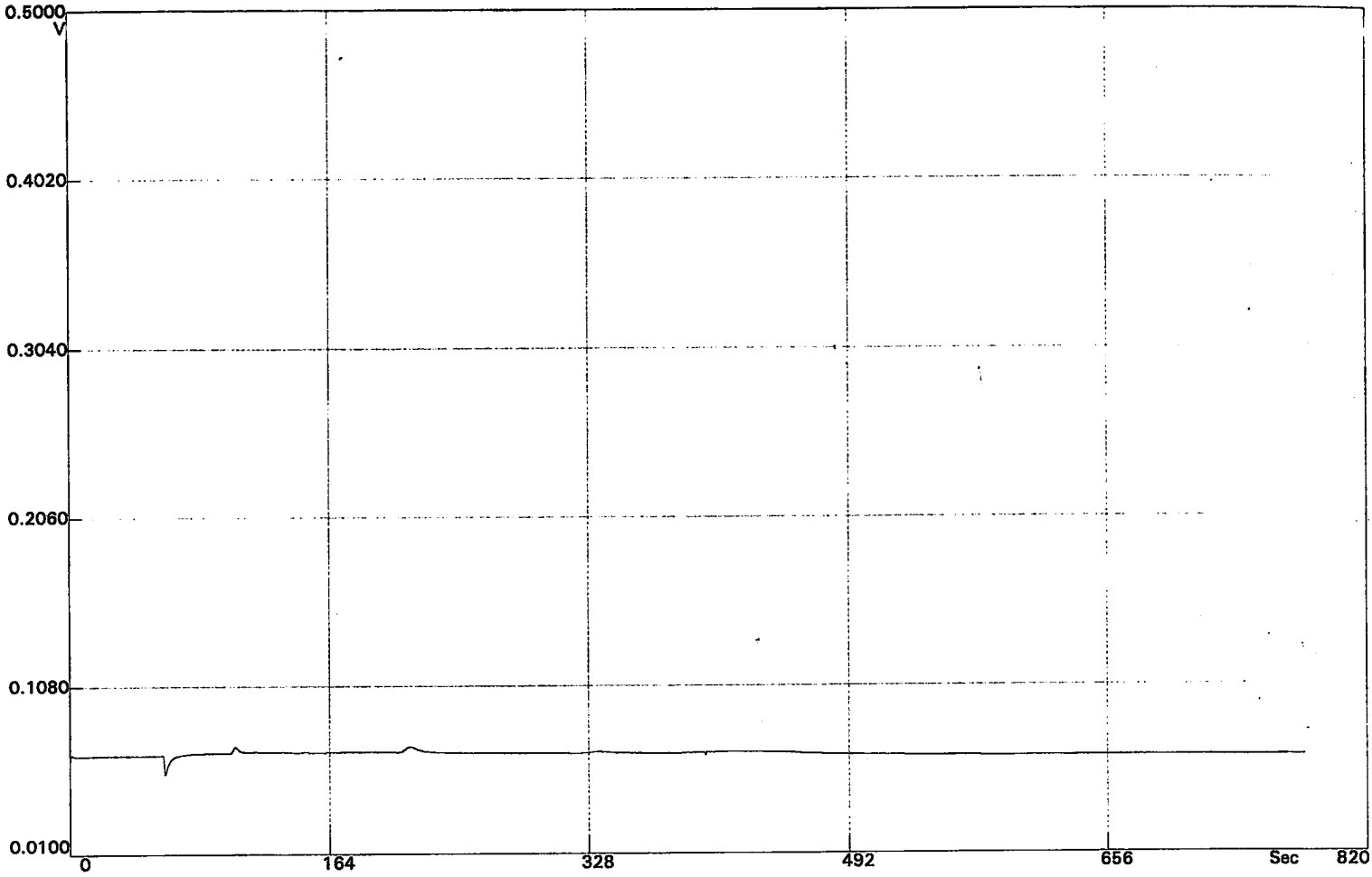
METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration		
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	11:07:35	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	6	
Tag	S-14	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	28.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

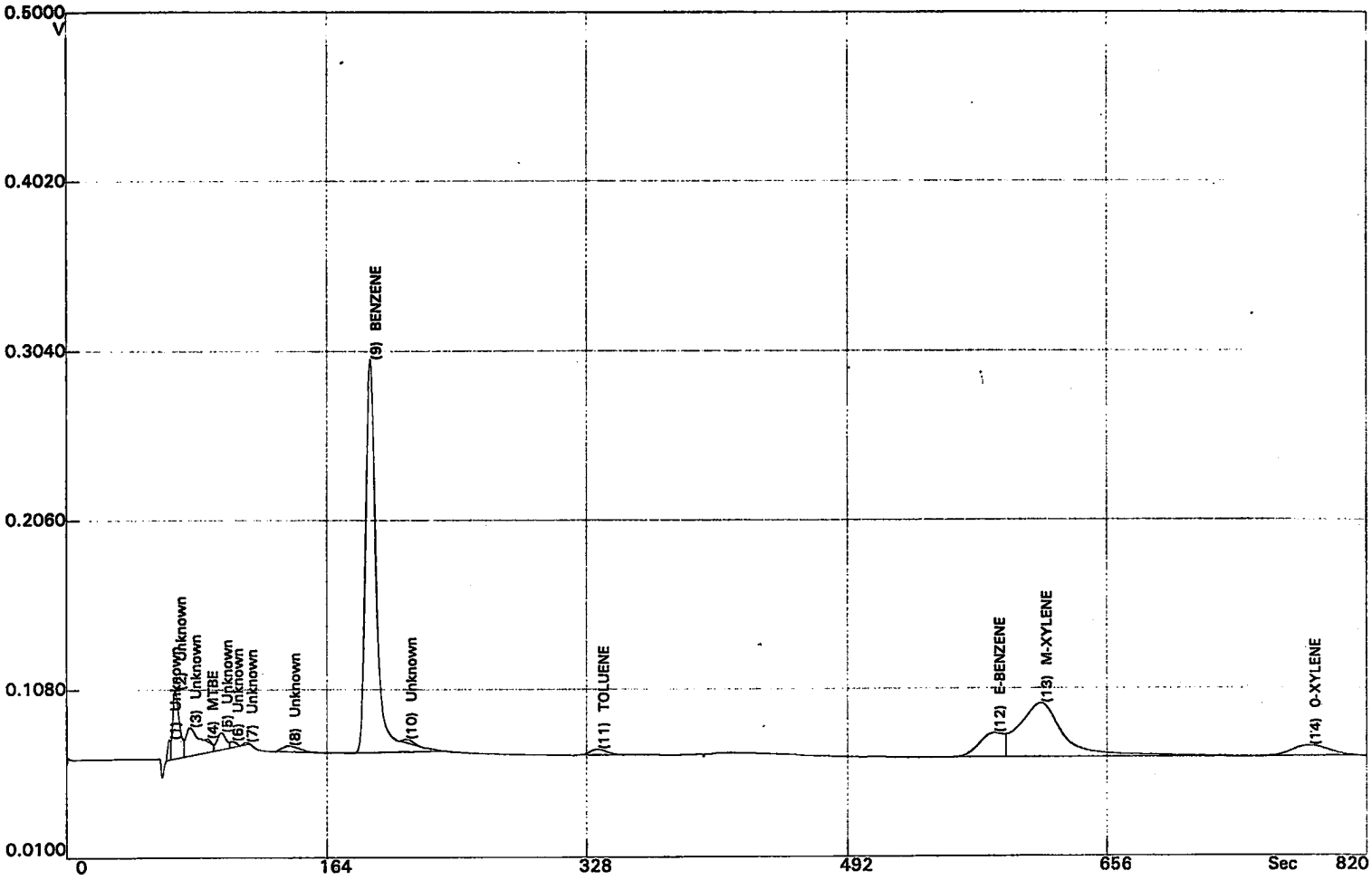
INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/02 11:21

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	11:21:18	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	7	
Tag	S-15	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	27.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.5	mV/S
SlopeDown	0.5	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	63 Sec	

PEAK REPORT:

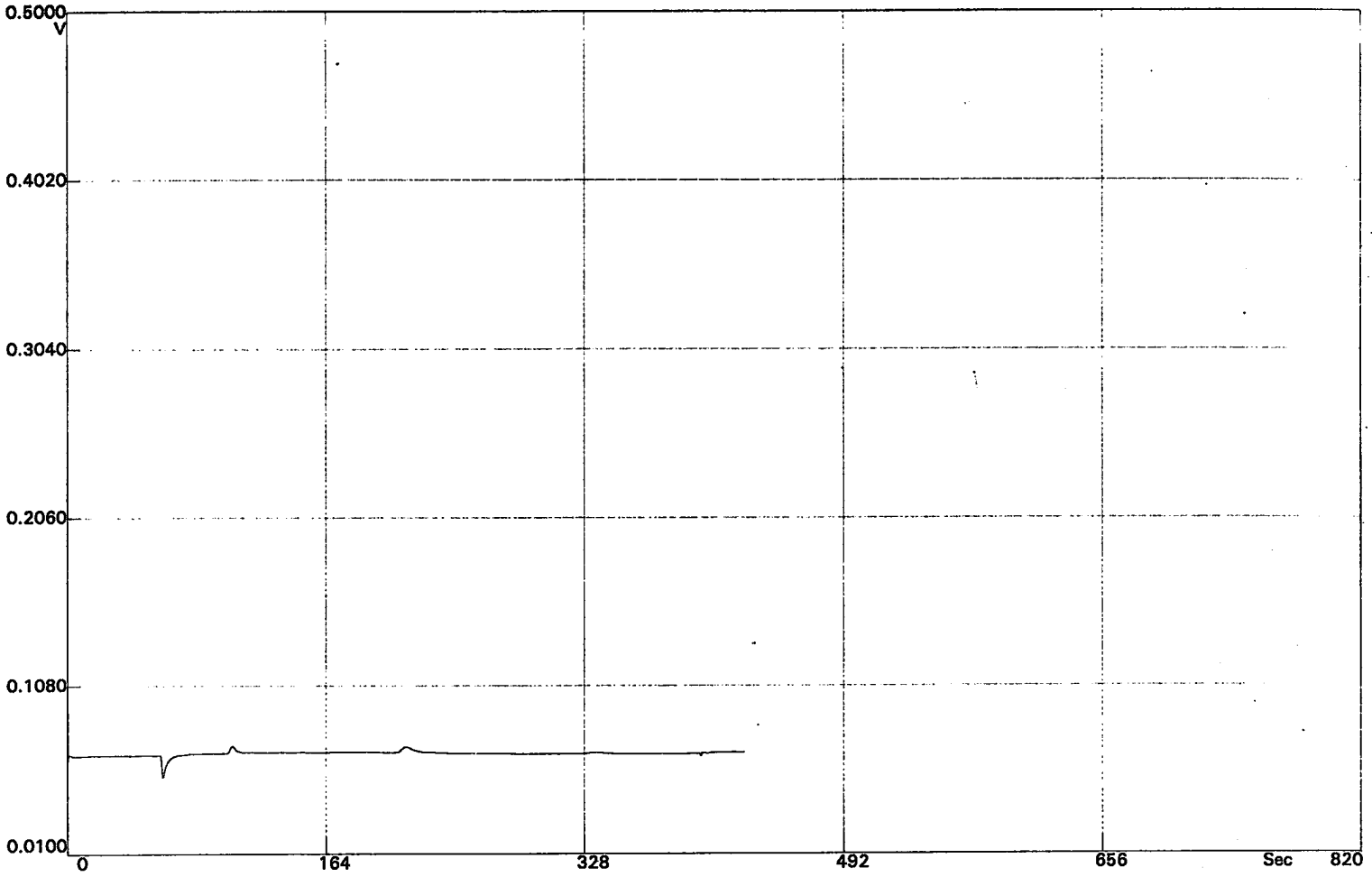
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		22.1	12.9	65.1	
2	Unknown		196	44.7	68.5	
3	Unknown		185	7.116	77.9	
4	MTBE	0.002	4.174	0.496	88.4	
5	Unknown		67.2	6.953	97.6	
6	Unknown		16.6	0.580	104.4	
7	Unknown		5.303	1.701	113.3	

Date: 99/11/02 11:38

SiteChart Analysis Report

8	Unknown		44.7	3.196	140.0
9	BENZENE	0.055	1816	228	191.0
10	Unknown		15.2	1.093	213.0
11	TOLUENE	0.002	40.4	3.353	334.7
12	E-BENZENE	0.010	245	14.1	584.0
13	M-XYLENE	0.050	1029	31.6	613.9
14	O-XYLENE	0.012	163	6.246	783.3

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	11:40:05	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	8	
Tag	BLNK	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	28.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

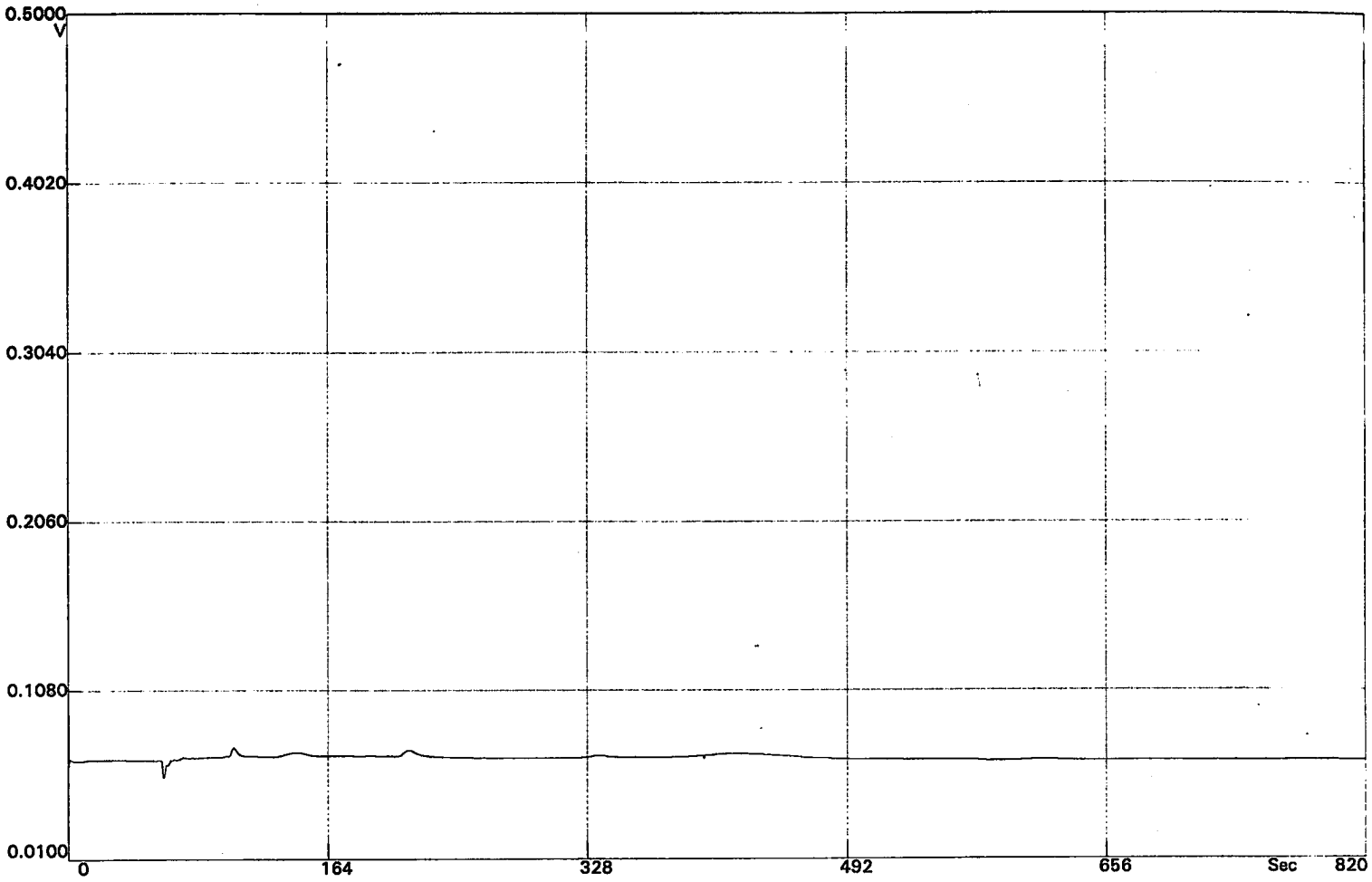
INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/02 11:49

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	11:49:52	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	9	
Tag	S-7	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	28.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

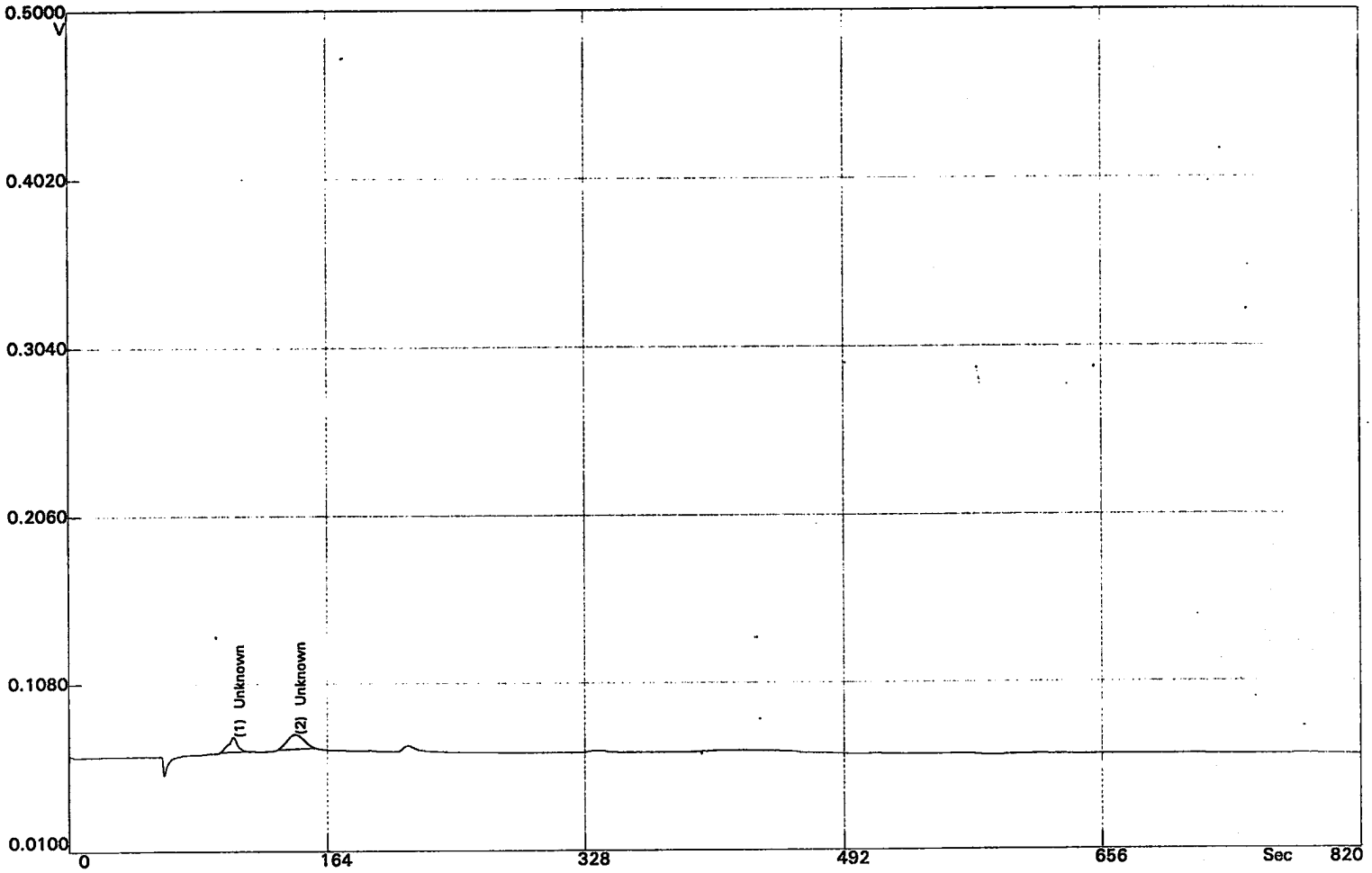
INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/02 12:06

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	12:07:25	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	10	
Tag	S-10	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	27.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

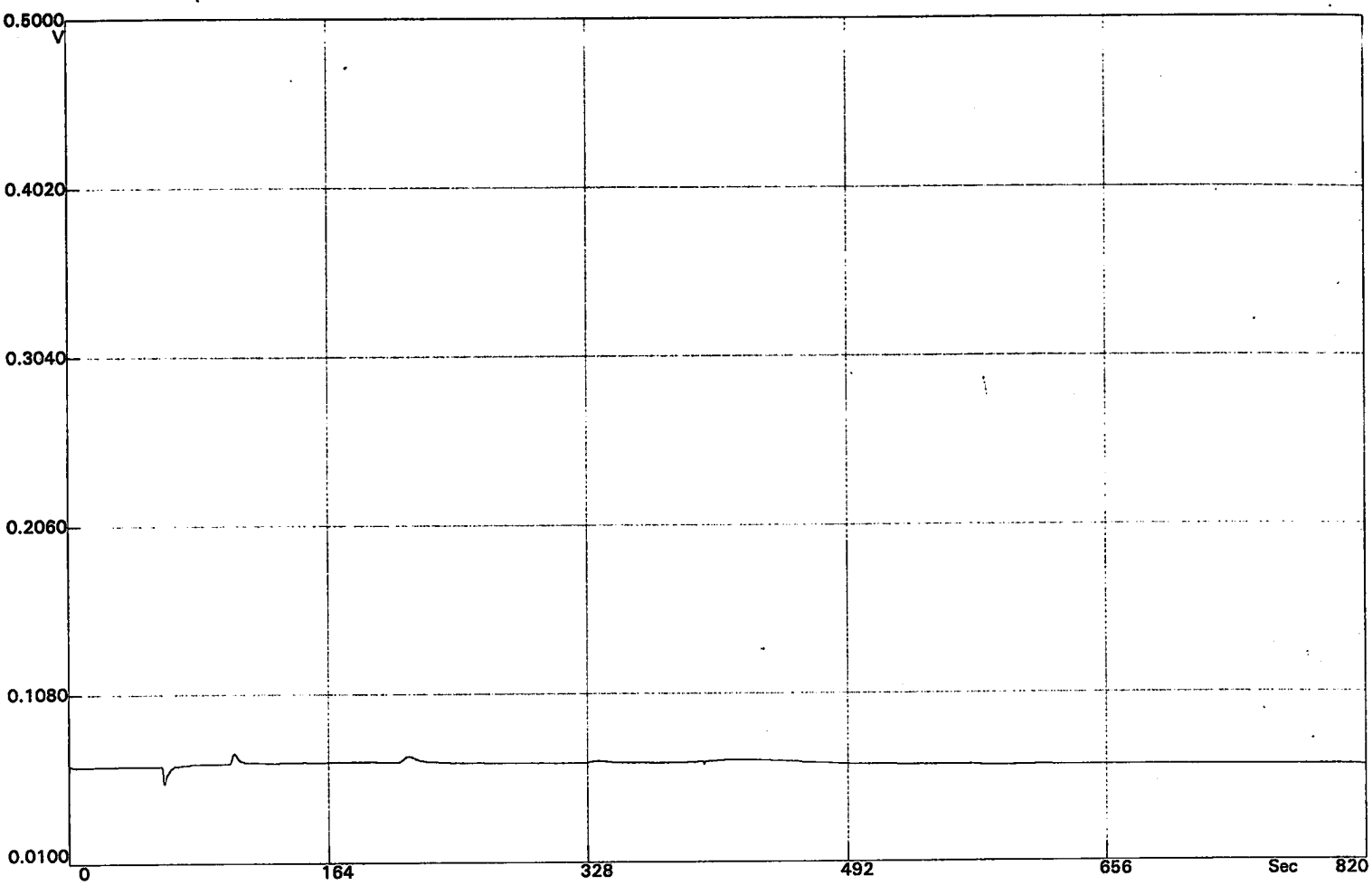
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		62.0	9.430	104.5	
2	Unknown		109	9.234	143.1	

Date: 99/11/02 12:22

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	12:22:20	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	11	
Tag	S-16	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	28.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

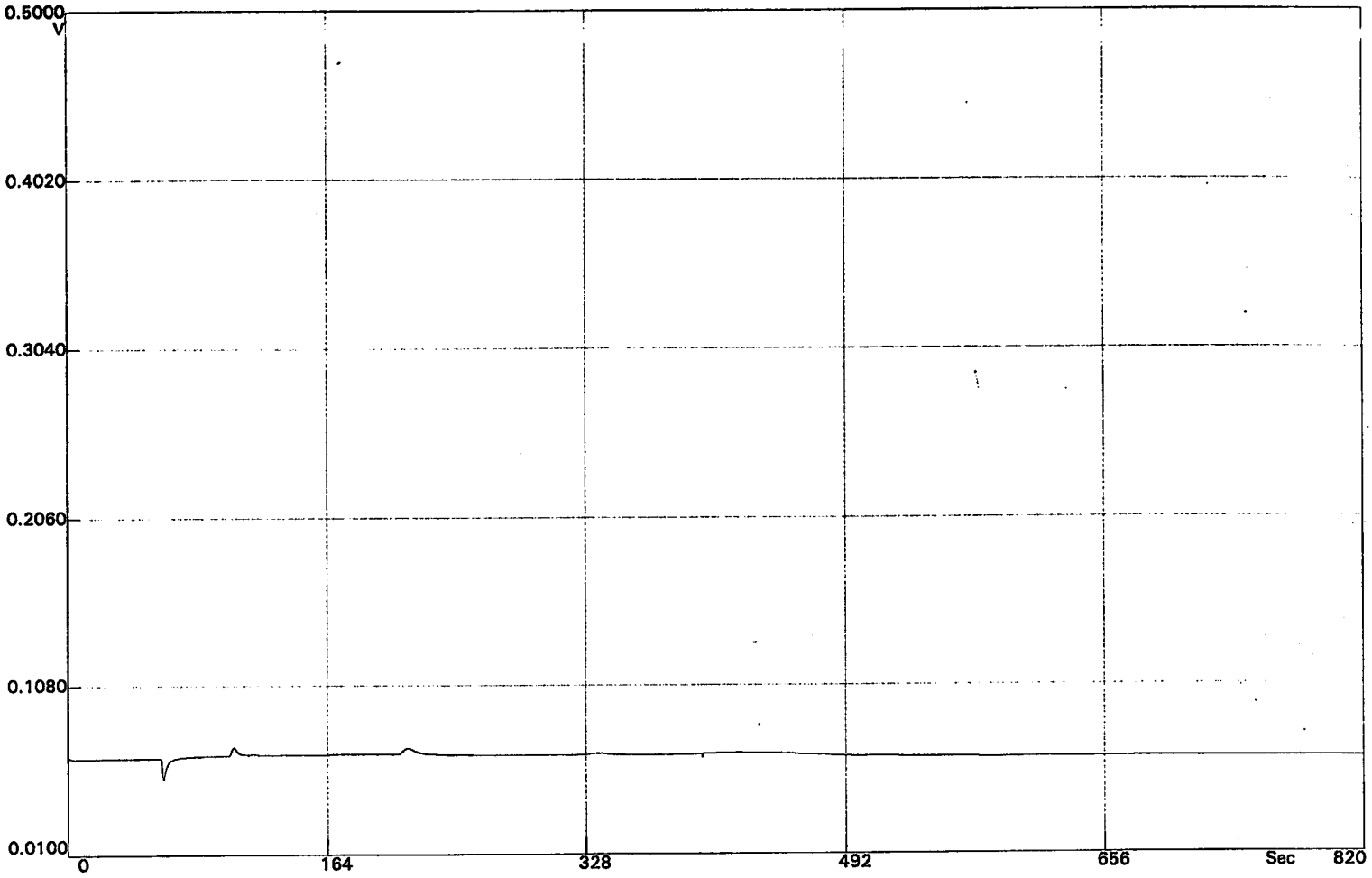
INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/02 12:42

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	12:43:56	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	12	
Tag	SMITH WELL	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	28.0	C

METHOD:

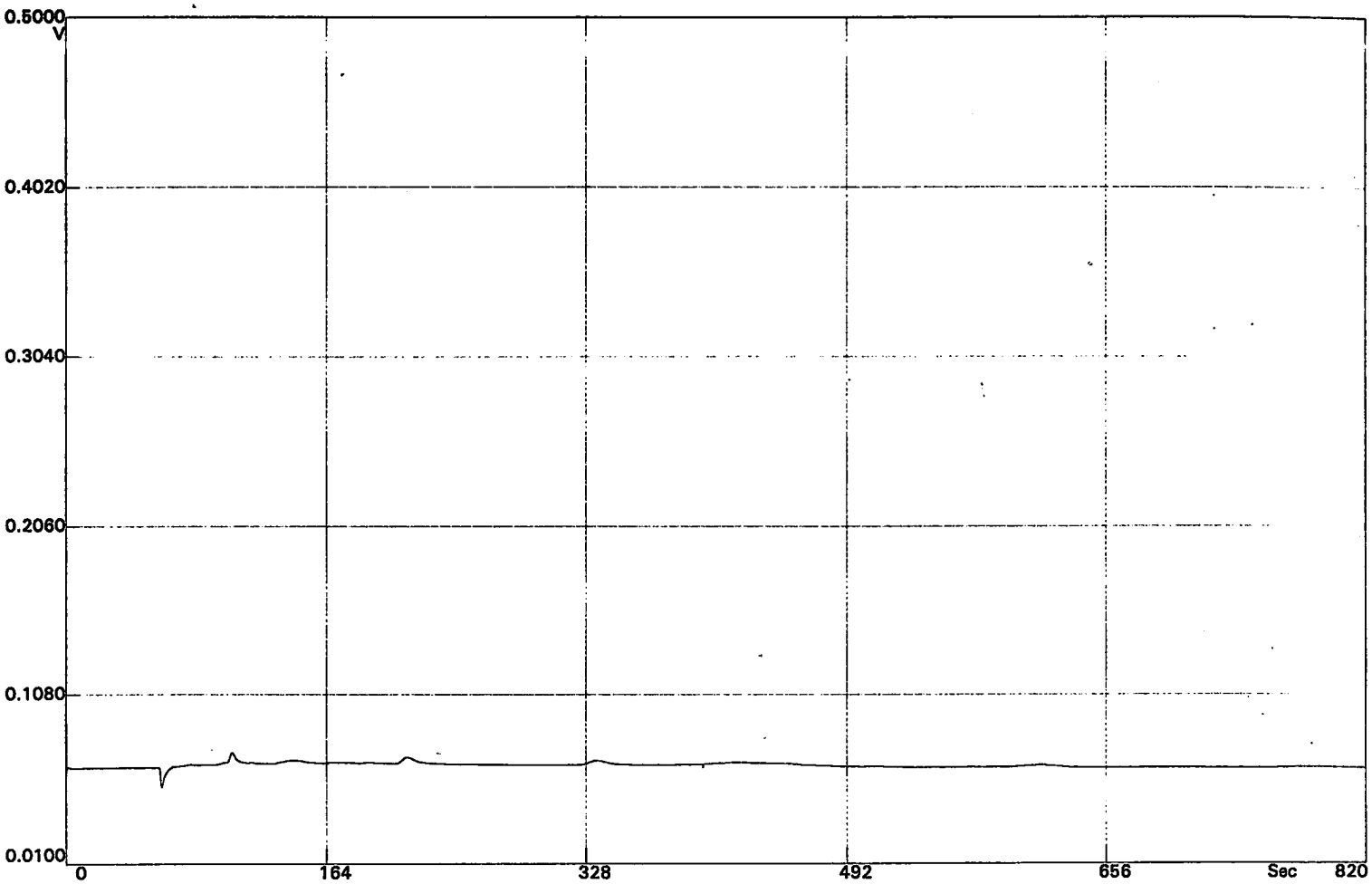
Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration		
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/02 12:58

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	12:58:48	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	13	
Tag	S-9	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	28.0	C

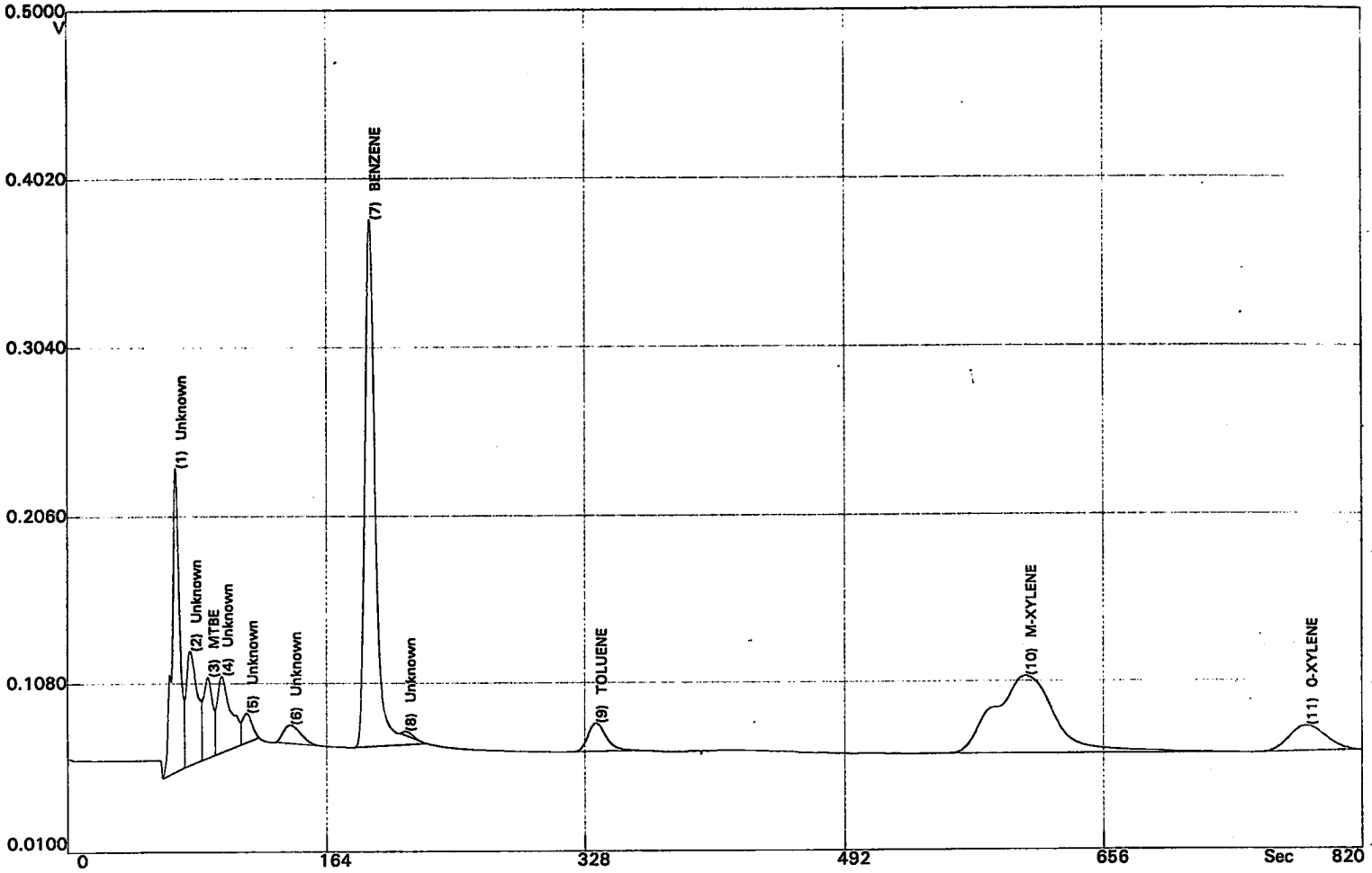
METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration		
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	14:40:30	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	15	
Tag	S-17	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	29.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

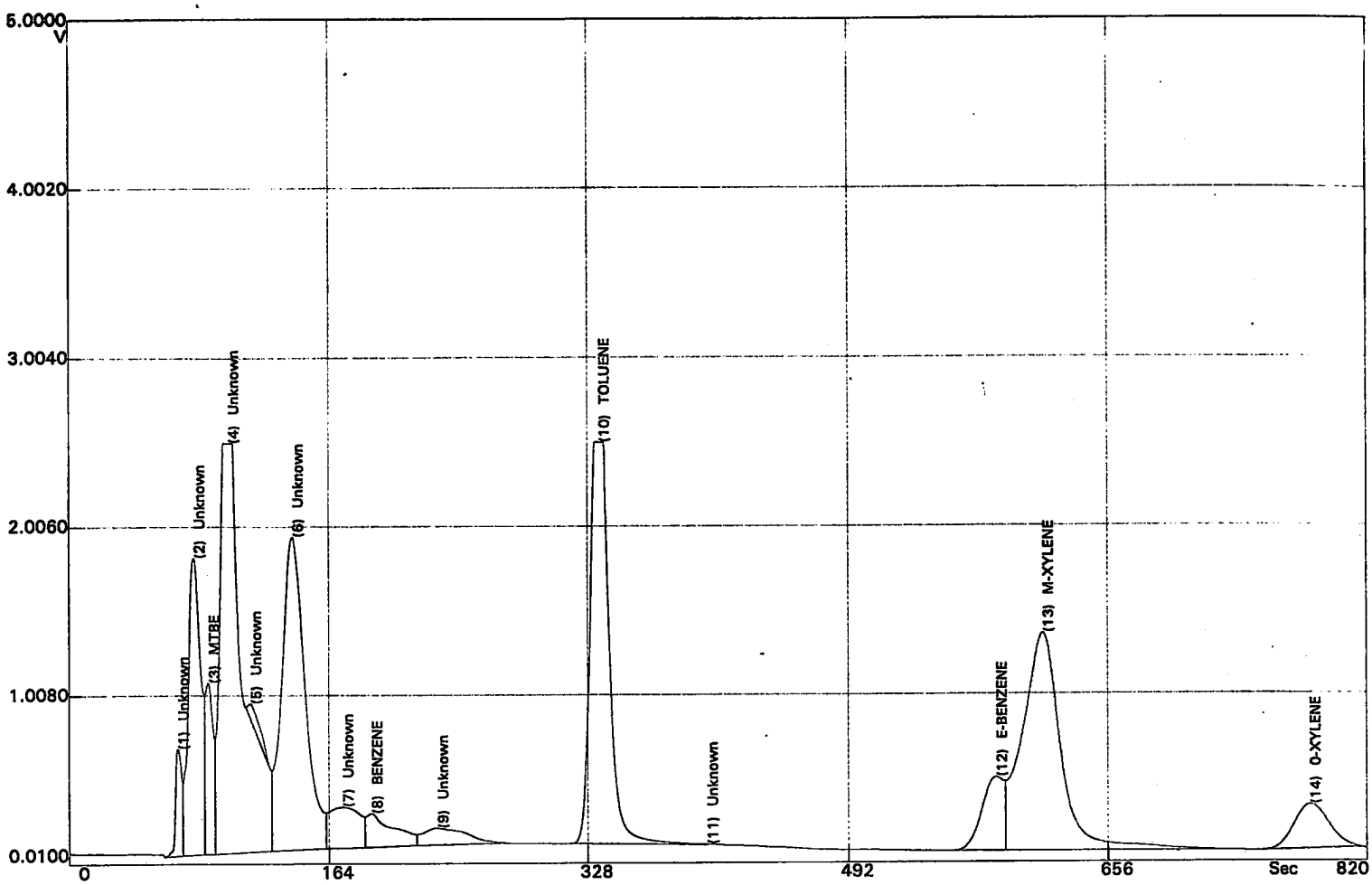
SlopeUp	1.0	mV/S
SlopeDown	1.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	0 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		964	180	68.5	
2	Unknown		545	27.8	77.7	
3	MTBE	0.123	314	13.4	88.9	
4	Unknown		450	19.7	97.7	
5	Unknown		120	4.850	113.5	
6	Unknown		139	10.0	140.7	
7	BENZENE	0.070	2342	307	191.2	

Date: 99/11/02 14:56

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	15:19:46	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	21	
Tag	S-8 10%	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	30.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	5.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	60 Sec	

PEAK REPORT:

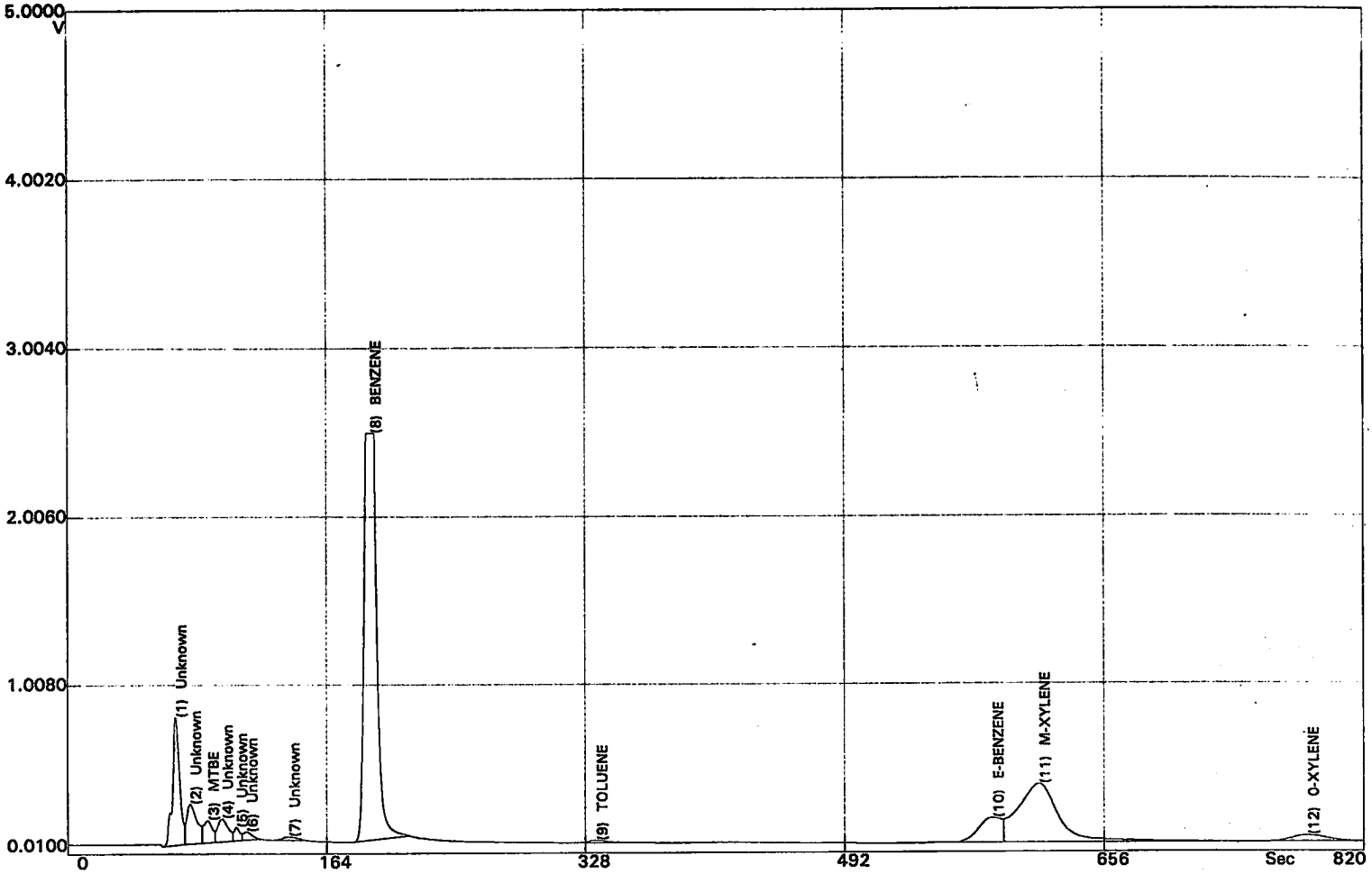
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		2864	636	68.8	
2	Unknown		15917	1765	78.8	
3	MTBE	2.286	5852	69.8	87.9	
4	Unknown		52921	1785	100.4	
5	Unknown		978	18.3	114.5	
6	Unknown		31651	1384	140.9	
7	Unknown		5528	32.8	172.2	

Date: 99/11/02 15:35

SiteChart Analysis Report

8	BENZENE	0.123	4084	19.2	190.6
9	Unknown		3279	37.0	232.0
10	TOLUENE	1.388	37012	2391	334.7
11	Unknown		5.126	1.578	402.3
12	E-BENZENE	0.288	6939	435	584.5
13	M-XYLENE	1.785	37043	1292	614.4
14	O-XYLENE	0.489	6606	270	783.3

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	15:35:47	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	22	
Tag	S-18	10%
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	30.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

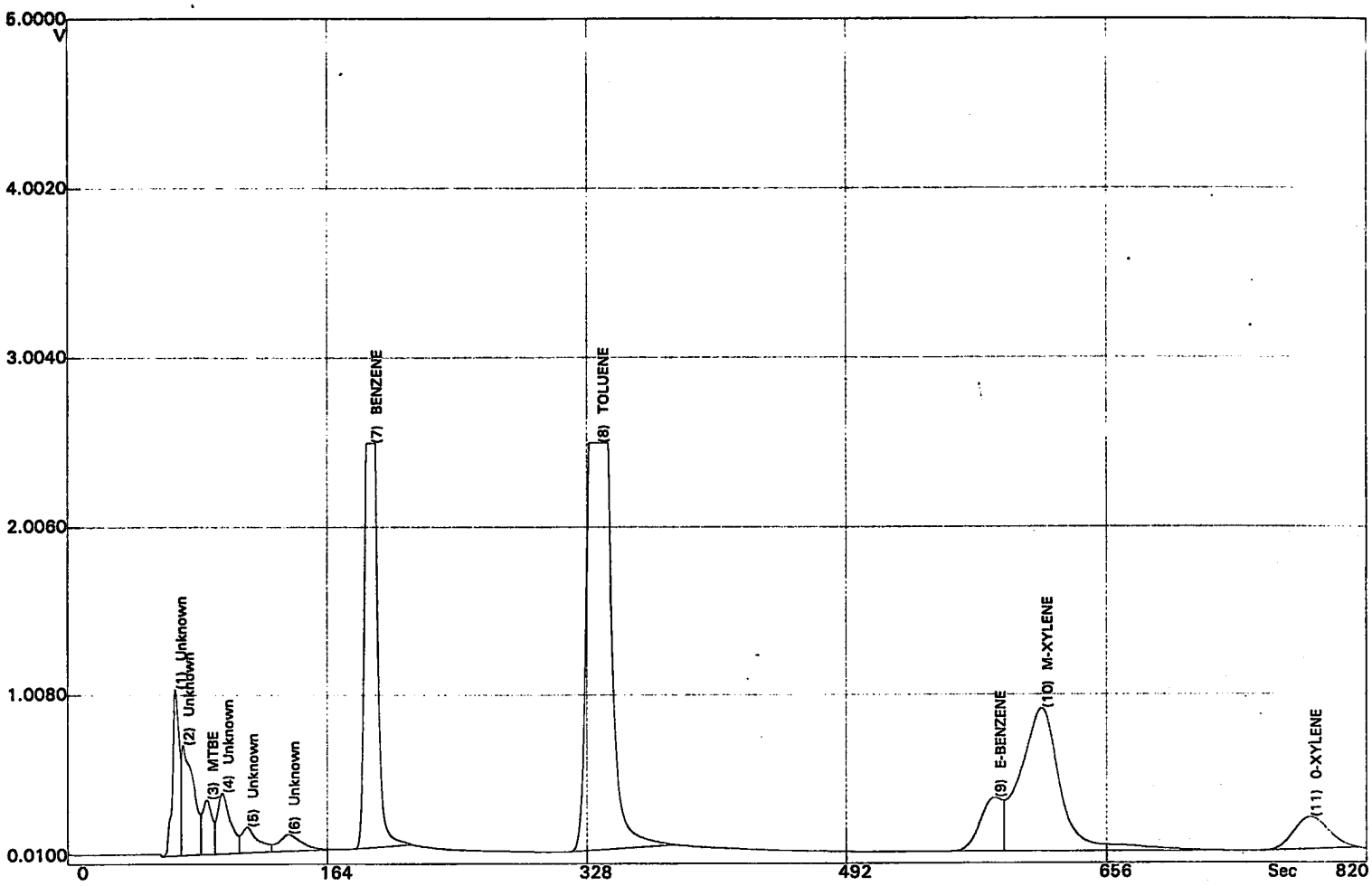
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	60 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		3865	758	68.5	
2	Unknown		1824	115	77.6	
3	MTBE	0.334	855	31.4	88.8	
4	Unknown		1099	74.0	97.7	
5	Unknown		345	29.2	107.1	
6	Unknown		330	8.494	113.3	
7	Unknown		238	19.8	139.9	

Date: 99/11/02 15:56

SiteChart Analysis Report - B9110223.PID



RESULTS:

Date	Nov 02, 1999	
Time	16:02:20	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	23	
Tag	S-19 10%	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	30.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

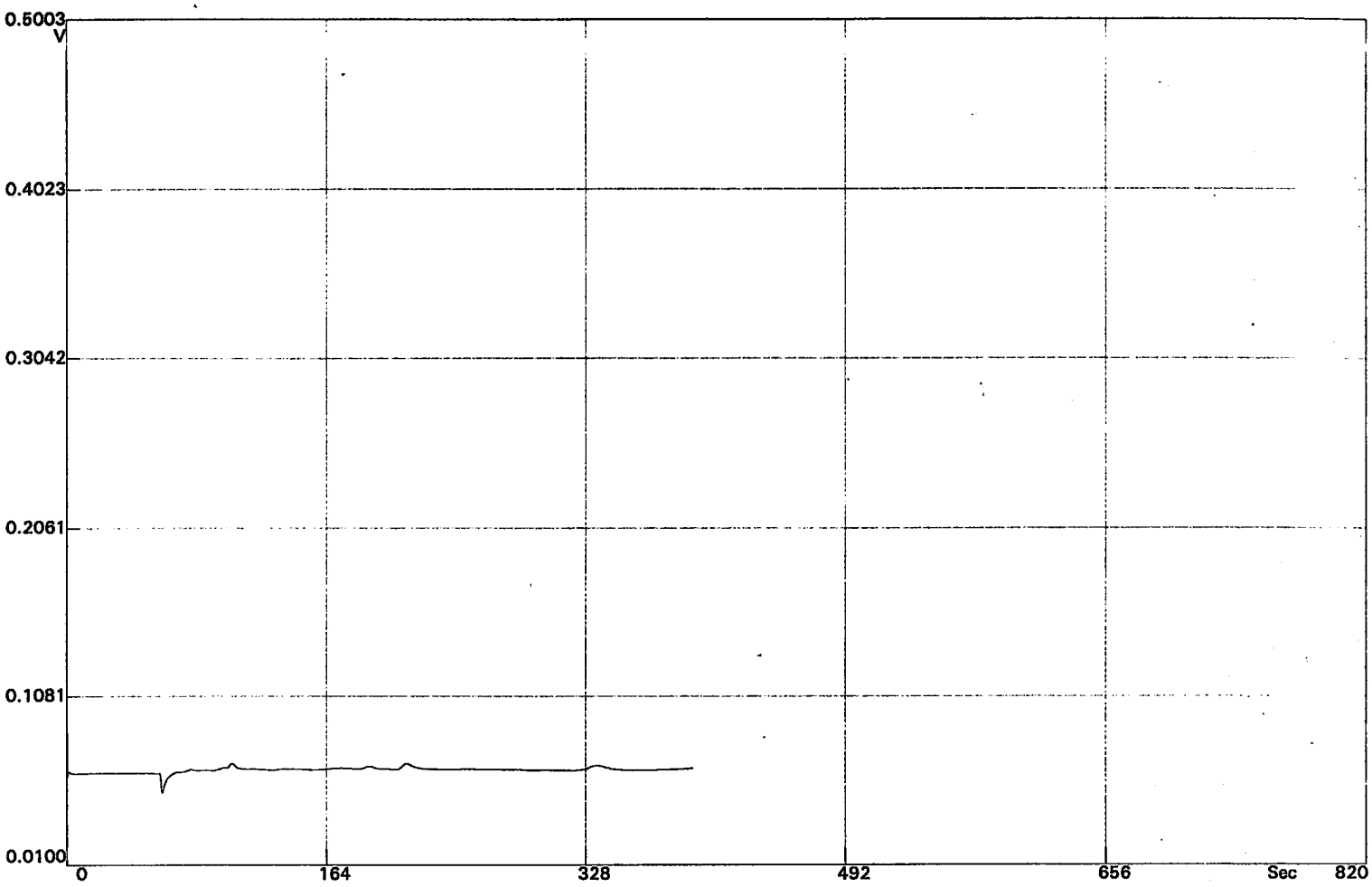
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	60 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		4899	988	68.4	
2	Unknown		5697	69.0	73.2	
3	MTBE	0.917	2346	84.0	88.1	
4	Unknown		3571	172	97.9	
5	Unknown		1899	49.7	113.6	
6	Unknown		1793	58.9	139.6	
7	BENZENE	0.984	32786	2427	191.6	

Date: 99/11/02 16:24

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	16:21:30	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	24	
Tag	~~S-19~~ Blank	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	30.0	C

METHOD:

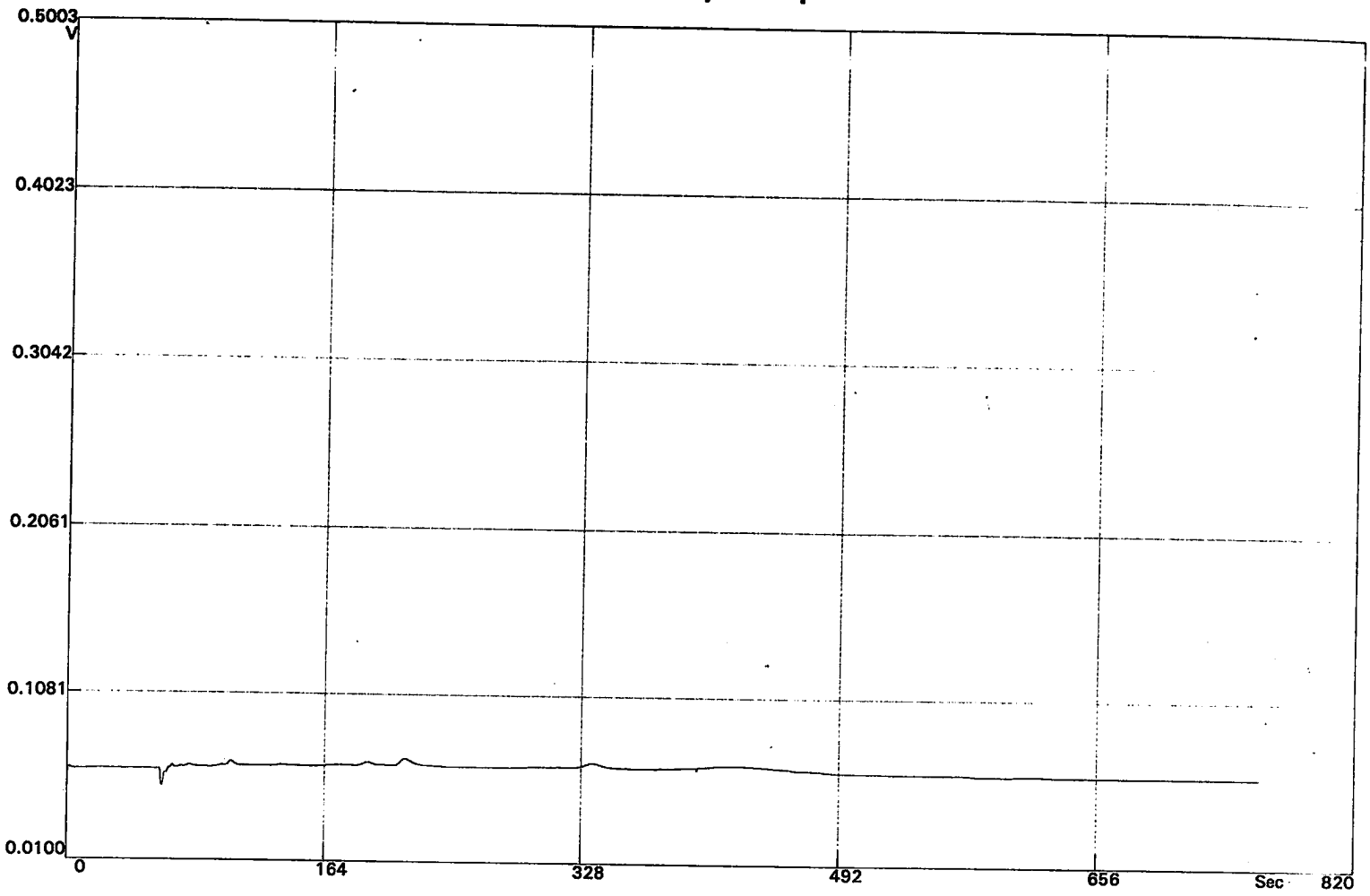
Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	16:29:42	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	25	
Tag	S-21	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	30.0	C

METHOD:

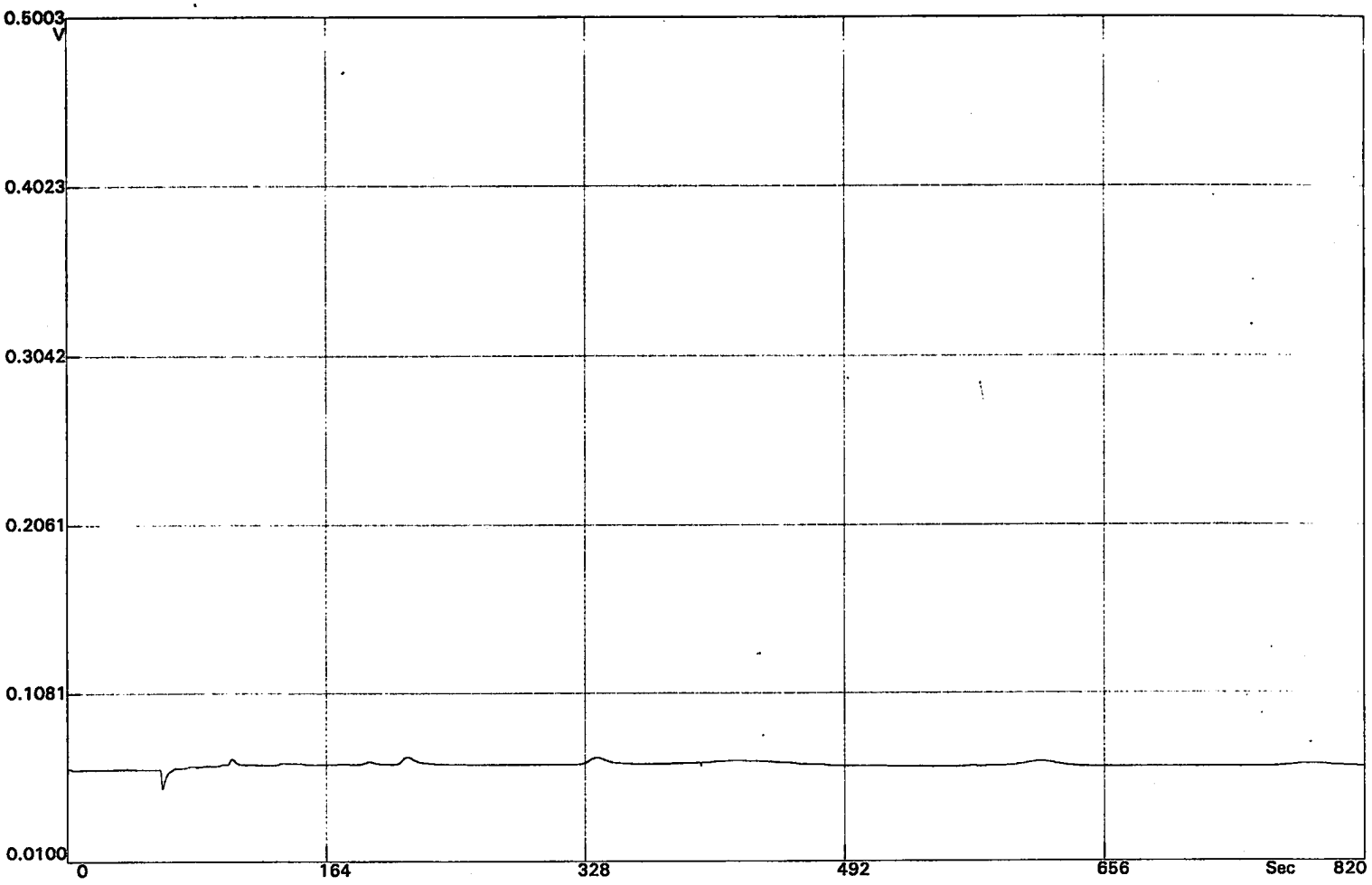
Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999
Time	16:43:03
Instrument	FGGK301
Detector	PID
Column	B
Analysis#	26
Tag	VIC WELL
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	29.0 C

METHOD:

Analysis Time	820.0 S
PumpTime	10.0 S
Back Flush	400.0 S
Temperature	60.0 C
Pressure	12.0 psi
Inject	Syringe, 50.0 uL
PID State	High Sense

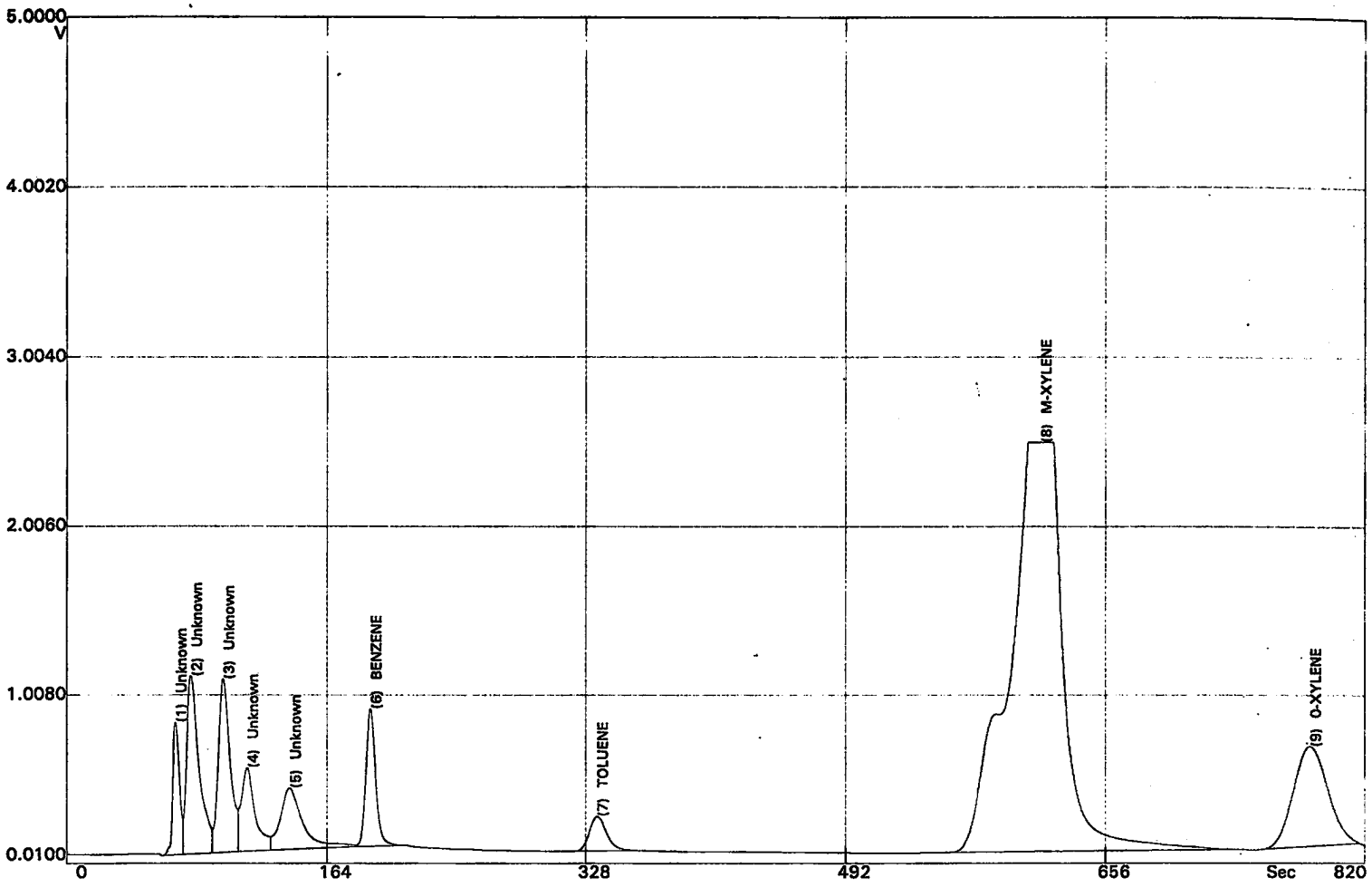
INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0 mV/S
SlopeDown	10.0 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	68 Sec

Date: 99/11/02 17:09

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999
Time	17:13:15
Instrument	FGGK301
Detector	PID
Column	B
Analysis#	27
Tag	[redacted]-20
Column Temp	59.0 C
Det Temp	59.0 C
Ambient Temp	28.0 C

METHOD:

Analysis Time	820.0 S
PumpTime	10.0 S
Back Flush	400.0 S
Temperature	60.0 C
Pressure	12.0 psi
Inject	Syringe, 50.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

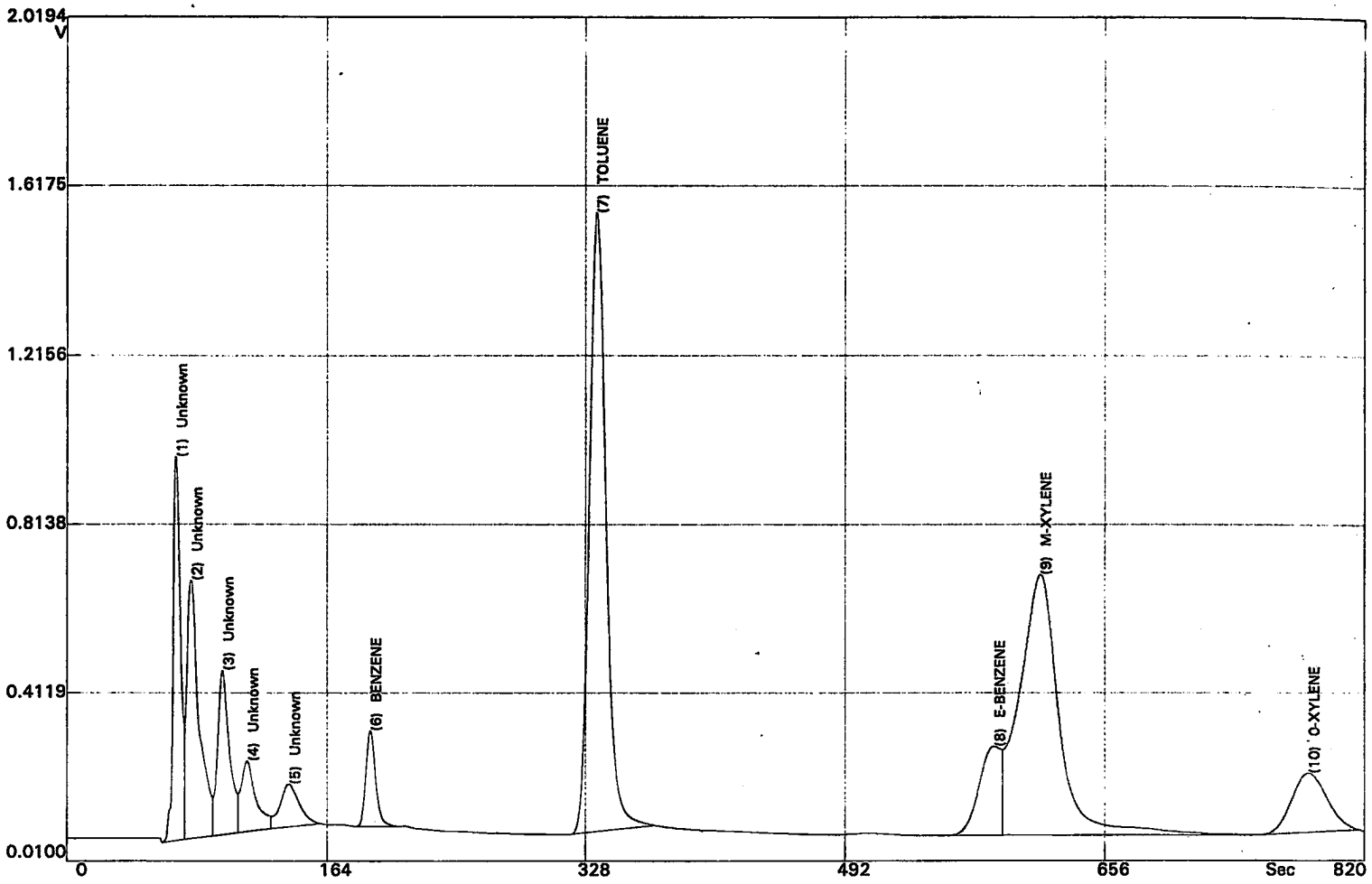
SlopeUp	1.0 mV/S
SlopeDown	10.0 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	60 Sec

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		3796	790	68.8	
2	Unknown		9532	1059	78.3	
3	Unknown		8955	887	98.5	
4	Unknown		5093	247	113.7	
5	Unknown		5916	288	140.4	
6	BENZENE	0.175	5835	806	191.4	
7	TOLUENE	0.099	2629	207	334.7	

Date: 99/11/02 17:32

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	17:33:32	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	28	
Tag	MW-1	10%
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	28.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

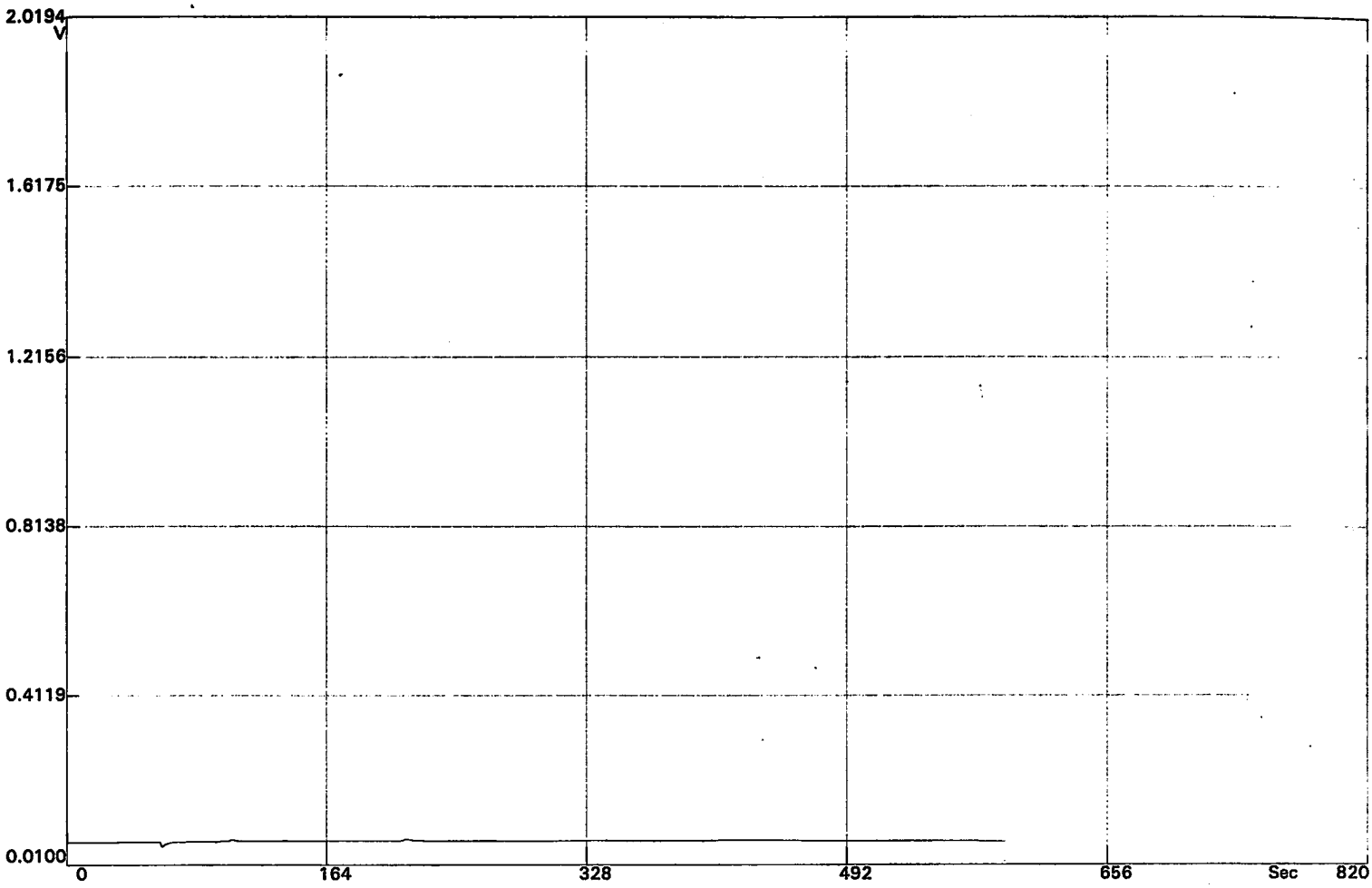
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	60 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		4872	921	68.7	
2	Unknown		5585	338	78.3	
3	Unknown		3445	303	98.0	
4	Unknown		1882	78.5	113.7	
5	Unknown		1440	77.2	140.0	
6	BENZENE	0.049	1643	229	191.2	
7	TOLUENE	0.672	17907	1480	334.7	

Date: 99/11/02 17:53

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	17:54:47	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	29	
Tag	BLNK	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	28.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

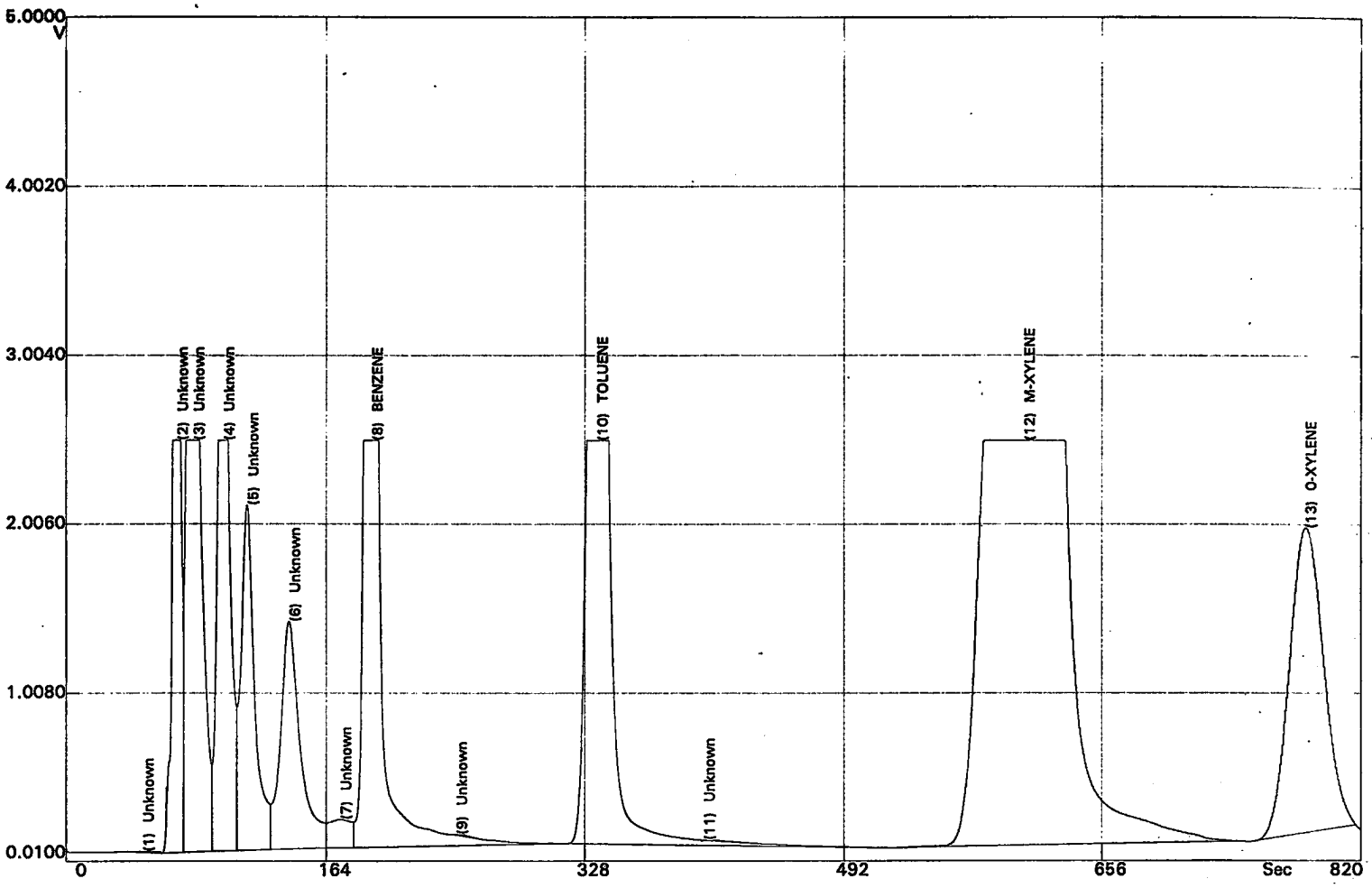
INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/02 18:05

SiteChart Analysis Report



RESULTS:

Date	Nov 02, 1999	
Time	18:06:42	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	30	
Tag	S-22	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	28.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	0.1	mV/S
SlopeDown	0.1	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	0 Sec	

PEAK REPORT:

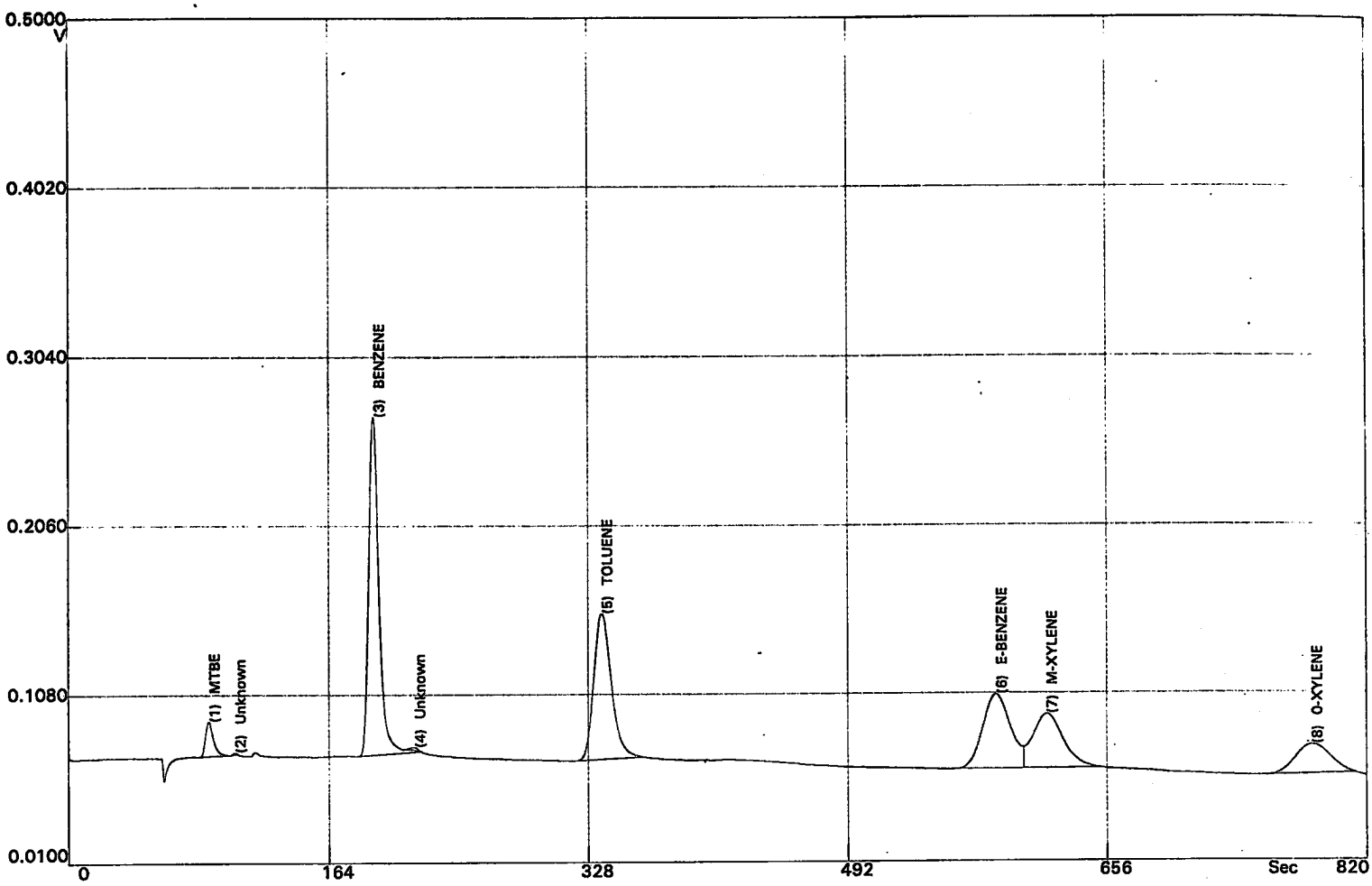
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		126	2.652	48.3	
2	Unknown		24028	2476	69.7	
3	Unknown		62694	896	79.9	
4	Unknown		39741	1954	98.9	
5	Unknown		20574	1183	114.1	
6	Unknown		19448	1085	140.4	
7	Unknown		2729	20.7	172.4	

Date: 99/11/02 18:22

SiteChart Analysis Report

8	BENZENE	2.064	68770	2300	192.2
9	Unknown		85.7	0.294	245.9
10	TOLUENE	2.946	78550	2426	334.9
11	Unknown		68.8	1.779	402.3
12	M-XYLENE	12.8	265888	2496	605.9
13	O-XYLENE	3.285	44390	1851	784.0

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999	
Time	10:22:15	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	2	
Tag	STND	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	27.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

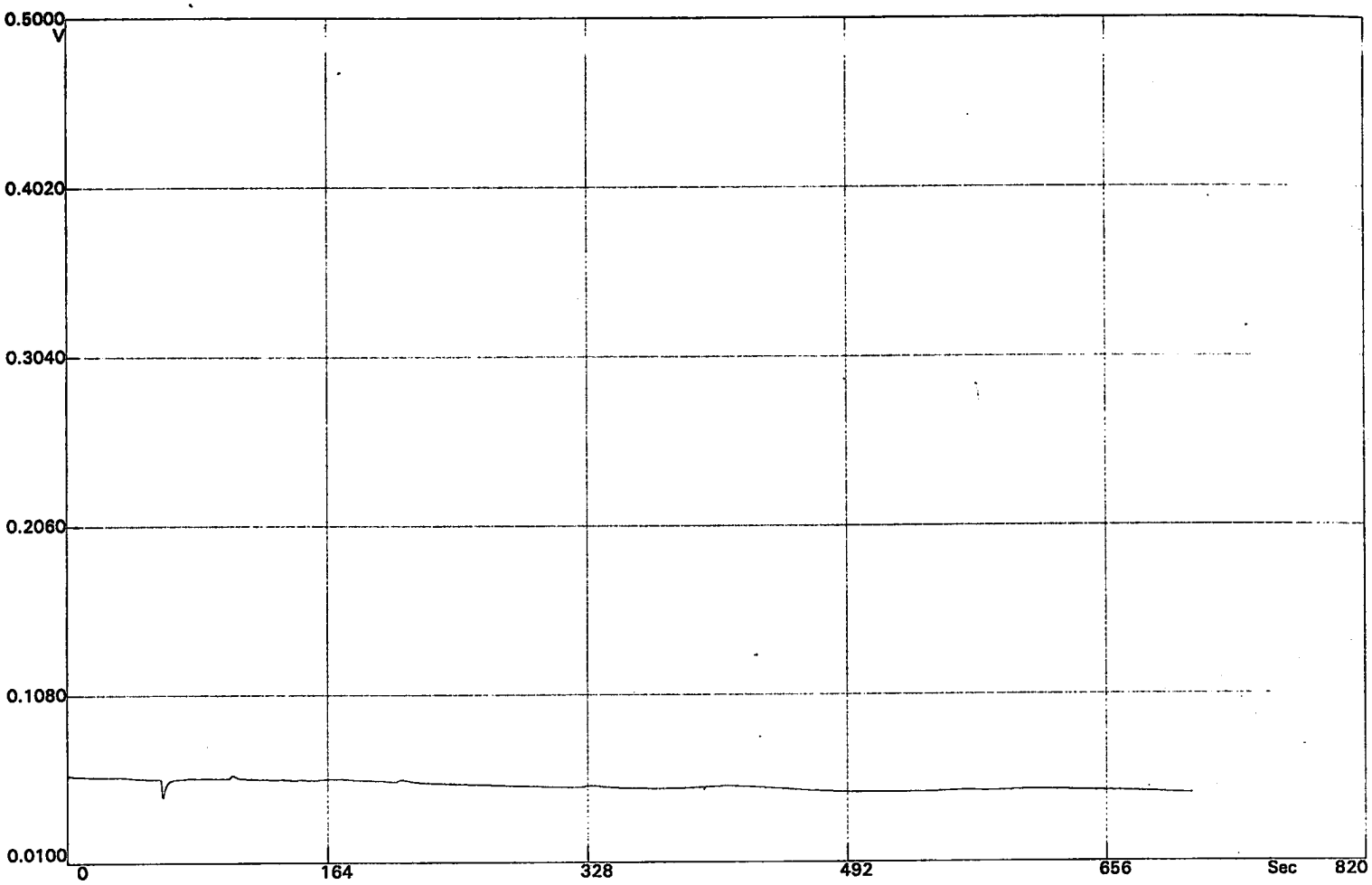
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	MTBE	0.050	119	20.5	88.3	Cal
2	Unknown		1.855	1.450	104.8	
3	BENZENE	0.050	1467	197	192.0	Cal
4	Unknown		9.090	1.290	217.4	
5	TOLUENE	0.050	1086	85.4	336.0	Cal
6	E-BENZENE	0.050	883	43.6	585.1	Cal
7	M-XYLENE	0.050	710	19.2	617.1	Cal

Date: 99/11/04 10:43

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999	
Time	09:51:44	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	3	
Tag	BLNK	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	23.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

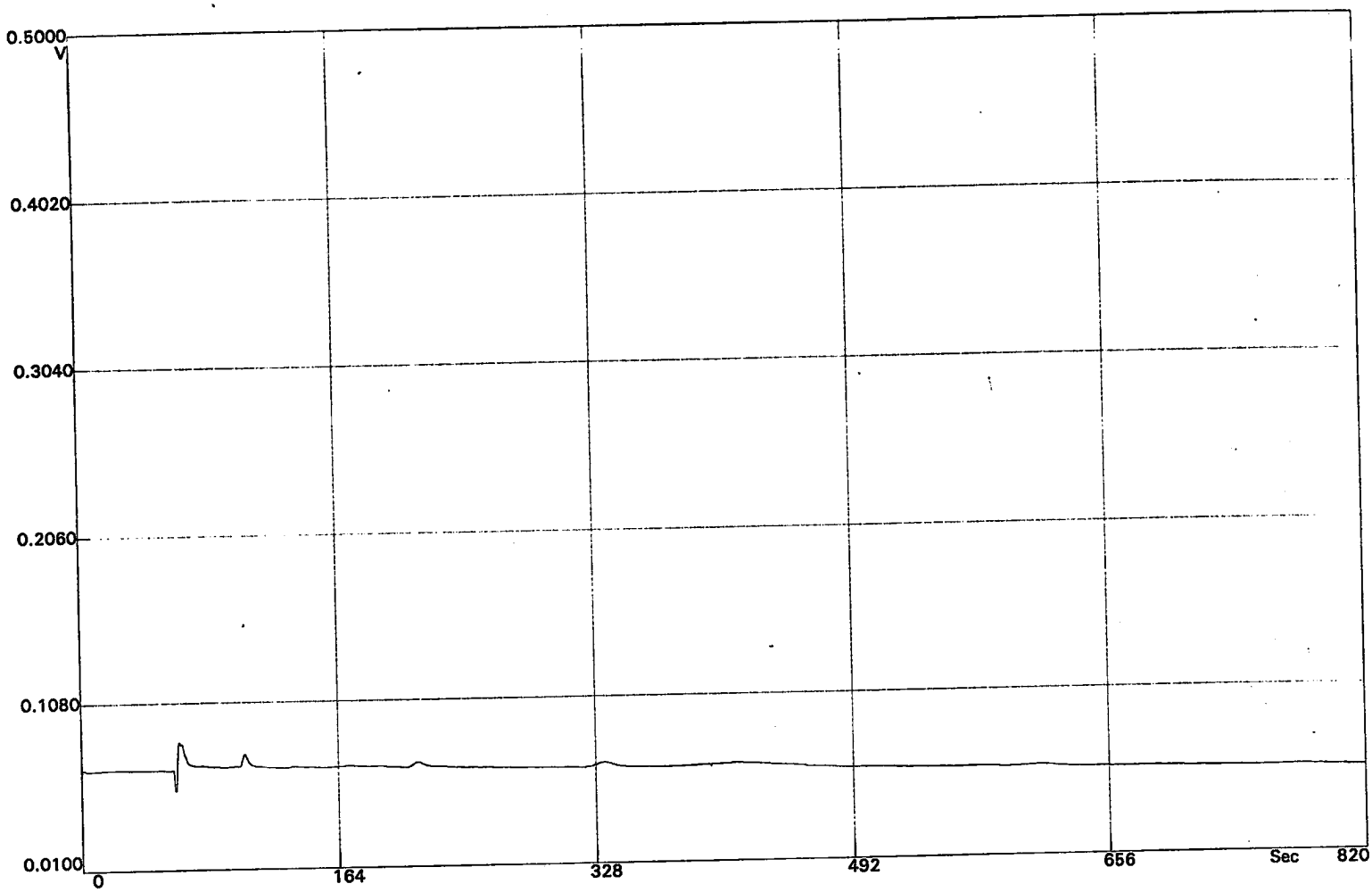
INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/04 10:04

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999
Time	10:44:39
Instrument	FGGK301
Detector	PID
Column	B
Analysis#	3
Tag	S-29
Column Temp	59.0 C
Det Temp	59.0 C
Ambient Temp	29.0 C

METHOD:

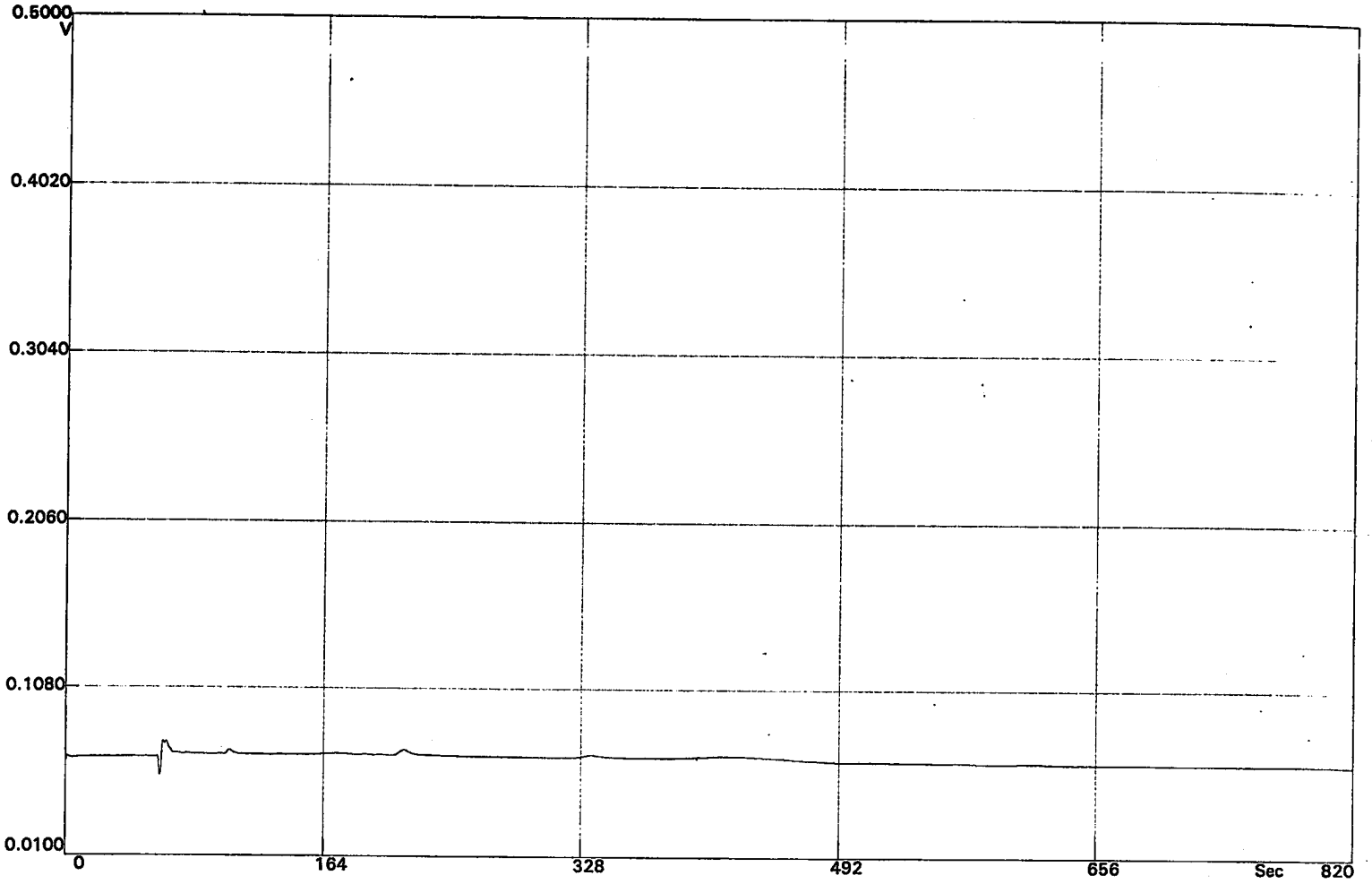
Analysis Time	820.0 S
PumpTime	10.0 S
Back Flush	400.0 S
Temperature	60.0 C
Pressure	12.0 psi
Inject	Syringe, 50.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0 mV/S
SlopeDown	10.0 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	68 Sec

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999	
Time	10:59:17	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	4	
Tag	S-23	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	30.0	C

METHOD:

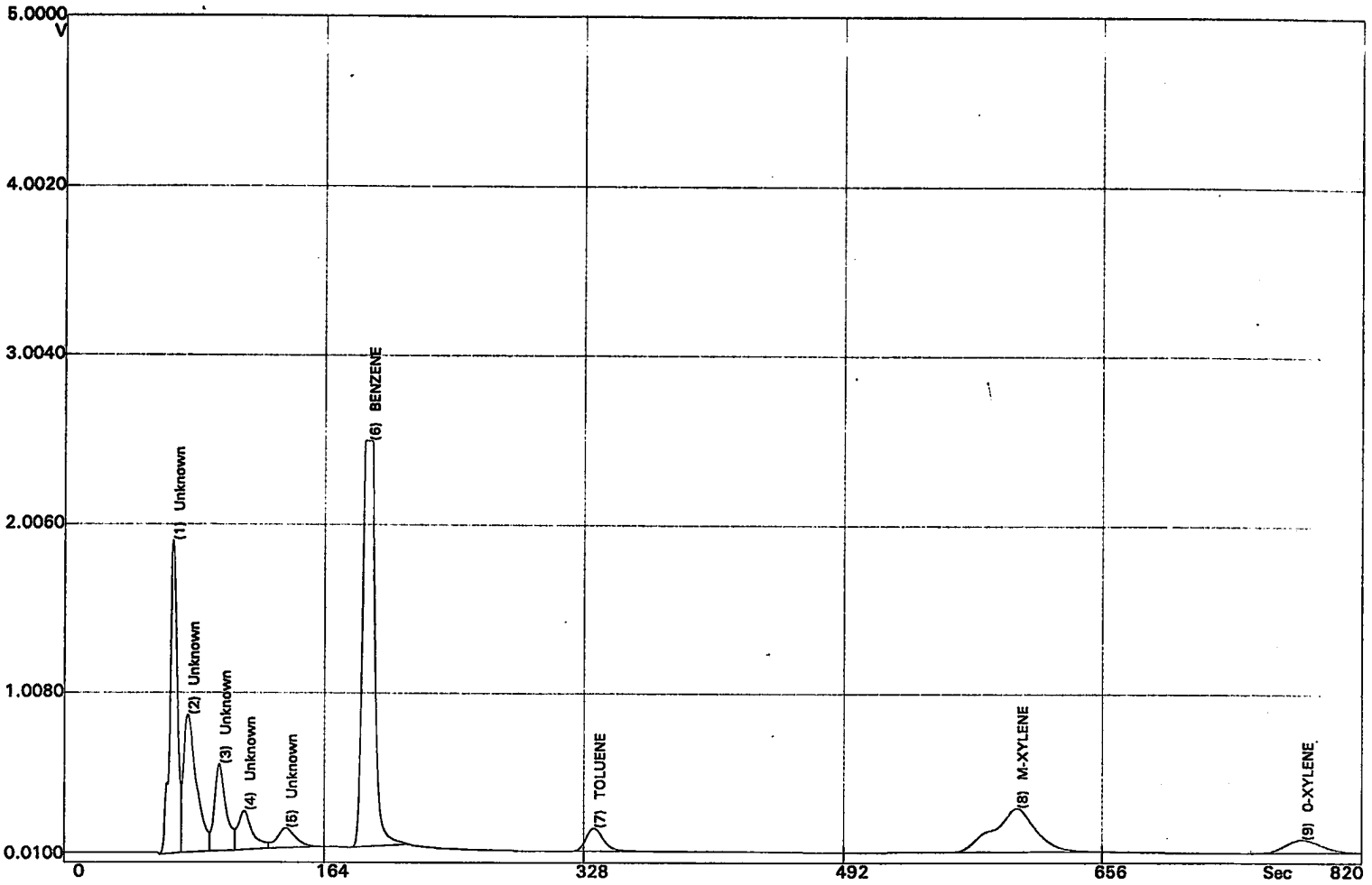
Analysis.Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration		
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/04 11:13

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999	
Time	11:13:51	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	5	
Tag	S-25	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	29.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

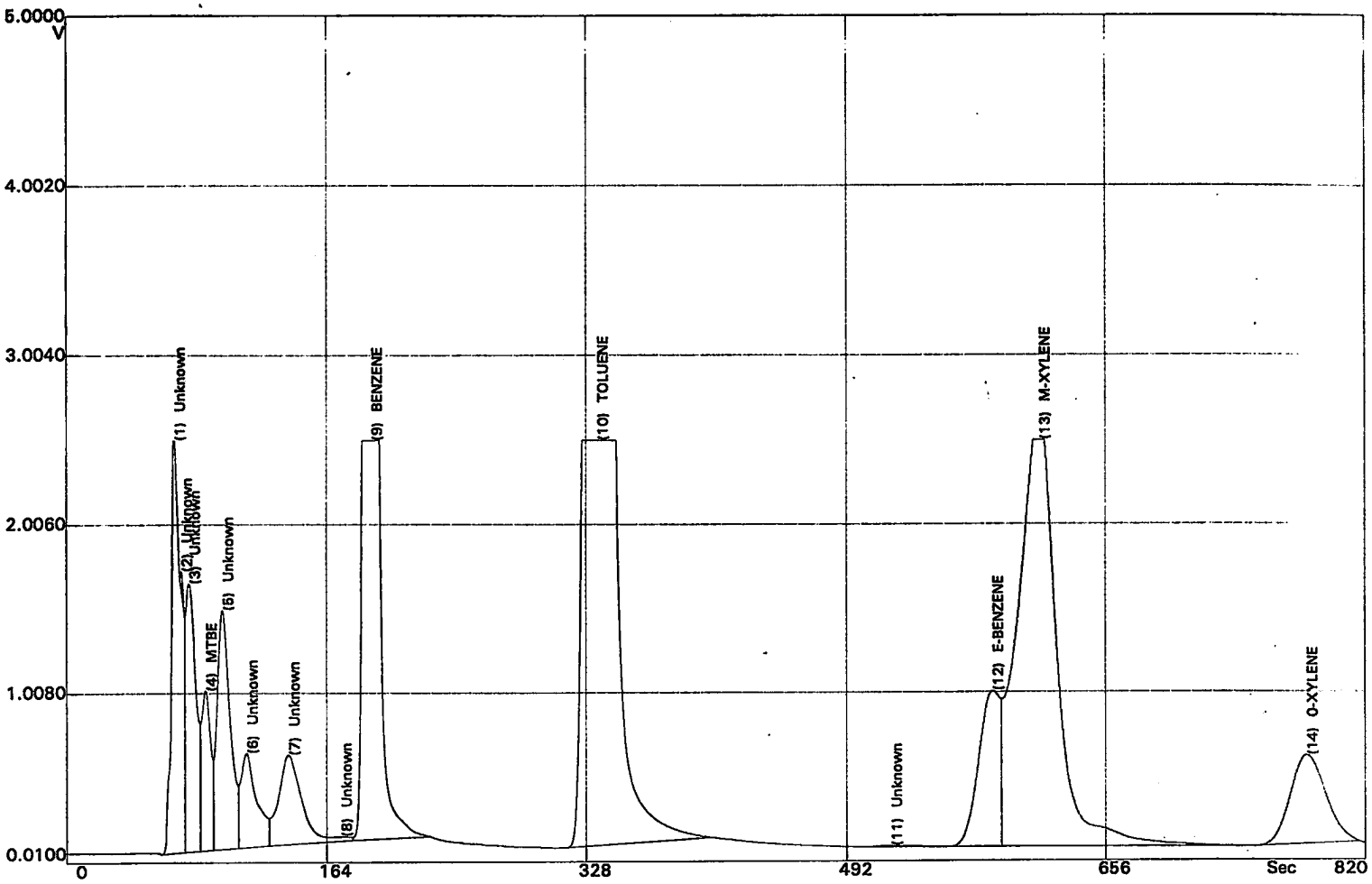
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	60 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		10167	1851	68.5	
2	Unknown		7678	413	78.0	
3	Unknown		4289	401	97.7	
4	Unknown		2446	108	113.5	
5	Unknown		1565	87.9	139.6	
6	BENZENE	0.957	28083	2422	191.2	
7	TOLUENE	0.079	1713	135	333.9	

Date: 99/11/04 11:29

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999	
Time	11:32:37	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	6	
Tag	S-24 10%	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	29.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	50 Sec	

PEAK REPORT:

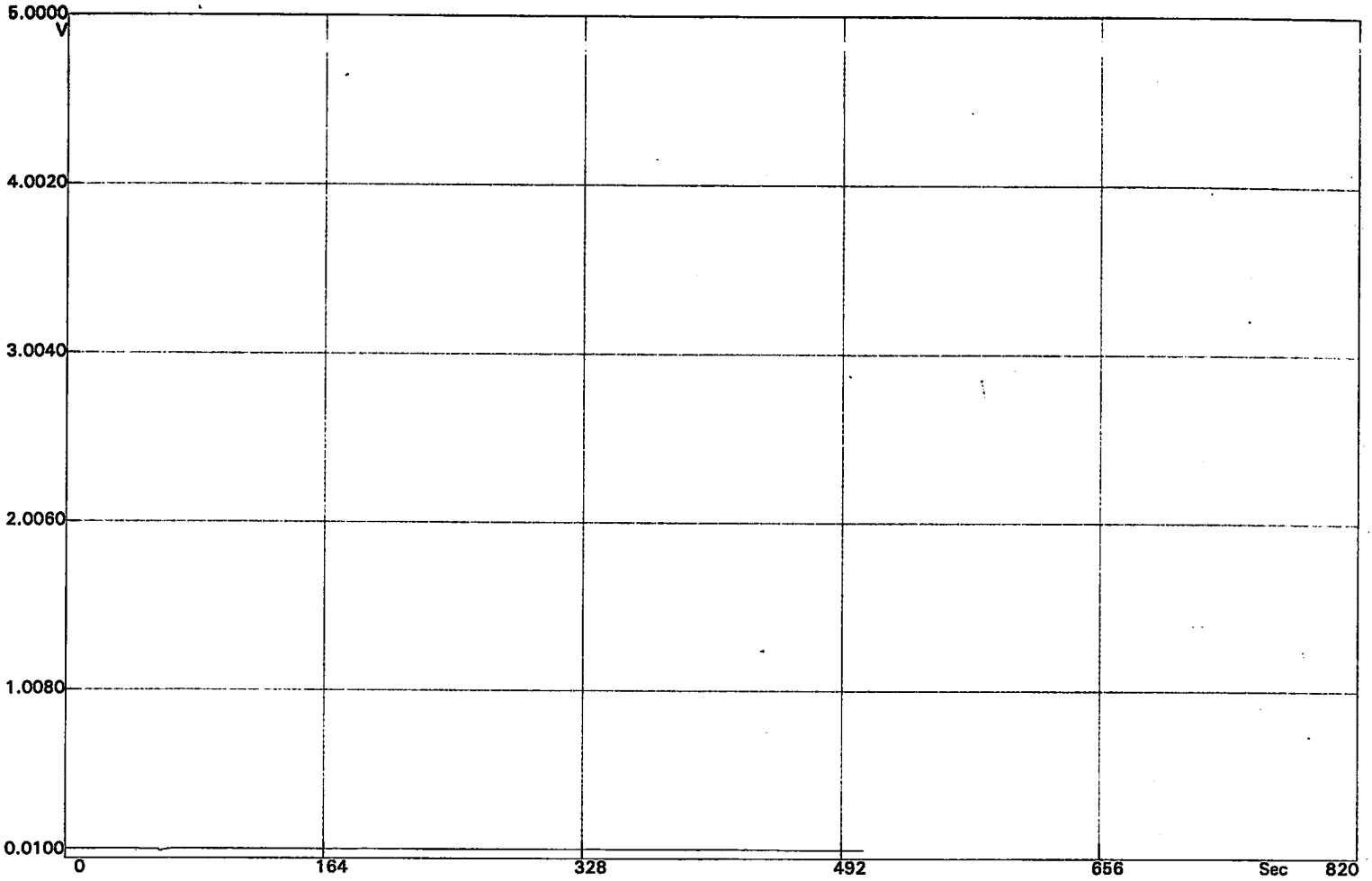
#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		17418	2446	68.4	
2	Unknown		108	30.7	72.8	
3	Unknown		11859	176	77.6	
4	MTBE	2.665	6324	189	87.9	
5	Unknown		13734	878	98.5	
6	Unknown		6570	187	113.7	
7	Unknown		9106	372	139.9	

Date: 99/11/04 11:49

SiteChart Analysis Report

8	Unknown		21.3	3.108	172.6
9	BENZENE	2.579	75657	2384	191.8
10	TOLUENE	7.214	156701	2469	334.7
11	Unknown		168	5.616	519.0
12	E-BENZENE	0.823	14522	921	583.5
13	M-XYLENE	5.272	74907	2416	613.3
14	O-XYLENE	1.566	13490	537	782.7

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999	
Time	11:49:59	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	7	
Tag	BLNK	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	28.0	C

METHOD:

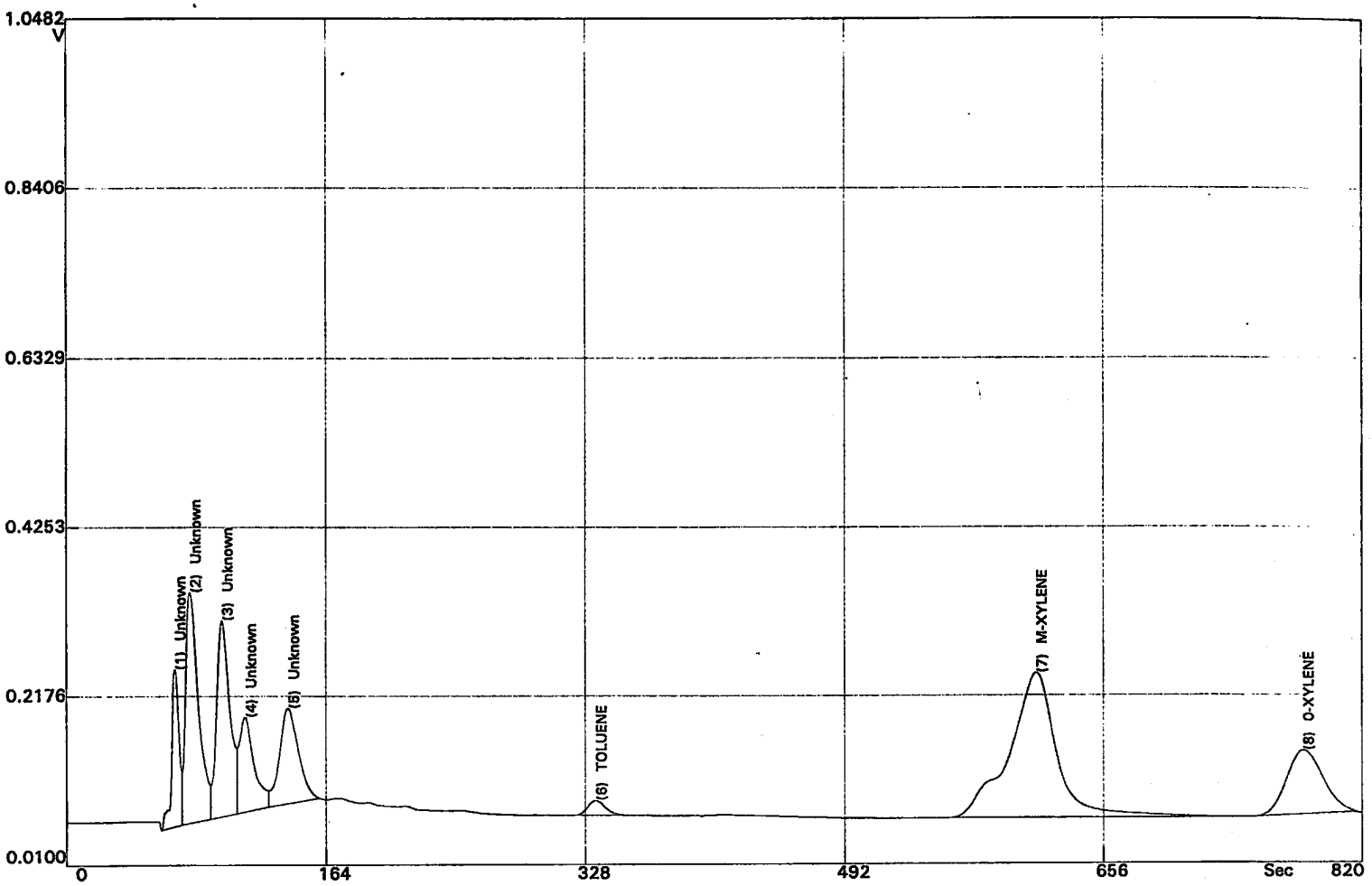
Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999	
Time	12:05:31	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	8	
Tag	S-30	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	28.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

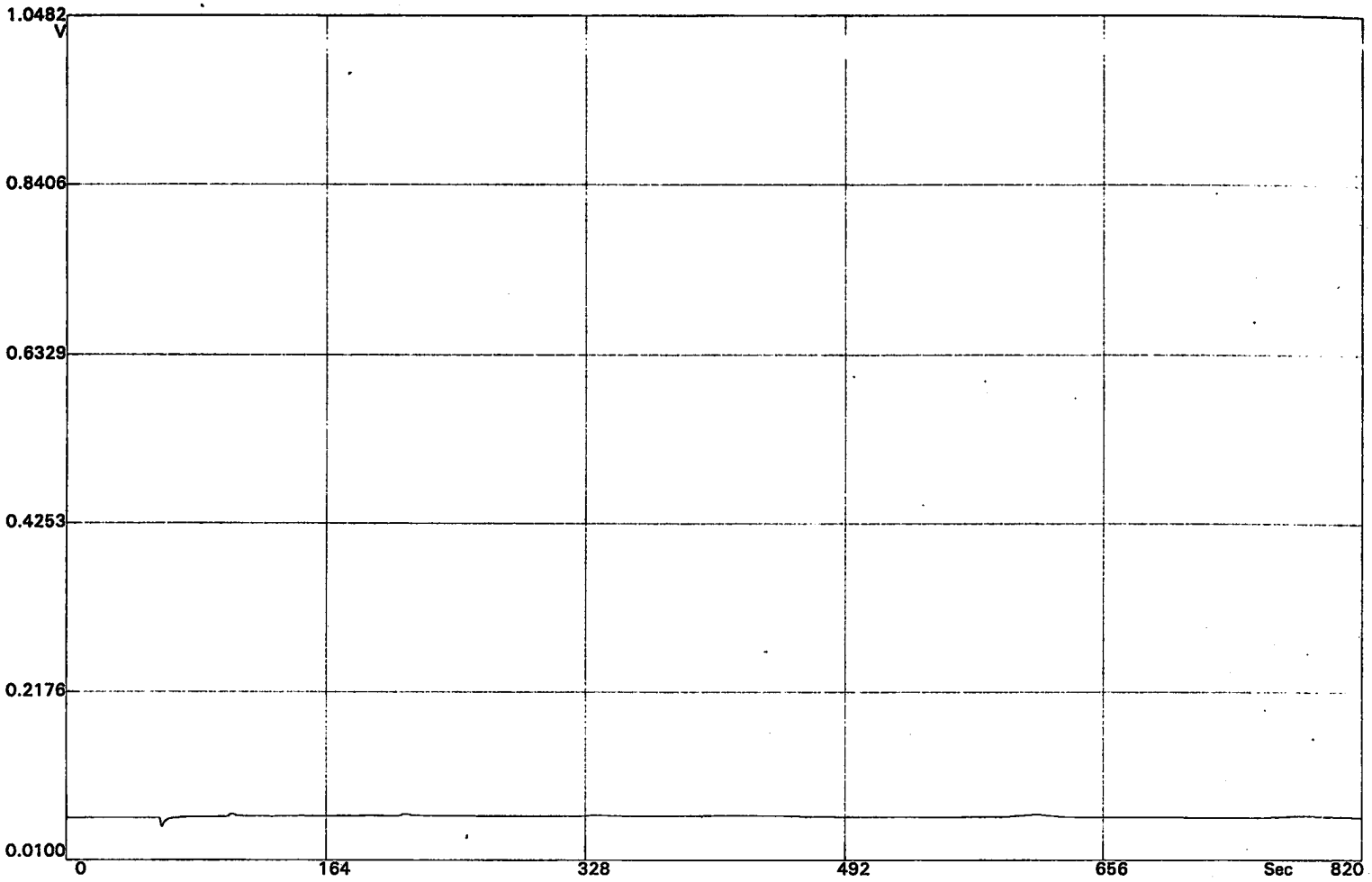
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	60 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		1025	196	68.8	
2	Unknown		2659	285	78.1	
3	Unknown		2356	201	98.4	
4	Unknown		1285	37.4	113.2	
5	Unknown		1619	101	140.0	
6	TOLUENE	0.011	232	18.0	333.9	
7	M-XYLENE	0.437	6209	178	612.8	

Date: 99/11/04 12:35

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999	
Time	12:34:58	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	9	
Tag	BLNK	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	28.0	C

METHOD:

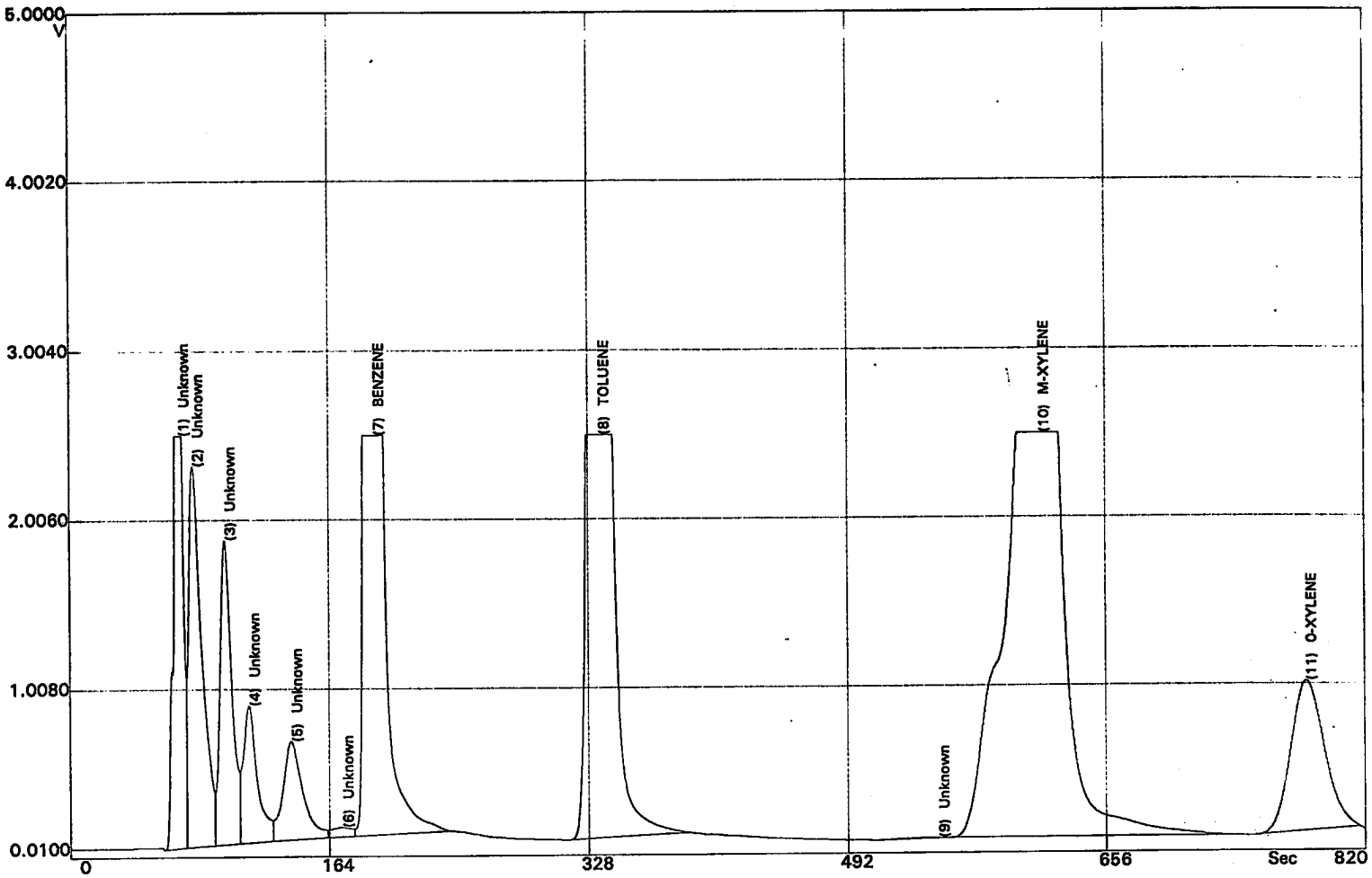
Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999	
Time	14:16:47	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	10	
Tag	S-31	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	28.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

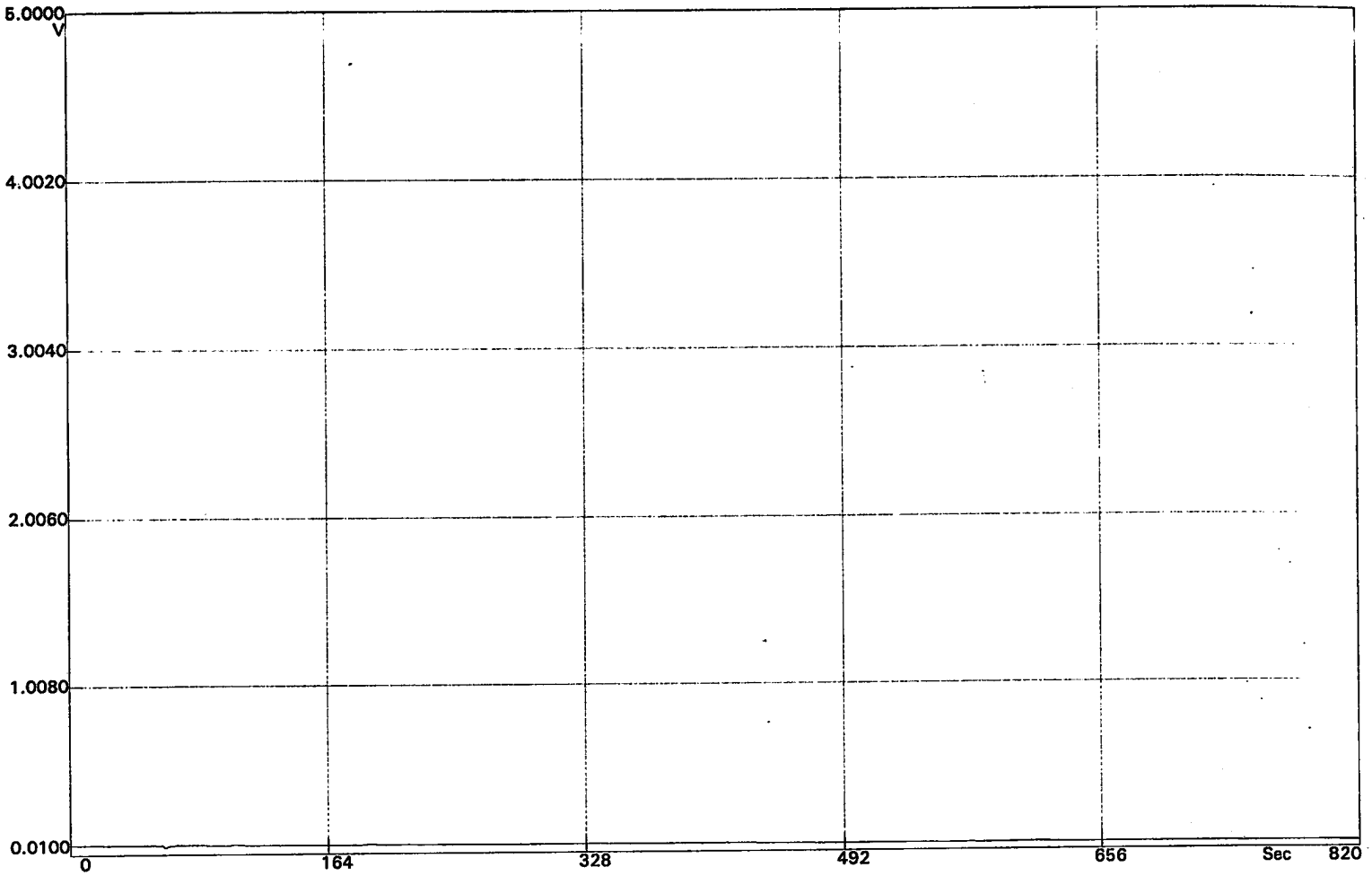
Manual Integration		
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	60 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		23113	2474	69.1	
2	Unknown		22113	1225	78.0	
3	Unknown		15574	1488	98.1	
4	Unknown		8625	391	113.5	
5	Unknown		8524	470	139.9	
6	Unknown		863	14.0	172.0	
7	BENZENE	3.832	112417	2384	192.2	

Date: 99/11/04 14:31

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999	
Time	14:32:24	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	11	
Tag	BLNK	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	28.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

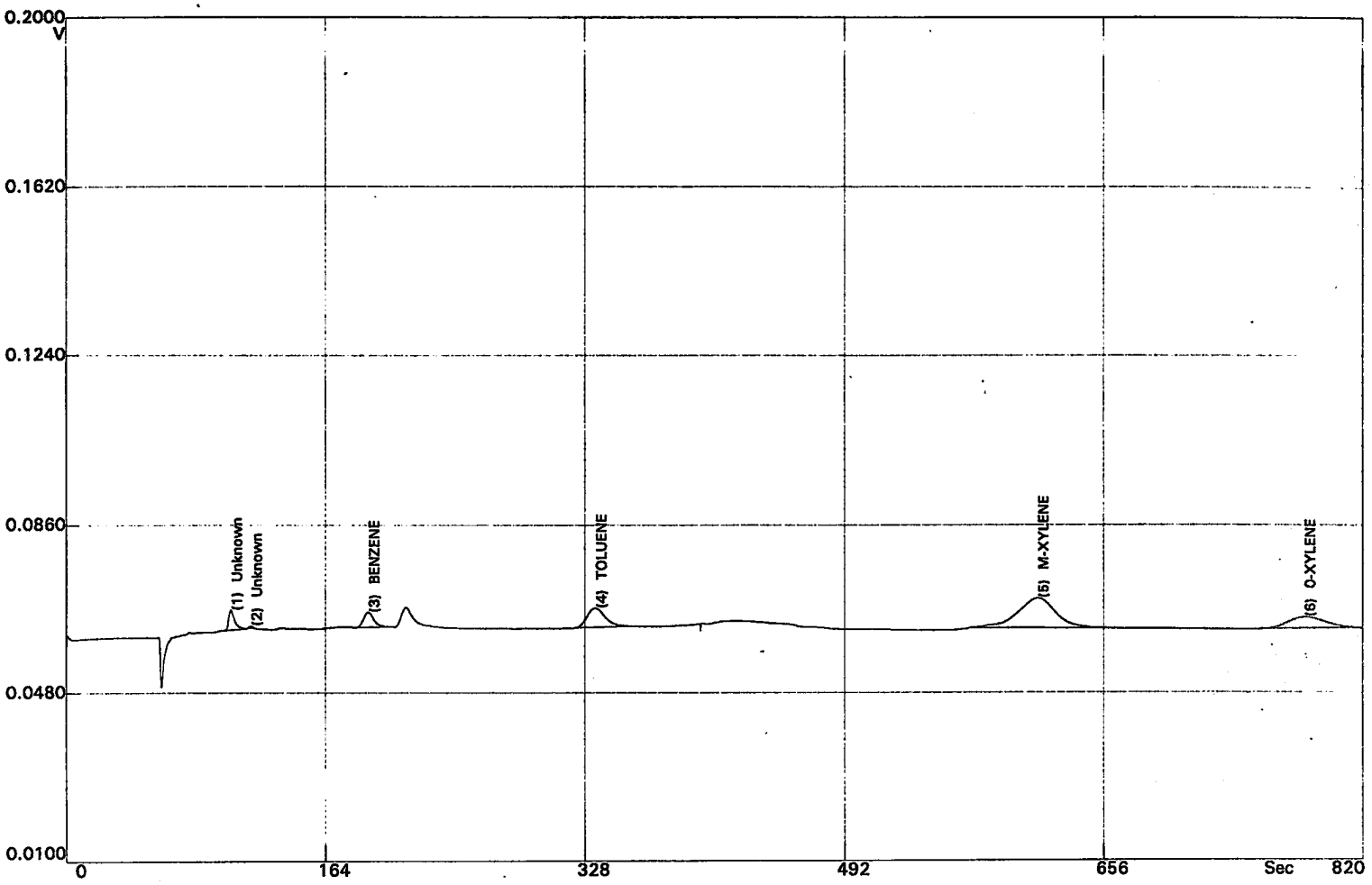
INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/04 14:52

SiteChart Analysis Report - B9110414.PID



RESULTS:

Date	Nov 04, 1999	
Time	16:02:37	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	12	
Tag	S-32	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	30.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

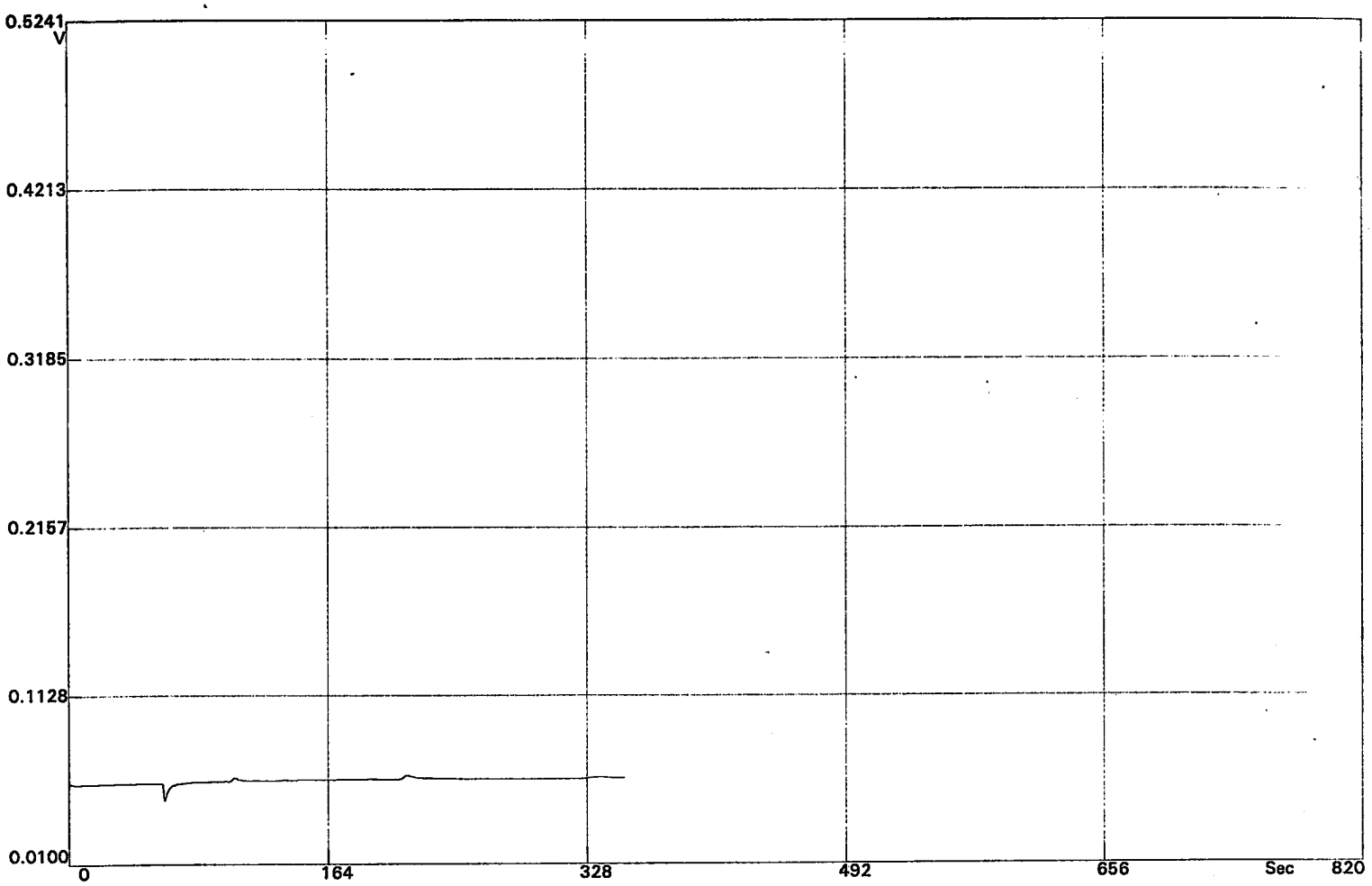
SlopeUp	0.5	mV/S
SlopeDown	0.5	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		19.1	4.627	104.4	
2	Unknown		0.991	0.524	116.9	
3	BENZENE		26.2	3.416	191.0	
4	TOLUENE	0.003	58.8	4.562	334.7	
5	M-XYLENE	0.014	193	6.929	613.9	
6	O-XYLENE	0.008	68.7	2.750	783.3	

Date: 99/11/04 17:31

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999	
Time	17:28:15	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	13	
Tag	~~S-32~~ Blank	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	26.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

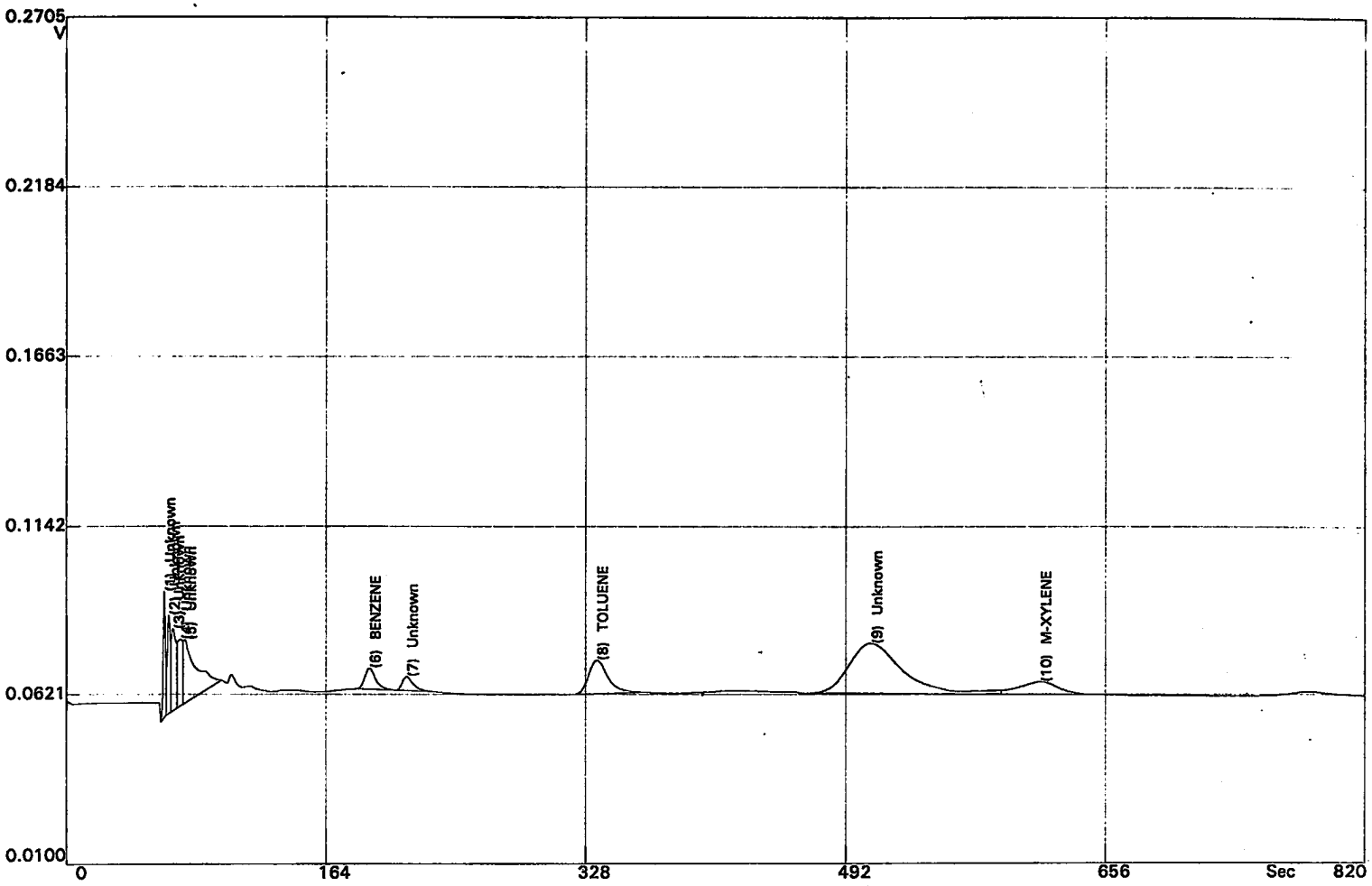
INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/04 17:35

SiteChart Analysis Report



RESULTS:

Date	Nov 04, 1999	
Time	17:35:29	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	14	
Tag	S-26	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	26.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

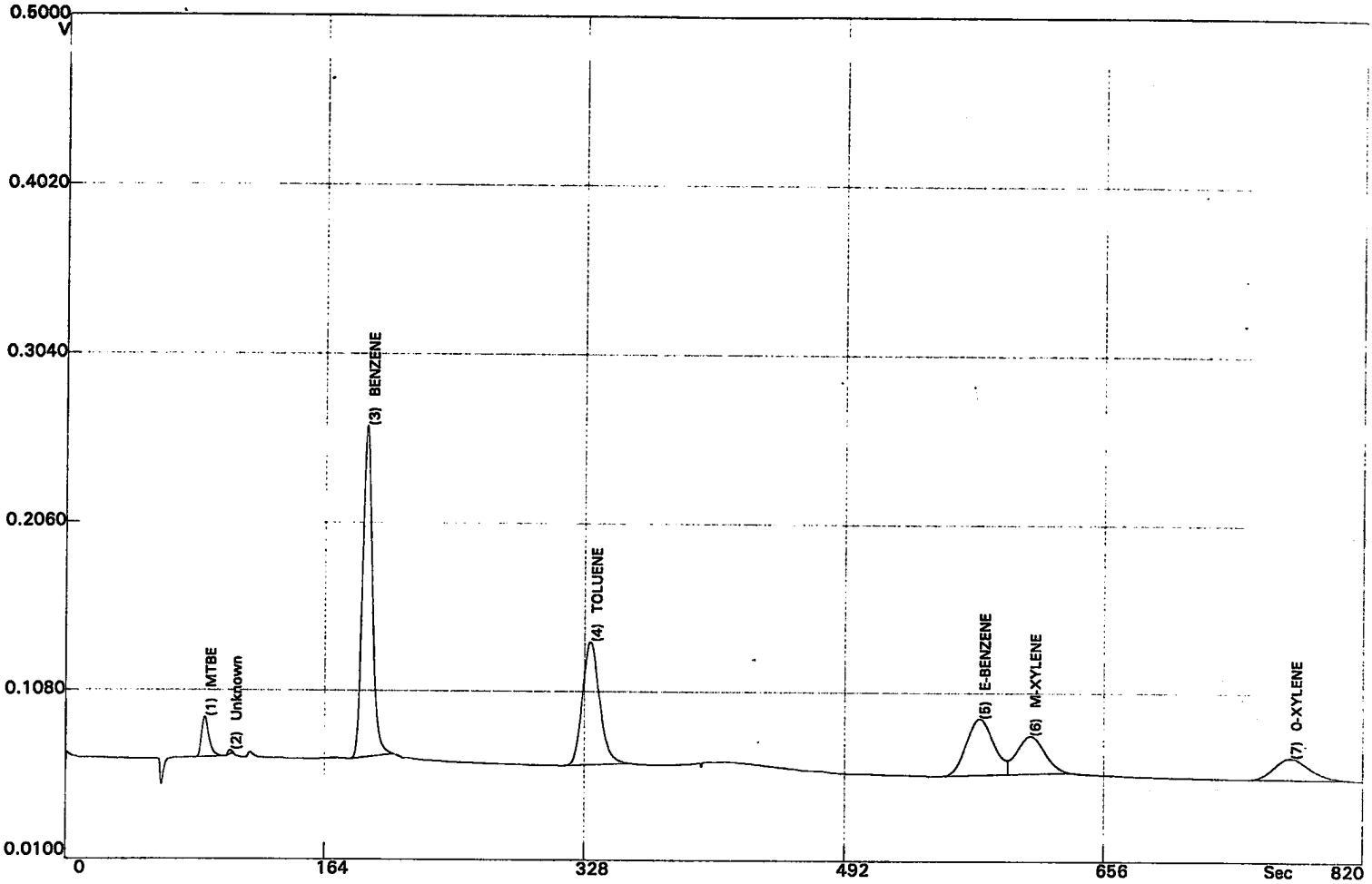
SlopeUp	0.5	mV/S
SlopeDown	0.5	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	6 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		59.8	40.5	62.0	
2	Unknown		67.5	18.1	64.9	
3	Unknown		89.6	3.144	67.6	
4	Unknown		79.4	1.056	72.4	
5	Unknown		185	0.453	74.9	
6	BENZENE	0.002	52.9	6.456	191.2	
7	Unknown		35.3	4.237	214.4	

Date: 99/11/04 17:53

SiteChart Analysis Report



RESULTS:

Date	Nov 08, 1999	
Time	10:35:26	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	1	
Tag	STND	
Column Temp	60.0	C
Det Temp	60.0	C
Ambient Temp	22.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

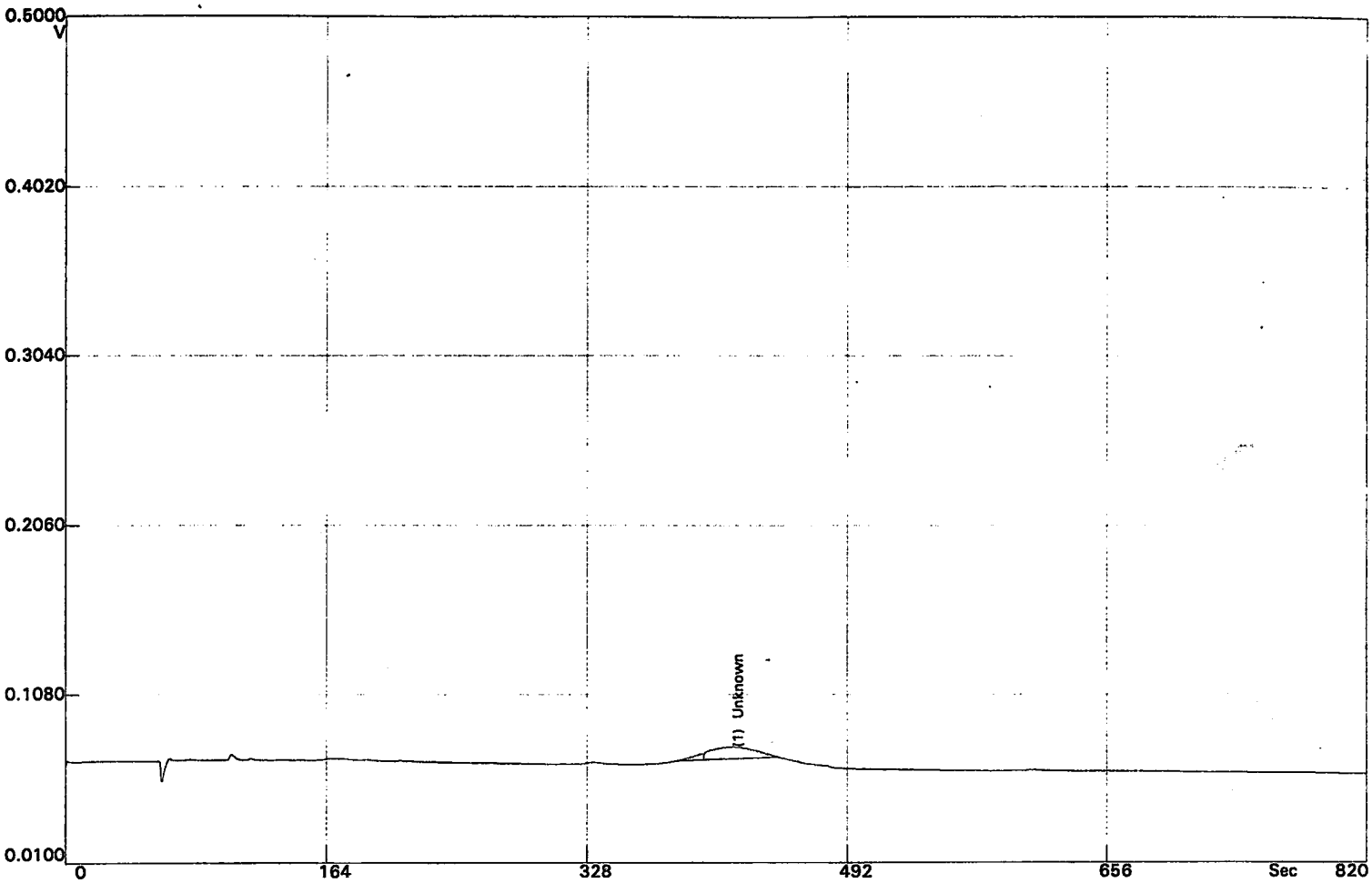
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	MTBE	0.050	131	23.6	88.3	Cal
2	Unknown		5.892	3.746	104.3	
3	BENZENE	0.050	1359	194	189.8	Cal
4	TOLUENE	0.050	890	72.2	331.2	Cal
5	E-BENZENE	0.050	655	33.3	576.0	Cal
6	M-XYLENE	0.050	461	14.0	608.0	Cal
7	O-XYLENE	0.050	337	12.5	774.0	Cal

Date: 99/11/08 10:54

SiteChart Analysis Report



RESULTS:

Date	Nov 08, 1999
Time	10:54:54
Instrument	FGGK301
Detector	PID
Column	B
Analysis#	2
Tag	BLNK
Column Temp	60.0 C
Det Temp	60.0 C
Ambient Temp	23.0 C

METHOD:

Analysis Time	820.0 S
PumpTime	10.0 S
Back Flush	400.0 S
Temperature	60.0 C
Pressure	12.0 psi
Inject	Syringe, 50.0 uL
PID State	High Sense

INTEGRATION METHOD:

Manual Integration

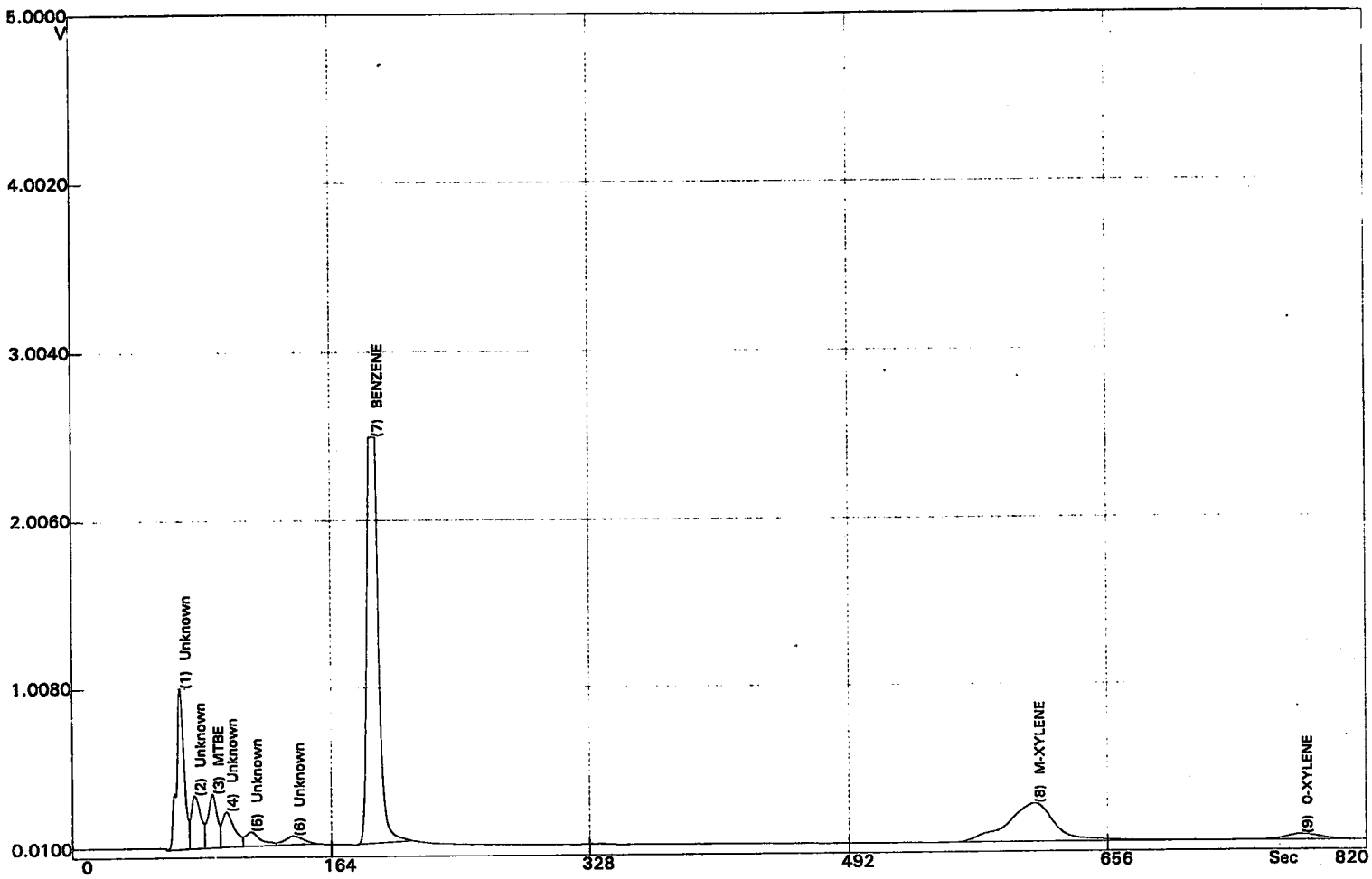
SlopeUp	1.0 mV/S
SlopeDown	10.0 mV/S
Min Height	0.0 mV
Min Area	0.0 mVS
FilterLevel	4
Delay	68 Sec

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		253	8.631	418.8	

Date: 99/11/08 11:15

SiteChart Analysis Report



RESULTS:

Date	Nov 08, 1999	
Time	11:16:55	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	3	
Tag	S-27	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	24.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

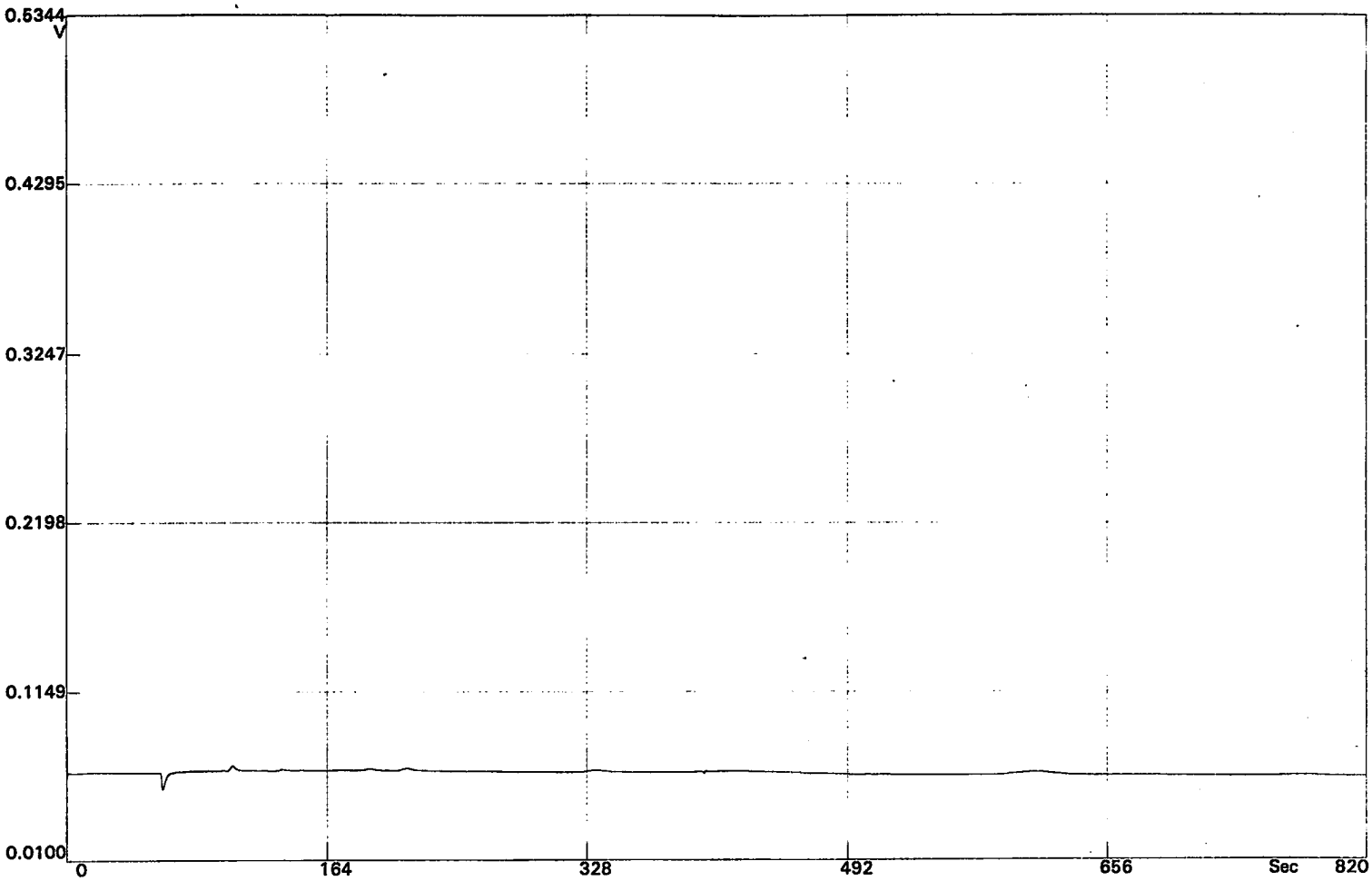
SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	60 Sec	

PEAK REPORT:

#	Name	Conc (PPM)	Area (mVS)	Height (mV)	R.T. (S)	Status
1	Unknown		5239	952	68.5	
2	Unknown		2248	147	77.6	
3	MTBE	0.818	2151	170	88.9	
4	Unknown		1911	77.6	97.7	
5	Unknown		955	29.7	113.3	
6	Unknown		695	37.8	140.0	
7	BENZENE	0.891	24235	2435	190.6	

Date: 99/11/08 11:34

SiteChart Analysis Report



RESULTS:

Date	Nov 08, 1999	
Time	11:47:20	
Instrument	FGGK301	
Detector	PID	
Column	B	
Analysis#	5	
Tag	BLNK	
Column Temp	59.0	C
Det Temp	59.0	C
Ambient Temp	24.0	C

METHOD:

Analysis Time	820.0	S
PumpTime	10.0	S
Back Flush	400.0	S
Temperature	60.0	C
Pressure	12.0	psi
Inject	Syringe, 50.0	uL
PID State	High Sense	

INTEGRATION METHOD:

Manual Integration

SlopeUp	1.0	mV/S
SlopeDown	10.0	mV/S
Min Height	0.0	mV
Min Area	0.0	mVS
FilterLevel	4	
Delay	68 Sec	

Date: 99/11/08 12:05

APPENDIX D
WELL CONSTRUCTION RECORDS

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 03' 36" N
Longitude: 81° 07' 25" W

Distance and Direction from Road Intersections: Charlotte Hwy. & Old McKinney Rd.

Street Address & City of Well Location: 3176 Charlotte Hwy., York, SC

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
Red clay w/silt and some backfill	35'	35'
material consisting of trees, etc.		
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-1 Bentonite Seal 23' to 24'

4. OWNER OF WELL: Lois B. Smith
Address: 3176 Charlotte Hwy. York, SC 29745
Telephone No: (803) 684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118 Fort Mill, SC 29715
Telephone No: (803) 548-5989

5. WELL DEPTH (completed) 35 ft. Date Started: 1/16/99 Date Completed: 1/16/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 25 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 0.010" Length: 10'
Set Between: 25 ft. and 35 ft. NOTE: MULTIPLE SCREENS
ft. and ft. USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 27.32 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 24 ft. to 35 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 23 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. direction
Hydrocarbon Type well disinfected upon completion ☐ Yes ☒ No Type: Amount: 0

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 2/19/99
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29715
Signed: Thomas Burke/mm Cert. No.: 1260
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	3'	3'
Reddish-brown silty micaceous clay	17'	20'
Tan micaceous silty clay	12'	32'
Light tan micaceous silty clay	3'	35'
Light tan micaceous silty sandy clay	3'	38'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-2
Bentonite Seal 20' - 21'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 38 ft. Date Started: 11/15/99 Date Completed: 11/15/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 23 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 23 ft. and 38 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 31.58 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 21 ft. to 38 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 20 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 63 ft. W direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cruninger/mtn Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	4'	4'
Reddish-brown silty clay	5'	9'
Tan silty micaceous clay	6'	15'
Light tan silty micaceous clay	9'	24'
Light tan sandy clay	7'	31'
Light tan sandy silt	4'	35'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-3
Bentonite Seal 22' - 23'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 35 ft.
Date Started: 11/12/99
Date Completed: 11/12/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 25 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC
Slot/Gauge: 10
Set Between: 25 ft. and 35 ft.
ft. and ft.
Diam.: 2"
Length: 10'
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 28.62 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 23 ft. to 35 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 22 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 120 ft. N direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cranmer /mtn Cert. No.: 1468
Authorized Representative

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	3'	3'
Reddish-brown sandy clay	5'	8'
Reddish-brown clayey silt	6'	14'
Brown to tan micaceous silty clay	5'	19'
Brown to tan silty sand	8'	27'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-4 Bentonite Seal 14' - 15'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 27 ft. Date Started: 11/11/99 Date Completed: 11/11/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 17 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 10'
Set Between: 17 ft. and 27 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 22.76 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface. ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 15 ft. to 27 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 14 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 78 ft. E direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cruinger /mlw Cert. No.: 1468
Authorized Representative

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown micaceous silty clay	13'	13'
Light reddish-brown to tan micaceous clayey silt	12'	25'
Tan micaceous clayey silt	5'	30'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-5
Bentonite Seal 17' - 18'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway
York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 30 ft. Date Started: 11/11/99 Date Completed: 11/11/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 20 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 10'
Set Between: 20 ft. and 30 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 26.20 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 18 ft. to 30 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 17 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 164 ft. SW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cranmer/mfn Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:
County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W
Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road
Street Address & City of Well Location: 3176 Charlotte Highway, York
Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No
Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	4'	4'
Reddish-brown micaceous silty clay	5'	9'
Brown to tan micaceous silty clay	4'	13'
Purple-brown micaceous silty clay	12'	25'
Light brown to tan micaceous silty clay	8'	33'
Tan sandy clay	4'	37'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-6
Bentonite Seal 24' - 25'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289
Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 37 ft. Date Started: 11/12/99 Date Completed: 11/12/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 27 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 10'
Set Between: 27 ft. and 37 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 31.60 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface. ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 25 ft. to 37 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 24 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 180 ft. SSW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimminger /mk Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	5'	5'
Reddish-brown micaceous silty clay	3'	8'
Light brown to tan micaceous silty clay	10'	18'
Dark reddish-brown micaceous silty clay	10'	28'
Light tan silty sand	8'	36'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-7
Bentonite Seal 23' - 24'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 36 ft. Date Started: 11/12/99 Date Completed: 11/12/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 26 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 10'
Set Between: 26 ft. and 36 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 30.41 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 24 ft. to 36 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 23 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 268 ft. SW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimins /Mgr Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:
County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W
Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road
Street Address & City of Well Location: 3176 Charlotte Highway, York
Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No
Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	3'	3'
Reddish-brown micaceous silty clay	7'	10'
Tan micaceous silty clay	24'	34'
Tan micaceous silty sandy clay	4'	38'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-8
Bentonite Seal 20' - 21'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289
Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 38 ft. Date Started: 11/16/99 Date Completed: 11/16/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 23 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 23 ft. and 38 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 31.65 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 21 ft. to 38 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 20 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 57 ft. NW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 4/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cruminger Jr. Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown micaceous silty clay	13'	13'
Brown micaceous silty clay	5'	18'
Tan micaceous silty clay	11'	29'
Light tan micaceous silty sandy clay	7'	36'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-9
Bentonite Seal 18' - 19'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 36 ft.
Date Started: 11/16/99
Date Completed: 11/16/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug
☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE:
☐ Domestic ☐ Public Supply-Permit No. ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 21 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC
Slot/Gauge: 10
Set Between: 21 ft. and 36 ft.
ft. and ft.
Diam.: 2"
Length: 15'
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
29.31 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 19 ft. to 36 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 18 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 337 ft. SW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/24/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimmings /MW Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:
County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W
Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road
Street Address & City of Well Location: 3176 Charlotte Highway, York
Sketch Map: See Attached

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289
Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 44 ft. Date Started: 11/16/99 Date Completed: 11/16/99

6. [ ] Mud Rotary [ ] Air Rotary [ ] Jetted [ ] Driven [X] Bored [ ] Cable tool [ ] Dug [ ] Other

7. USE: [ ] Domestic [ ] Irrigation [ ] Test Well [ ] Public Supply-Permit No. [ ] Air Conditioning [X] Monitor Well [ ] Industry [ ] Commercial [ ]

8. CASING: [X] Threaded [ ] Welded
Diam.: 2"
Type: [X] PVC [ ] Steel [ ] Galvanized [ ] Other
2 in. to 29 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? [ ] Yes [X] No

2. CUTTING SAMPLES: [ ] Yes [X] No
Geophysical Logs: [ ] Yes (please enclose) [X] No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown silty clay	6'	6'
Brown to tan silty sand	7'	13'
Tan silty sand with quartz fragments	5'	18'
Tan micaceous silty clay	11'	29'
Tan micaceous clayey silt	9'	38'
Light tan sandy clay	6'	44'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

9. SCREEN
Type: PVC
Slot/Gauge: 10
Set Between: 29 ft. and 44 ft.
ft. and ft.
Diam.: 2"
Length: 15'
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis [ ] Yes (please enclose) [X] No

10. STATIC WATER LEVEL 37.30 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: [ ] Yes (please enclose) [X] No
Yield:

12. WATER QUALITY
Chemical Analysis [X] Yes [ ] No Bacterial Analysis [ ] Yes [X] No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) [X] Yes [ ] No
Installed from 27 ft. to 44 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? [X] Yes [ ] No
[X] Neat Cement [ ] Sand Cement [ ] Concrete [ ] Other
Depth: From 0 ft. to 26 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 165 ft. NW direction
Petroleum
Type well disinfected upon completion [ ] Yes [X] No
Type:
Amount:

16. PUMP: Date Installed: Not Installed [X]
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: [ ] Submersible [ ] Jet (deep) [ ] Jet (shallow) [ ] Reciprocating [ ] Turbine [ ] Centrifugal

3. REMARKS MW-10
Bentonite Seal 26' - 27'

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimmings Jr. Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 44 ft. Date Started: 11/16/99 Date Completed: 11/16/99

6. [ ] Mud Rotary [ ] Air Rotary [ ] Jetted [ ] Driven [X] Bored [ ] Cable tool [ ] Dug [ ] Other

7. USE: [ ] Domestic [ ] Irrigation [ ] Test Well [ ] Public Supply-Permit No. [ ] Air Conditioning [X] Monitor Well [ ] Industry [ ] Commercial [ ]

8. CASING: [X] Threaded [ ] Welded
Diam.: 2"
Type: [X] PVC [ ] Steel [ ] Galvanized [ ] Other
2 in. to 29 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? [ ] Yes [X] No

2. CUTTING SAMPLES: [ ] Yes [X] No
Geophysical Logs: [ ] Yes (please enclose) [X] No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brown silty clay	3'	3'
Reddish-brown silty clay	2'	5'
Tan micaceous silty clay	7'	12'
Brown micaceous silty clay	12'	24'
Tan micaceous silty clay	13'	37'
Tan to brown silty sand	7'	44'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

9. SCREEN
Type: PVC
Slot/Gauge: 10
Set Between: 29 ft. and 44 ft.
ft. and ft.
Diam.: 2"
Length: 15'
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis [ ] Yes (please enclose) [X] No

10. STATIC WATER LEVEL 38.23 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: [ ] Yes (please enclose) [X] No
Yield:

12. WATER QUALITY
Chemical Analysis [X] Yes [ ] No Bacterial Analysis [ ] Yes [X] No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) [X] Yes [ ] No
Installed from 27 ft. to 44 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? [X] Yes [ ] No
[X] Neat Cement [ ] Sand Cement [ ] Concrete [ ] Other
Depth: From 0 ft. to 26 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 232 ft. N direction
Petroleum
Type well disinfected upon completion [ ] Yes [X] No
Type:
Amount:

16. PUMP: Date Installed: Not Installed [X]
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: [ ] Submersible [ ] Jet (deep) [ ] Jet (shallow) [ ] Reciprocating [ ] Turbine [ ] Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimmings/mtn Cert. No.: 1468
Authorized Representative

3. REMARKS MW-11
Bentonite Seal 26' - 27'

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown silty clay	4'	4'
Reddish-brown micaceous silty clay	4'	8'
Brown to tan micaceous silty clay	20'	28'
Tan micaceous silty clay	10'	38'
Light tan micaceous silty sandy clay	6'	44'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS: MW-12 Bentonite Seal 26' - 27'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed): 44 ft.
Date Started: 11/17/99
Date Completed: 11/17/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 29 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC
Slot/Gauge: 10
Set Between: 29 ft. and 44 ft.
ft. and ft.
Diam.: 2"
Length: 15'
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL: 37.53 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 27 ft. to 44 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 26 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 175 ft. W direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pat Cummings/mrm Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown silty micaceous clay	8'	8'
Brown micaceous silty clay	10'	18'
Tan micaceous silty clay	5'	23'
Brown micaceous silty clay	8'	31'
Tan micaceous silty clay	9'	40'
Light tan micaceous silty sandy clay	7'	47'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-13 Bentonite Seal 28' - 29'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 47 ft. Date Started: 11/17/99 Date Completed: 11/17/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 32 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 32 ft. and 47 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 41.22 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 29 ft. to 47 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 28 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 340 ft. NNW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimmins Jr. Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:
County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W
Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road
Street Address & City of Well Location: 3176 Charlotte Highway, York
Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No
Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brown to reddish-brown silty clay	13'	13'
Light tan micaceous silty clay	7'	20'
Brown micaceous silty clay	8'	28'
Tan micaceous silty clay	15'	43'
Brown silty sandy clay	7'	50'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-14
Bentonite Seal 32' - 33'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289
Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 50 ft. Date Started: 11/18/99 Date Completed: 11/18/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 35 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 35 ft. and 50 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 41.85 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 33 ft. to 50 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 32 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 350 ft. W direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cruenga /mtn Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York | System Name: Smith's Grocery

Latitude: 35° 02' 30" N | Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brown silty clay	2'	2'
Reddish-brown micaceous silty clay	11'	13'
Brown micaceous silty clay	11'	24'
Reddish-brown micaceous silty clay	8'	32'
Tan micaceous silty clay	12'	44'
Light tan silty sandy clay	6'	50'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS: MW-15 Bentonite Seal 32' - 33'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 50 ft. Date Started: 11/18/99 Date Completed: 11/18/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 35 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 35 ft. and 50 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 43.23 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 33 ft. to 50 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 32 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 290 ft. NW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crumpler PM Cert. No.: 1468
Authorized Representative

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown clay	5'	5'
Reddish-brown micaceous silty clay	9'	14'
Brown micaceous silty clay	5'	19'
Tan micaceous silty clay	10'	29'
Dark brown micaceous silty clay	8'	37'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-16 Bentonite Seal 19' - 20'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 37 ft. Date Started: 11/18/99 Date Completed: 11/18/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 22 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 22 ft. and 37 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 30.00 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 20 ft. to 37 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 19 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 389 ft. SW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cimino Jr. Cert. No.: 1468
Authorized Representative

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Reddish-brown micaceous silty clay	13'	13'
Brown to tan micaceous silty clay	15'	28'
Light tan micaceous silty clay	7'	35'
Light tan silty sandy clay	5'	40'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-17 Bentonite Seal 22' - 23'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 40 ft. Date Started: 11/19/99 Date Completed: 11/19/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 25 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 25 ft. and 40 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 34.67 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 23 ft. to 40 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 22 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 297 ft. SW direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Cunningham Cert. No.: 1468
Authorized Representative

D H E C

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections:
Charlotte Highway & Old McKinney Road

Street Address & City of Well Location:
3176 Charlotte Highway, York

Sketch Map:
See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Tan micaceous silty clay	2'	2'
Reddish-brown micaceous silty clay	8'	10'
Light brown micaceous silty clay	5'	15'
Tan micaceous silty clay	10'	25'
Light tan micaceous silty clay	15'	40'
Tan micaceous silty sandy clay	6'	46'
Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-18
Bentonite Seal 28' - 29'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway
York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118
Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 46 ft.
Date Started: 11/19/99
Date Completed: 11/19/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug
☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE:
☐ Domestic ☐ Public Supply-Permit No. ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 31 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No.

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 31 ft. and 46 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL
40.87 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 29 ft. to 46 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 28 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 297 ft. W direction
Petroleum Type well disinfected upon completion ☐ Yes ☒ No
Type:
Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/24/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimmins / mfn Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

DHEC

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brown silty sand	3'	3'
Reddish-brown micaceous silty clay	4'	7'
Brown micaceous silty clay	7'	14'
Light tan micaceous clayey silt	9'	23'
Light brown micaceous silty clay	17'	40'
Dark brown micaceous silty clay	10'	50'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS MW-19
Bentonite Seal 32' - 33'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 50 ft. Date Started: 11/19/99 Date Completed: 11/19/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 35 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0.2 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 15'
Set Between: 35 ft. and 50 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 43.51 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 33 ft. to 50 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 32 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 420 ft. W direction
Petroleum Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/24/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: Pete Crimmins / mtm Cert. No.: 1468
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

D H E C

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York
System Name: Smith's Grocery
Latitude: 35° 02' 30" N
Longitude: 81° 08' 48" W

Distance and Direction from Road Intersections: Charlotte Highway & Old McKinney Road

Street Address & City of Well Location: 3176 Charlotte Highway, York

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brown micaceous silty clay	3'	3'
Reddish-brown micaceous silty clay	19'	22'
Brown to tan micaceous silty clay	11'	33'
Light tan micaceous silty sandy clay	7'	40'
Light tan clayey sand	21'	61'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS TW-1
Bentonite Seal 53' - 54'

4. OWNER OF WELL: Lois Smith
Address: 3176 Charlotte Highway, York, SC 29745
Telephone No: 803-684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Telephone No: 803-548-5989

5. WELL DEPTH (completed) 61 ft. Date Started: 11/15/99 Date Completed: 11/23/99

6. ☐ Mud Rotary ☐ Air Rotary ☐ Jetted ☐ Driven ☒ Bored ☐ Cable tool ☐ Dug ☐ Other

7. USE: ☐ Domestic ☐ Irrigation ☐ Test Well ☐ Public Supply-Permit No. ☐ Air Conditioning ☒ Monitor Well ☐ Industry ☐ Commercial ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 6"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
6 in. to 40 ft. depth
2 in. to 61 ft. depth
Height: Above/Below
Surface 0.10 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 10 Length: 5'
Set Between: 56 ft. and 61 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 23.64 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 54 ft. to 61 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0/0 ft. to 40/53 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 67 ft. W direction
Petroleum
Type well disinfected upon completion ☐ Yes ☒ No Type: Amount:

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (deep) ☐ Jet (shallow) ☐ Reciprocating ☐ Turbine ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 1/28/00
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29708
Signed: [signature] Authorized Representative Cert. No.: 1468

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

APPENDIX E
CERTIFICATES OF DISPOSAL

CLIENT

GARCO, Inc.

Environmental, Industrial & Recycling Services

Certificate of Disposal

GENERATOR:

CBM Environmental
Smiths Grocery CBM# 10629
3176 Charlotte Highway SITE ID# 09322
York, S. C.

MATERIAL ACCEPTED:

39 drums of non-hazardous petroleum contaminated soil

DISPOSAL METHOD:

Bio-Remediation

GARCO Inc. accepted the above listed materials on 11/12/99. The material has been assigned the following GARCO Identification number(s).

GARCO ID No.(s) SP-1713 through SP1751

GARCO, Inc. has accepted custody of the above referenced non-hazardous material. This material has been determined to be non-hazardous by a material profile, generator knowledge and/or analytical data provided to GARCO, Inc.

Greg Russell GR

Greg Russell
President

Post Office Box 1907 / Asheboro, NC 27204-1907 / 336-683-0911 / Fax 336-683-0811

NON-HAZARDOUS WASTE MANIFEST

CLIENT

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NA

Manifest Document No. 99002

2. Page 1 b

3. Generator's Name and Mailing Address
Smiths Grocery
3176 Charlotte Highway
York, S. C.

4. Generator's Phone (803-684-6289

John Hess

5. Transporter 1 Company Name: GARCO, Inc.

6. US EPA ID Number: NA

A. State Transporter's ID

B. Transporter 1 Phone 336-683-0911

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
GARCO, Inc.
2503 N. Fayetteville St.
Asheboro, NC 27203

10. US EPA ID Number: NA

E. State Facility's ID

F. Facility's Phone 336-683-0911

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non-hazardous Material SP1213 - SP1251	39	DM	27,300	P
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above
11a). Soil

H. Handling Codes for Wastes Listed Above
None

15. Special Handling Instructions and Additional Information
24 Hour ER# 800-814-1204

GENERATOR

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Agent for CBM | Signature | Date: Month 11 Day 12 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Randy B. Cox | Signature | Date: Month 11 Day 12 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in Item 19.

Printed/Typed Name: Lori Boyd | Signature | Date: Month 11 Day 12 Year 99

NON-HAZARDOUS WASTE

F14 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800) 621-5808

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

Rev. 3/95

RECEIVED
NOV 24 1999

DeBruhl Environmental Excavating, Inc.
2937 Gibbon Road
Charlotte, NC 28269
(704)598-2681

CERTIFICATE OF NON-HAZARDOUS WASTE DISPOSAL

This is to certify that DeBruhl Environmental Excavating, Inc., received thirty-five (35) drums of petroleum contaminated soil for remediation from:

REF: CBM Environmental

Site: Smith's Grocery CBM #10629
3176 Charlotte Hwy. SITE ID # 09322
York, SC

This soil has been land applied for remedial treatment in accordance with provisions of Article 21, Chapter 143, of the General Statutes of North Carolina as amended, and other applicable Laws, Rules, and Regulations, Permit No. SR0300078.

Signed: Randy DeBruhl

Randy DeBruhl,
President

Date: November 19, 1999

RECEIVED
JAN 2 1 2000

GARCO, Inc.

Environmental, Industrial & Recycling Services

FILE COPY

Certificate of Disposal

GENERATOR:

CBM
Smith's Grocery CBM#10629
3176 Charlotte Highway SITE ID# 09322
York, SC

MATERIAL ACCEPTED:

5 drums of non-hazardous petroleum contaminated soil

DISPOSAL METHOD:

Bio-Remediation

GARCO Inc. accepted the above listed materials on 01/5/00. The material has been assigned the following GARCO Identification number(s).

GARCO ID No.(s) SP-2001 through SP-2005

GARCO, Inc. has accepted custody of the above referenced non-hazardous material. This material has been determined to be non-hazardous by a material profile, generator knowledge and/or analytical data provided to GARCO, Inc.

Greg Russell
President

CC: SB

Post Office Box 1907 / Asheboro, NC 27204-1907 / 336-683-0911 / Fax 336-683-0811

NON-HAZARDOUS WASTE MANIFEST

CLIEN

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NA

Manifest Document No. 00001 2. Page 1 of 1

3. Generator's Name and Mailing Address
Smith's Grocery
3176 Charlotte Highway
York, SC

4. Generator's Phone (864) 574-2360

Richard Bonds

5. Transporter 1 Company Name
GARCO, Inc.

6. US EPA ID Number NA

A. State Transporter's ID

B. Transporter 1 Phone 336-683-0911

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
GARCO, Inc.
2503 N. Fayetteville St.
Asheboro, NC 27203

10. US EPA ID Number NA

E. State Facility's ID

F. Facility's Phone 336-683-0911

11. WASTE DESCRIPTION	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non-hazardous Material	5	DM	4,000	P
b. Non-hazardous Material	5	DM	1,500	P
c.				
d.				

G. Additional Descriptions for Materials Listed Above

11a). Soil SP-2001 - SP-2005

11b). Water Ag-2000 - Ag-2004

H. Handling Codes for Wastes Listed Above

None

15. Special Handling Instructions and Additional Information

24 Hour ER# 800-814-1204

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Agent for Stmt

Signature: M. Randall

Date: Month 01 Day 05 Year 00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Jamie Owen

Signature:

Date: Month 1 Day 5 Year 2000

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name:

Signature:

Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: Dee H. Brewer

Signature: Dee H. Brewer

Date: Month 1 Day 6 Year 00

GENERATOR

TRANSPORTER

FACILITY

NON-HAZARDOUS WASTE

FILE COPY

GARCO, Inc.

RECEIVED
JAN 2 1 2000

Environmental, Industrial & Recycling Services

Certificate of Disposal

GENERATOR:

CBM
Smith's Grocery CBM #10629
3176 Charlotte Highway SITE ID# 09322
York, SC

MATERIAL ACCEPTED:

5 drums of non-hazardous petroleum contaminated water

DISPOSAL METHOD:

Waste water treatment

GARCO Inc. accepted the above listed materials on 01/6/00. The material has been assigned the following GARCO Identification number(s).

GARCO ID No.(s) AQ-2000 through AQ-2004

GARCO, Inc. has accepted custody of the above referenced non-hazardous material. This material has been determined to be non-hazardous by a material profile, generator knowledge and/or analytical data provided to GARCO, Inc.

Greg Russell
President

CC: SB

Post Office Box 1907 / Asheboro, NC 27204-1907 / 336-683-0911 / Fax 336-683-0811

b17y22wx=(x(xx(((xáP54wα┬┬á┬┬i CLIENT

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NA

Manifest Document No. 0000 2. Page 1 of 1

3. Generator's Name and Mailing Address
Smith's Grocery
3176 Charlotte Highway
York, SC

4. Generator's Phone (864) 574-2360

Richard Bonds

5. Transporter 1 Company Name	6. US EPA ID Number	A. State Transporter's ID
GARCO, Inc.	NA	B. Transporter 1 Phone 336-683-0911
7. Transporter 2 Company Name	8. US EPA ID Number	C. State Transporter's ID
		D. Transporter 2 Phone

9. Designated Facility Name and Site Address	10. US EPA ID Number	E. State Facility's ID
GARCO, Inc. 2503 N. Fayetteville St. Asheboro, NC 27203	NA	F. Facility's Phone 336-683-0911

11. WASTE DESCRIPTION	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non-hazardous Material	5	DM	4,000	P
b. Non-hazardous Material	5	DM	1,500	P
c.				
d.				

GENERATOR

G. Additional Descriptions for Materials Listed Above

11a). Soil SP-2001 - SP-2005

11b). Water Ag-2000 - Ag-2004

H. Handling Codes for Wastes Listed Above

None

15. Special Handling Instructions and Additional Information

24 Hour ER# 800-814-1204

NON-HAZARDOUS WASTE

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date (Month Day Year)
Agent for SHME	M. Rumell	01 05 00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Joe Owen		1 5 2000

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

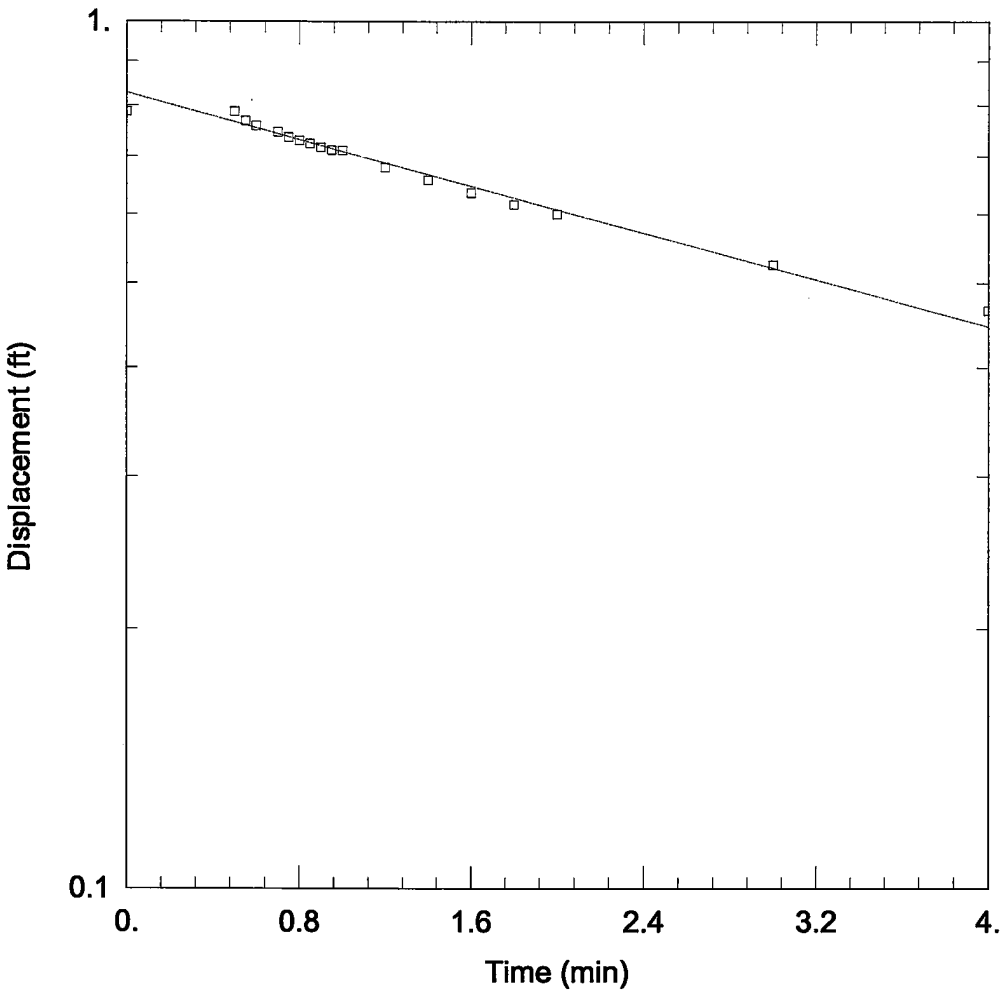
19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Dee H. Brewer	Dee H. Brewer	1 6 00

APPENDIX F
SLUG TEST DATA

MW2



SMITH'S GROCERY

Data Set: C:\AQTW\09322MW2.AQT
Date: 12/04/00 Time: 15:04:52

AQUIFER DATA

Saturated Thickness: 6.38 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

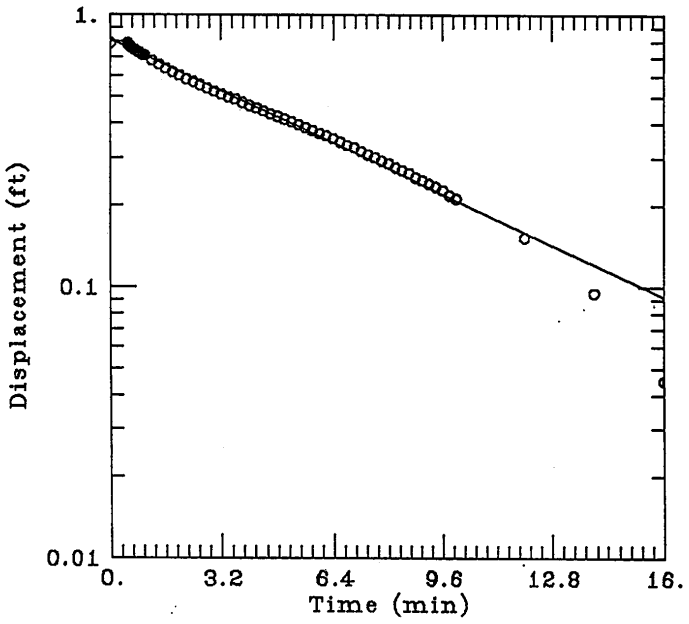
Initial Displacement: 0.787 ft Water Column Height: 31.62 ft
Casing Radius: 0.083 ft Wellbore Radius: 0.354 ft
Screen Length: 15. ft

SOLUTION

Aquifer Model: Unconfined K = 0.0001179 ft/min
Solution Method: Bouwer-Rice y0 = 0.8276 ft

CBM ENVIRONMENTAL SERVICES,INC	Client: LOIS SMITH
Project No.: 10629	Location: YORK, SOUTH CAROLINA

SMITH'S GROCERY - SLUG TEST - MW-2



DATA SET:
MW2.DAT
12/07/99

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
12/1/1999
TEST WELL:
MW-2
OBS. WELL:
N/A

ESTIMATED PARAMETERS:
K = 0.0001038 ft/min
y0 = 0.814 ft

TEST DATA:
H0 = 0.787 ft
rc = 0.083 ft
rw = 0.354 ft
L = 15. ft
b = 5.38 ft
H = 31.62 ft

A Q T E S O L V

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield
and
James O. Rumbaugh, III

Geraghty & Miller Modeling Group
1895 Preston White Drive, Suite 301
Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

- o confined aquifers, unconfined aquifers, and leaky aquifers
- o pumping tests, injection tests, recovery tests, and slug tests

Features:

- o Interactive, menu-driven program design
- o Nonlinear least-squares estimation of aquifer coefficients
- o Statistical analysis of results
- o Complete graphical display of results

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<>>

A Q T E S O L V   R E S U L T S
Version 1.10

12/07/99 10:30:09

TEST DESCRIPTION

Data set........... MW2.DAT
Data set title..... SMITH'S GROCERY - SLUG TEST - MW-2
Company............ CBM ENVIRONMENTAL SERVICES,INC
Project............ 10629
Client............. LOIS SMITH
Location........... YORK, SOUTH CAROLINA
Test date.......... 12/1/1999
Test well.......... MW-2
Obs. well.......... N/A

Knowns and Constants:
No. of data points.................. 79
Radius of well casing............... 0.083
Radius of well...................... 0.354
Aquifer saturated thickness......... 6.38
Well screen length.................. 15
Static height of water in well...... 31.62
Log(Re/Rw).......................... 3.323
A, B, C............................. 0.000, 0.000, 2.377

ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

RESULTS FROM STATISTICAL CURVE MATCHING

STATISTICAL MATCH PARAMETER ESTIMATES

	Estimate		Std. Error
K =	1.0376E-004	+/-	8.8358E-007
y0 =	8.1402E-001	+/-	2.5689E-003

ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual * weight

Weighted Residual Statistics:
Number of residuals............... 79
Number of estimated parameters.... 2
Degrees of freedom................ 77
Residual mean..................... -8.189E-005

Residual standard deviation..... 0.01181
Residual variance..... 0.0001394

Model Residuals:

Time	Observed	Calculated	Residual	Weight
0.5	0.787	0.76051	0.026488	1
0.5166	0.774	0.7588	0.015201	1
0.5333	0.771	0.75708	0.013921	1
0.55	0.768	0.75536	0.01264	1
0.5666	0.765	0.75366	0.011344	1
0.5833	0.761	0.75195	0.0090531	1
0.6	0.758	0.75024	0.0077568	1
0.6166	0.755	0.74855	0.0064495	1
0.6333	0.755	0.74685	0.0081476	1
0.65	0.752	0.74516	0.0068438	1
0.6666	0.749	0.74348	0.005522	1
0.6833	0.746	0.74179	0.0042095	1
0.7	0.746	0.74011	0.0058923	1
0.7166	0.743	0.73844	0.0045591	1
0.7333	0.739	0.73676	0.0022362	1
0.75	0.736	0.73509	0.00090554	1
0.7666	0.736	0.73343	0.0025631	1
0.7833	0.733	0.73177	0.0012289	1
0.8	0.73	0.73011	-0.00011316	1
0.8166	0.73	0.72846	0.0015332	1
0.8333	0.727	0.72681	0.00018664	1
0.85	0.724	0.72516	-0.0011626	1
0.8666	0.724	0.72353	0.00047254	1
0.8833	0.72	0.72189	-0.0018882	1
0.9	0.717	0.72025	-0.0032486	1
0.9166	0.717	0.71863	-0.0016245	1
0.9333	0.714	0.717	-0.0029964	1
0.95	0.711	0.71537	-0.0043689	1
0.9666	0.711	0.71376	-0.0027558	1
0.9833	0.711	0.71214	-0.0011367	1
1	0.708	0.71052	-0.0025233	1
1.2	0.679	0.69146	-0.012458	1
1.4	0.657	0.6729	-0.015904	1
1.6	0.635	0.65485	-0.019849	1
1.8	0.616	0.63728	-0.02128	1
2	0.6	0.62018	-0.02018	1
2.2	0.581	0.60354	-0.02254	1
2.4	0.569	0.58735	-0.018348	1
2.6	0.553	0.57159	-0.018587	1
2.8	0.537	0.55625	-0.019249	1
3	0.525	0.54132	-0.016325	1
3.2	0.512	0.5268	-0.014801	1
3.4	0.499	0.51267	-0.013667	1
3.6	0.49	0.49891	-0.00891	1
3.8	0.477	0.48552	-0.0085245	1
4	0.465	0.4725	-0.0074983	1
4.2	0.455	0.45982	-0.0048185	1
4.4	0.443	0.44748	-0.004482	1
4.6	0.433	0.43547	-0.0024734	1
4.8	0.424	0.42379	0.00020798	1
5	0.414	0.41242	0.0015809	1
5.2	0.405	0.40135	0.0036476	1

5.4	0.395	0.39058	0.0044145	1
5.6	0.386	0.3801	0.0058954	1
5.8	0.376	0.36991	0.0060922	1
6	0.367	0.35998	0.0070183	1
6.2	0.36	0.35032	0.0096771	1
6.4	0.351	0.34092	0.010078	1
6.6	0.341	0.33177	0.0092231	1
6.8	0.332	0.32287	0.0091261	1
7	0.326	0.31421	0.011788	1
7.2	0.316	0.30578	0.010221	1
7.4	0.307	0.29757	0.0094244	1
7.6	0.3	0.28959	0.010409	1
7.8	0.291	0.28182	0.0091779	1
8	0.285	0.27426	0.010741	1
8.2	0.275	0.2669	0.0081002	1
8.4	0.269	0.25974	0.0092605	1
8.6	0.263	0.25277	0.01023	1
8.8	0.253	0.24599	0.0070128	1
9	0.247	0.23939	0.007613	1
9.2	0.24	0.23296	0.0070361	1
9.4	0.234	0.22671	0.0072858	1
9.6	0.228	0.22063	0.0073689	1
9.8	0.218	0.21471	0.0032887	1
10	0.212	0.20895	0.0030507	1
12	0.152	0.15919	-0.0071932	1
14	0.094999	0.12128	-0.026284	1
16	0.045	0.092402	-0.047402	1

==

RESULTS FROM VISUAL CURVE MATCHING

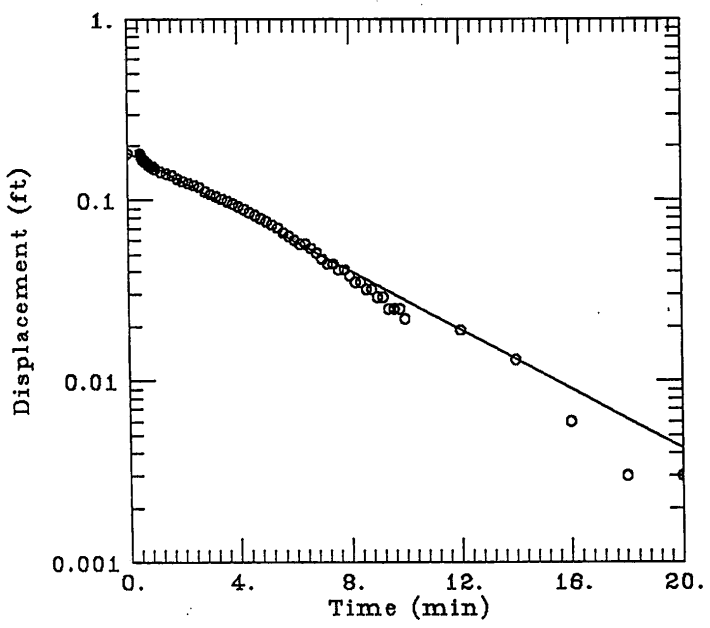
VISUAL MATCH PARAMETER ESTIMATES

	Estimate
K =	1.0376E-004
y0 =	8.1402E-001

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<>>

CBM ENVIRONMENTAL SERVICES,INC	Client: LOIS SMITH
Project No.: 10629	Location: YORK, SOUTH CAROLINA

SMITH'S GROCERY - SLUG TEST - MW-5



DATA SET:
MW5.DAT
12/07/99

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
12/1/1999
TEST WELL:
MW-5
OBS. WELL:
N/A

ESTIMATED PARAMETERS:
K = 0.0001975 ft/min
y0 = 0.1833 ft

TEST DATA:
H0 = 0.18 ft
rc = 0.083 ft
rw = 0.354 ft
L = 10. ft
b = 5.63 ft
H = 24.37 ft

A Q T E S O L V

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield
and
James O. Rumbaugh, III

Geraghty & Miller Modeling Group
1895 Preston White Drive, Suite 301
Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

- o confined aquifers, unconfined aquifers, and leaky aquifers
- o pumping tests, injection tests, recovery tests, and slug tests

Features:

- o Interactive, menu-driven program design
- o Nonlinear least-squares estimation of aquifer coefficients
- o Statistical analysis of results
- o Complete graphical display of results

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<>>

A Q T E S O L V   R E S U L T S
Version 1.10

12/07/99 10:27:12

TEST DESCRIPTION

Data set........... MW5.DAT
Data set title..... SMITH'S GROCERY - SLUG TEST - MW-5
Company............ CBM ENVIRONMENTAL SERVICES,INC
Project............ 10629
Client............. LOIS SMITH
Location........... YORK, SOUTH CAROLINA
Test date.......... 12/1/1999
Test well.......... MW-5
Obs. well.......... N/A

Knowns and Constants:
No. of data points.................. 84
Radius of well casing............... 0.083
Radius of well...................... 0.354
Aquifer saturated thickness......... 5.63
Well screen length.................. 10
Static height of water in well...... 24.37
Log(Re/Rw).......................... 3.052
A, B, C............................. 0.000, 0.000, 1.914

ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

RESULTS FROM STATISTICAL CURVE MATCHING

STATISTICAL MATCH PARAMETER ESTIMATES

	Estimate		Std. Error
K =	1.9754E-004	+/-	2.3917E-006
y0 =	1.8330E-001	+/-	8.7633E-004

ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual * weight

Weighted Residual Statistics:
Number of residuals............... 84
Number of estimated parameters.... 2
Degrees of freedom................ 82
Residual mean..................... -0.0002622

Residual standard deviation..... 0.003854
Residual variance..... 1.485E-005

Model Residuals:

Time	Observed	Calculated	Residual	Weight
0.45	0.18	0.16843	0.011565	1
0.4666	0.177	0.16791	0.0090901	1
0.4833	0.174	0.16738	0.0066162	1
0.5	0.174	0.16686	0.0071407	1
0.5166	0.171	0.16634	0.0046604	1
0.5333	0.167	0.16582	0.0011816	1
0.55	0.167	0.1653	0.0017012	1
0.5666	0.167	0.16478	0.0022161	1
0.5833	0.164	0.16427	-0.00026756	1
0.6	0.164	0.16375	0.00024716	1
0.6166	0.164	0.16324	0.00075721	1
0.6333	0.161	0.16273	-0.0017323	1
0.65	0.161	0.16222	-0.0012224	1
0.6666	0.161	0.16172	-0.00071709	1
0.6833	0.161	0.16121	-0.00021036	1
0.7	0.158	0.1607	-0.0027052	1
0.7166	0.158	0.1602	-0.0022047	1
0.7333	0.158	0.1597	-0.0017027	1
0.75	0.155	0.1592	-0.0042023	1
0.7666	0.155	0.15871	-0.0037064	1
0.7833	0.155	0.15821	-0.0032091	1
0.8	0.155	0.15771	-0.0027134	1
0.8166	0.152	0.15722	-0.0052221	1
0.8333	0.152	0.15673	-0.0047295	1
0.85	0.152	0.15624	-0.0042384	1
0.8666	0.152	0.15575	-0.0037517	1
0.8833	0.152	0.15526	-0.0032637	1
0.9	0.152	0.15478	-0.0027772	1
0.9166	0.152	0.15429	-0.0022951	1
0.9333	0.152	0.15381	-0.0018116	1
0.95	0.148	0.15333	-0.0053297	1
0.9666	0.148	0.15285	-0.0048521	1
0.9833	0.148	0.15237	-0.0043731	1
1	0.148	0.15189	-0.0038957	1
1.2	0.142	0.14629	-0.0042916	1
1.4	0.139	0.1409	-0.0018953	1
1.6	0.136	0.1357	0.00030206	1
1.8	0.13	0.13069	-0.00069334	1
2	0.126	0.12587	0.00012762	1
2.2	0.123	0.12123	0.0017707	1
2.4	0.12	0.11676	0.0032426	1
2.6	0.117	0.11245	0.0045495	1
2.8	0.111	0.1083	0.0026985	1
3	0.107	0.10431	0.0026935	1
3.2	0.104	0.10046	0.0035411	1
3.4	0.101	0.096753	0.0042468	1
3.6	0.098	0.093184	0.0048154	1
3.8	0.094999	0.089747	0.0052525	1
4	0.091999	0.086436	0.0055629	1
4.2	0.088999	0.083248	0.005751	1
4.4	0.084999	0.080177	0.0048221	1
4.6	0.081999	0.077219	0.0047794	1

4.8	0.078999	0.074371	0.0046276	1
5	0.076	0.071628	0.0043726	1
5.2	0.073	0.068985	0.0040146	1
5.4	0.07	0.066441	0.003559	1
5.6	0.066	0.06399	0.0020102	1
5.8	0.063	0.061629	0.0013703	1
6	0.06	0.059356	0.0006435	1
6.2	0.056999	0.057166	-0.00016729	1
6.4	0.056999	0.055058	0.0019415	1
6.6	0.053999	0.053027	0.00097212	1
6.8	0.050999	0.051071	-7.2039E-005	1
7	0.046999	0.049187	-0.0021879	1
7.2	0.043999	0.047372	-0.0033738	1
7.4	0.043999	0.045625	-0.0016263	1
7.6	0.041	0.043942	-0.0029416	1
7.8	0.041	0.042321	-0.0013207	1
8	0.038	0.04076	-0.0027598	1
8.2	0.035	0.039256	-0.0042566	1
8.4	0.035	0.037808	-0.0028085	1
8.6	0.032	0.036414	-0.004414	1
8.8	0.032	0.03507	-0.0030708	1
9	0.028999	0.033777	-0.0047774	1
9.2	0.028999	0.032531	-0.0035315	1
9.4	0.025	0.031331	-0.0063312	1
9.6	0.025	0.030175	-0.0051755	1
9.8	0.025	0.029062	-0.0040624	1
10	0.021999	0.02799	-0.0059906	1
12	0.018999	0.019221	-0.00022168	1
14	0.012999	0.013199	-0.00020036	1
16	0.0059986	0.0090638	-0.0030652	1
18	0.0030003	0.0062241	-0.0032239	1
20	0.0030003	0.0042741	-0.0012739	1

==

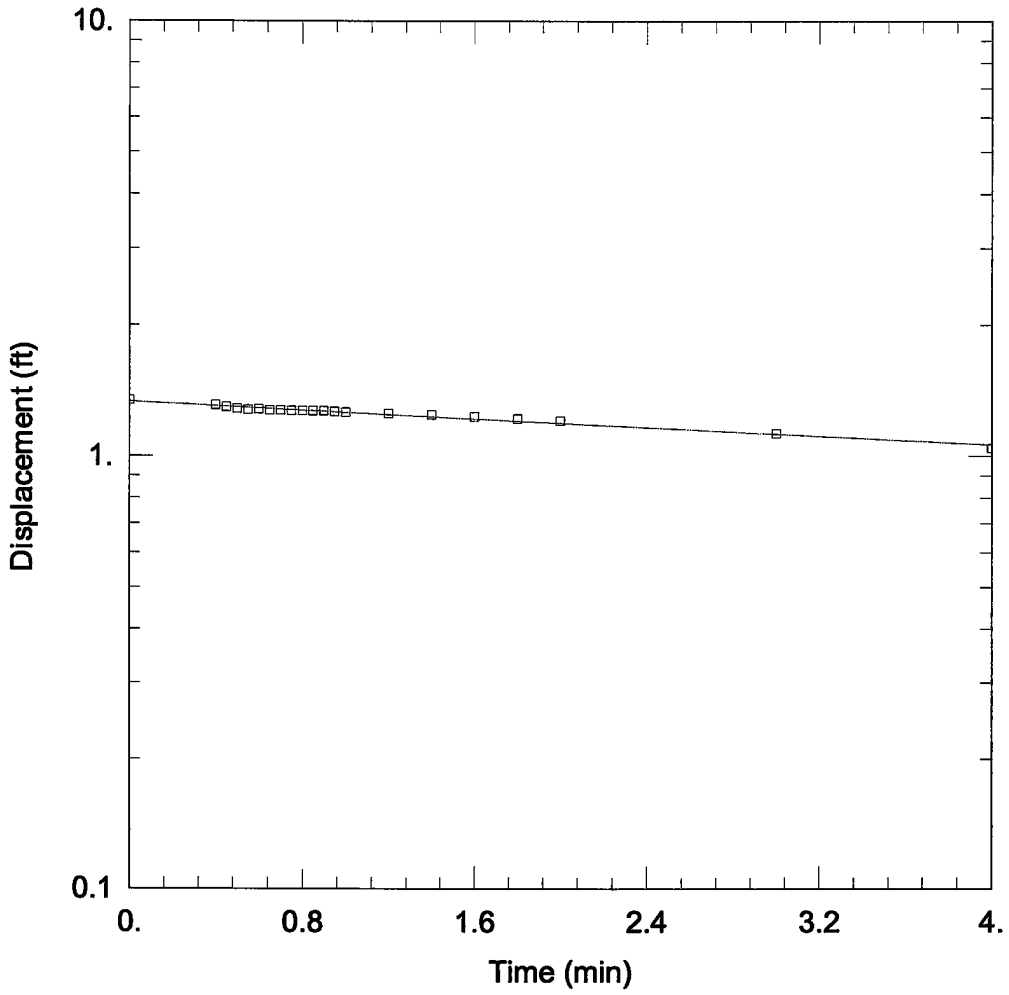
RESULTS FROM VISUAL CURVE MATCHING

VISUAL MATCH PARAMETER ESTIMATES

```
         Estimate
  K  =   1.9754E-004
  y0 =   1.8330E-001
```

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<>>

MW10



SMITH'S GROCERY

Data Set: C:\AQTW\09322MW0.AQT
Date: 12/04/00 Time: 15:17:20

AQUIFER DATA

Saturated Thickness: 6.76 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 1.345 ft Water Column Height: 37.24 ft
Casing Radius: 0.083 ft Wellbore Radius: 0.354 ft
Screen Length: 15. ft

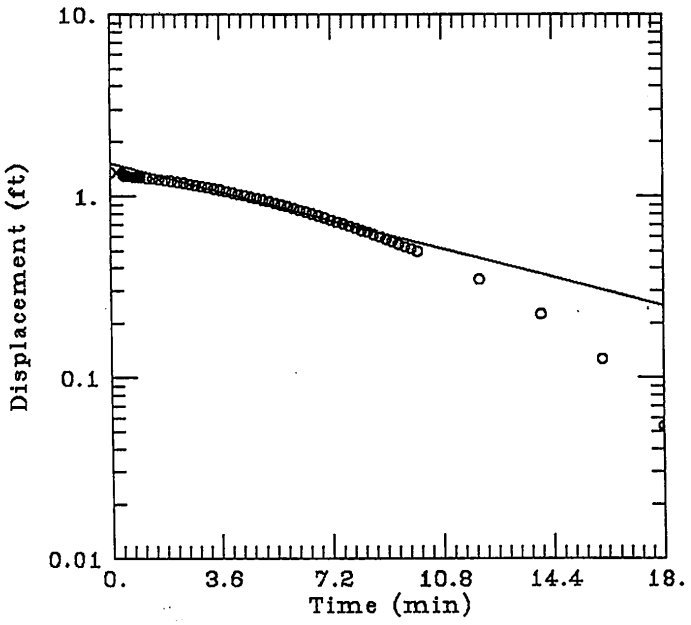
SOLUTION

Aquifer Model: Unconfined K = 4.494E-05 ft/min
Solution Method: Bouwer-Rice y0 = 1.335 ft

$K = 2.2 \times 10^{-7}$ m/s

CBM ENVIRONMENTAL SERVICES,INC	Client: LOIS SMITH
Project No.: 10629	Location: YORK, SOUTH CAROLINA

SMITH'S GROCERY – SLUG TEST – MW-10



DATA SET:
MW10.DAT
12/07/99

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
12/1/1999
TEST WELL:
MW-10
OBS. WELL:
N/A

ESTIMATED PARAMETERS:
K = 7.8891E-05 ft/min
y0 = 1.514,ft

TEST DATA:
H0 = 1.345 ft
rc = 0.083 ft
rw = 0.354 ft
L = 15. ft
b = 6.75 ft
H = 37.24 ft

A Q T E S O L V

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield
and
James O. Rumbaugh, III

Geraghty & Miller Modeling Group
1895 Preston White Drive, Suite 301
Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

- o confined aquifers, unconfined aquifers, and leaky aquifers
- o pumping tests, injection tests, recovery tests, and slug tests

Features:

- o Interactive, menu-driven program design
- o Nonlinear least-squares estimation of aquifer coefficients
- o Statistical analysis of results
- o Complete graphical display of results

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<>>

A Q T E S O L V   R E S U L T S
Version 1.10

12/07/99 10:24:16

TEST DESCRIPTION

```
Data set........... MW10.DAT
Data set title..... SMITH'S GROCERY - SLUG TEST - MW-10
Company............ CBM ENVIRONMENTAL SERVICES,INC
Project............ 10629
Client............. LOIS SMITH
Location........... YORK, SOUTH CAROLINA
Test date.......... 12/1/1999
Test well.......... MW-10
Obs. well.......... N/A

Knowns and Constants:
   No. of data points................... 87
   Radius of well casing................ 0.083
   Radius of well....................... 0.354
   Aquifer saturated thickness.......... 6.76
   Well screen length................... 15
   Static height of water in well....... 37.24
   Log(Re/Rw)........................... 3.42
   A, B, C..............................  0.000,  0.000,  2.377
```

ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

RESULTS FROM STATISTICAL CURVE MATCHING

STATISTICAL MATCH PARAMETER ESTIMATES

```
          Estimate          Std. Error
   K  =   7.1249E-005 +/-   1.8234E-006
   y0 =   1.3882E+000 +/-   1.0340E-002
```

ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual * weight

```
Weighted Residual Statistics:
   Number of residuals................ 87
   Number of estimated parameters.... 2
   Degrees of freedom................ 85
   Residual mean..................... -0.003065
```

Residual standard deviation..... 0.05712
Residual variance..... 0.003263

Model Residuals:

Time	Observed	Calculated	Residual	Weight
0.3833	1.345	1.3408	0.0042136	1
0.4	1.311	1.3388	-0.027757	1
0.4166	1.307	1.3367	-0.029742	1
0.4333	1.301	1.3347	-0.033719	1
0.45	1.298	1.3327	-0.034698	1
0.4666	1.295	1.3307	-0.035693	1
0.4833	1.292	1.3287	-0.036679	1
0.5	1.285	1.3267	-0.041667	1
0.5166	1.289	1.3247	-0.035671	1
0.5333	1.285	1.3227	-0.037666	1
0.55	1.282	1.3207	-0.038664	1
0.5666	1.282	1.3187	-0.036677	1
0.5833	1.282	1.3167	-0.03468	1
0.6	1.279	1.3147	-0.035687	1
0.6166	1.279	1.3127	-0.033709	1
0.6333	1.279	1.3107	-0.031722	1
0.65	1.279	1.3087	-0.029738	1
0.6666	1.276	1.3068	-0.030769	1
0.6833	1.276	1.3048	-0.028791	1
0.7	1.276	1.3028	-0.026815	1
0.7166	1.276	1.3009	-0.024855	1
0.7333	1.276	1.2989	-0.022886	1
0.75	1.273	1.2969	-0.02392	1
0.7666	1.273	1.295	-0.021968	1
0.7833	1.273	1.293	-0.020008	1
0.8	1.273	1.2911	-0.018051	1
0.8166	1.273	1.2891	-0.016108	1
0.8333	1.273	1.2872	-0.014157	1
0.85	1.27	1.2852	-0.015208	1
0.8666	1.27	1.2833	-0.013274	1
0.8833	1.27	1.2813	-0.011332	1
0.9	1.27	1.2794	-0.0093921	1
0.9166	1.27	1.2775	-0.007467	1
0.9333	1.266	1.2755	-0.0095332	1
0.95	1.266	1.2736	-0.0076024	1
0.9666	1.266	1.2717	-0.005686	1
0.9833	1.266	1.2698	-0.0037609	1
1	1.263	1.2678	-0.0048388	1
1.2	1.254	1.245	0.0089556	1
1.4	1.244	1.2227	0.02134	1
1.6	1.232	1.2007	0.031322	1
1.8	1.219	1.1791	0.039909	1
2	1.206	1.1579	0.048108	1
2.2	1.191	1.1371	0.053926	1
2.4	1.175	1.1166	0.058369	1
2.6	1.159	1.0966	0.062445	1
2.8	1.143	1.0768	0.06616	1
3	1.127	1.0575	0.069521	1
3.2	1.112	1.0385	0.073533	1
3.4	1.096	1.0198	0.076204	1
3.6	1.08	1.0015	0.078538	1
3.8	1.061	0.98346	0.077544	1

4	1.042	0.96577	0.076225	1
4.2	1.023	0.94841	0.074589	1
4.4	1.007	0.93136	0.07564	1
4.6	0.988	0.91461	0.073388	1
4.8	0.97	0.89817	0.07183	1
5	0.951	0.88202	0.068977	1
5.2	0.932	0.86616	0.065834	1
5.4	0.913	0.85059	0.06241	1
5.6	0.894	0.8353	0.058702	1
5.8	0.875	0.82028	0.054719	1
6	0.856	0.80553	0.050469	1
6.2	0.834	0.79105	0.042949	1
6.4	0.818	0.77683	0.041172	1
6.6	0.799	0.76286	0.036138	1
6.8	0.78	0.74915	0.030856	1
7	0.761	0.73568	0.025324	1
7.2	0.739	0.72245	0.016551	1
7.4	0.72	0.70946	0.010539	1
7.6	0.704	0.69671	0.0072953	1
7.8	0.685	0.68418	0.0008204	1
8	0.666	0.67188	-0.0058797	1
8.2	0.647	0.6598	-0.012801	1
8.4	0.632	0.64794	-0.015937	1
8.6	0.613	0.63629	-0.023285	1
8.8	0.597	0.62485	-0.027848	1
9	0.578	0.61361	-0.035615	1
9.2	0.562	0.60258	-0.040582	1
9.4	0.543	0.59175	-0.048749	1
9.6	0.527	0.58111	-0.054109	1
9.8	0.512	0.57066	-0.058661	1
10	0.496	0.5604	-0.0644	1
12	0.347	0.46742	-0.12042	1
14	0.224	0.38987	-0.16586	1
16	0.126	0.32518	-0.19918	1
18	0.054001	0.27123	-0.21722	1

RESULTS FROM VISUAL CURVE MATCHING

VISUAL MATCH PARAMETER ESTIMATES

	Estimate
K =	7.8891E-005
y0 =	1.5137E+000

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<>>

APPENDIX G
LABORATORY REPORTS – SOIL SAMPLES

RECEIVED
JAN 0 4 2000
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

09322

SMITH'S GROCERY
GROUNDWATER ANALYTICAL DATA[1]
WATER SUPPLY WELLS

Well ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
Vickery	10/18/99	**64.6**[2]	ND[3]	ND	39.82	ND	5.41
	10/27/99	ND	ND	ND	ND	ND	ND
	11/2/99	ND	ND	ND	ND	ND	**25.5**
	11/9/99	1.13	2.47	2.21	ND	ND	6.64
	11/11/99	ND	ND	ND	ND	ND	ND
	11/16/99	ND	ND	ND	ND	ND	ND
	11/23/99	ND	3.45	ND	ND	ND	ND
	11/30/99	ND	ND	ND	ND	ND	ND
	12/8/99	ND	ND	ND	ND	ND	ND
	12/14/99	ND	ND	ND	ND	ND	ND
	12/21/99	ND	ND	ND	ND	ND	ND
Hill	11/5/99	1.43	ND	ND	ND	ND	2.46
	11/17/99	ND	ND	ND	ND	ND	ND
	11/23/99	1.47	2.91	ND	ND	ND	ND
	11/30/99	1.31	ND	ND	ND	ND	ND
	12/8/99	2.18	ND	ND	ND	ND	1.85
	12/14/99	ND	ND	ND	ND	ND	ND
	12/21/99	ND	ND	ND	ND	ND	ND
Barnette	10/21/99	ND	ND	ND	ND	ND	ND
Beasley	10/21/99	ND	ND	ND	ND	ND	ND
Strife	10/21/99	ND	ND	ND	ND	ND	ND
Wood	10/21/99	ND	ND	ND	ND	ND	ND
Foster	11/19/99	ND	ND	ND	ND	ND	ND
	RBSL[5]	5	1,000	700	10,00	40	10

Notes:

1. Analyses for BTEX constituents, MTBE, and naphthalene using Method 8260; results reported in µg/L.
2. Concentrations in bold exceed the RBSL.
3. Not detected at or above the method detection limit specified in the laboratory analytical report.
4. Barnette, Beasley, Strife and Wood water supply wells sampled by the SCDHEC.
5. Risk Based Screening Level.

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/28/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **VICKERY WSW**
Prism Sample ID: **AB52916**
Login Group: 5148F2
Sample Collection Date/Time: 12/21/99 10:30
Lab Submittal Date/Time: 12/21/99 16:50

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/26/99 10:44	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
SURR: TOLUENE d8	98.25	%		8260	12/26/99 10:44	PEL
SURR: 1,4-DCB-D4	102.00	%		8260	12/26/99 10:44	PEL
SURR: DIBROMOFLUOROMETHANE	94.25	%		8260	12/26/99 10:44	PEL

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/28/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: HILL WSW
Prism Sample ID: AB52917
Login Group: 5148F2
Sample Collection Date/Time: 12/21/99 10:35
Lab Submittal Date/Time: 12/21/99 16:50

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/26/99 10:44	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
SURR: TOLUENE d8	100.75	%		8260	12/26/99 10:44	PEL
SURR: 1,4-DCB-D4	102.25	%		8260	12/26/99 10:44	PEL
SURR: DIBROMOFLUOROMETHANE	92.75	%		8260	12/26/99 10:44	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # ____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?			

Client
Physical Address

Phone Fax
P.O.#/Billing Reference
Project Name

REPORT TO: Name
Address
BILL TO: Name
Address
Requested Due Date

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC SC Other NA
Water Chlorinated Yes No NA
Sample Iced Upon Collection Yes No

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.

Sampler's Signature ____ Sampled By (Print Name) ____ Affiliation ____

Relinquished By: (Signature)	Received By: (Signature)	Date	Military Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Method of Shipment:		Log-In Group No.	

Additional Comments:

NPDES: NC SC OTHER UST: NC SC OTHER GROUNDWATER: NC SC OTHER DRINKING WATER: NC SC OTHER SOLID WASTE: NC SC OTHER OTHER: NC SC OTHER

SEE REVERSE FOR TERMS & CONDITIONS

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

FINAL REPORT COPY

Dec-28-99 01:52P Prism Laboratories 704 525 0409 P.03

Lab Report

RECEIVED

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/16/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB51831
Login Group: PGD16F2
Sample Collection Date/Time: 12/14/1999 10:30
Lab Submittal Date/Time: 12/14/1999 16:35

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	Not detected	ug/L	5	8260	12/15/1999 13:26	MP
BENZENE	Not detected	ug/L	5	8260	12/15/1999 13:26	MP
TOLUENE	Not detected	ug/L	5	8260	12/15/1999 13:26	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	12/15/1999 13:26	MP
XYLENES	Not detected	ug/L	10	8260	12/15/1999 13:26	MP
NAPHTHALENE	Not detected	ug/L	5	8260	12/15/1999 13:26	MP
SURR: DIBROMOFLUOROMETHANE	93	%	86-118	8260	12/15/1999 13:26	MP
SURR: TOLUENE, D8	98	%	88-110	8260	12/15/1999 13:26	MP
SURR: BROMOFLUOROBENZENE	108	%	86-115	8260	12/15/1999 13:26	MP
DILUTION FACTOR	1	ug/L		8260	12/15/1999 13:26	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/16/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: HILL WSW
Prism Sample ID: AB51832
Login Group: PGD16F2
Sample Collection Date/Time: 12/14/1999 10:35
Lab Submittal Date/Time: 12/14/1999 16:35

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	Not detected	ug/L	5	8260	12/15/1999 14:07	MP
BENZENE	Not detected	ug/L	5	8260	12/15/1999 14:07	MP
TOLUENE	Not detected	ug/L	5	8260	12/15/1999 14:07	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	12/15/1999 14:07	MP
XYLENES	Not detected	ug/L	10	8260	12/15/1999 14:07	MP
NAPHTHALENE	Not detected	ug/L	5	8260	12/15/1999 14:07	MP
SURR: DIBROMOFLUOROMETHANE	89	%	86-118	8260	12/15/1999 14:07	MP
SURR: TOLUENE, D8	94	%	88-110	8260	12/15/1999 14:07	MP
SURR: BROMOFLUOROBENZENE	108	%	86-115	8260	12/15/1999 14:07	MP
DILUTION FACTOR	1	ug/L		8260	12/15/1999 14:07	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # ____

PRISM LABORATORIES, INC.
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

Client ____
Physical Address ____
Phone ____ Fax ____
P.O.#/Billing Reference ____
Project Name ____

REPORT TO: Name ____
Address ____
BILL TO: Name ____
Address ____
Requested Due Date ____

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp ____	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

State Certification
Requested NC ____ SC ✓ Other ____ NA ____
Water Chlorinated Yes ____ No ✓ NA ____
Sample Iced Upon Collection Yes ✓ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VIOLATION WSW	12/14/99	1130	WATER	CGVOA	2	40ml	HCL	X			5831
MW WSW	12/14/99	1055	WATER	CGVOA	2	40ml	HCL	✓			5832

Sampler's Signature ____ Sampled By (Print Name) W SCOTT BALL Affiliation CBM ENVIRONMENTAL SERVICES

Relinquished By: (Signature)	Received By: (Signature)	Date 12/14/99	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 12/14/99	1635
Method of Shipment		Log-in Group No. 12991-03	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

Lab Report

DEC 2 2 1999

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/20/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB51171
Login Group: 4692F2
Sample Collection Date/Time: 12/08/99 14:20
Lab Submittal Date/Time: 12/08/99 16:35

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	12/16/99 23:29	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/16/99 23:29	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/16/99 23:29	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/16/99 23:29	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/16/99 23:29	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/16/99 23:29	PEL
SURR: TOLUENE d8	93.50	%		8260	12/16/99 23:29	PEL
SURR: 1,4-DCB-D4	97.75	%		8260	12/16/99 23:29	PEL
SURR: DIBROMOFLUOROMETHANE	97.25	%		8260	12/16/99 23:29	PEL

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/20/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: HILL WSW
Prism Sample ID: AB51172
Login Group: 4692F2
Sample Collection Date/Time: 12/08/99 14:25
Lab Submittal Date/Time: 12/08/99 16:35

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	2.18	ug/L	1.00	8260	12/16/99 12:00	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/16/99 12:00	PEL
NAPHTHALENE	1.85	ug/L	1.00	8260	12/16/99 12:00	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/16/99 12:00	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/16/99 12:00	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/16/99 12:00	PEL
SURR: TOLUENE d8	94.00	%		8260	12/16/99 12:00	PEL
SURR: 1,4-DCB-D4	97.50	%		8260	12/16/99 12:00	PEL
SURR: DIBROMOFLUOROMETHANE	96.00	%		8260	12/16/99 12:00	PEL

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # ____

PRISM LABORATORIES, INC.

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NC	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2°	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client ____
Physical Address ____
Phone ____ Fax ____
P.O.#/Billing Reference ____
Project Name ____

REPORT TO: Name ____ Address ____
BILL TO: Name ____ Address ____
Requested Due Date ____

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ____ SC ✓ Other ____ NA ____
Water Chlorinated Yes ____ No ✓ NA ____
Sample Iced Upon Collection Yes ✓ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED BTEX + MTBE BY 8260						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VICK: PV MSW	12/8/99	1420	WATER	VOA	3	40ml	HCL	X								51171
PILL MSW	12/8/99	1425	WATER	VOA	3	40ml	HCL	X								51172

Sampler's Signature ____ Sampled By (Print Name) W SCOTT BALL Affiliation CBM ENVIRONMENTAL SERVICES

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
		12/8/99	
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 12/8/99	1635
Method of Shipment		Log-In Group No. 4V9057	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

RECEIVED DEC 07 1999

12/2/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB50144
Login Group: PGD1F2
Sample Collection Date/Time: 11/30/1999 11:45
Lab Submittal Date/Time: 11/30/1999 13:23

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	12/1/1999 13:10	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/1/1999 13:10	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/1/1999 13:10	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/1/1999 13:10	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/1/1999 13:10	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/1/1999 13:10	PEL
SURR: TOLUENE d8	98.00	%		8260	12/1/1999 13:10	PEL
SURR: 1,4-DCB-D4	101.50	%		8260	12/1/1999 13:10	PEL
SURR: DIBROMOFLUOROMETHANE	101.75	%		8260	12/1/1999 13:10	PEL

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/2/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **HILL WSW**
Prism Sample ID: **AB50145**
Login Group: PGD1F2
Sample Collection Date/Time: 11/30/1999 12:00
Lab Submittal Date/Time: 11/30/1999 13:23

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	1.31	ug/L	1.00	8260	12/1/1999 13:34	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/1/1999 13:34	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/1/1999 13:34	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/1/1999 13:34	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/1/1999 13:34	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/1/1999 13:34	PEL
SURR: TOLUENE d8	98.50	%		8260	12/1/1999 13:34	PEL
SURR: 1,4-DCB-D4	100.25	%		8260	12/1/1999 13:34	PEL
SURR: DIBROMOFLUOROMETHANE	104.75	%		8260	12/1/1999 13:34	PEL

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE ___ OF ___ QUOTE # ___

PRISM LABORATORIES, INC.
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival? 4	✓		
Received ON WET ICE? Temp ___			
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client ___
Physical Address ___
Phone ___ Fax ___
P.O.#/Billing Reference ___
Project Name ___

REPORT TO: Name ___
Address ___
BILL TO: Name ___
Address ___
Requested Due Date ___

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ___ NA ✓
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.

Sampler's Signature ___ Sampled By (Print Name) ___ Affiliation ___

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Method of Shipment		Log-In Group No.	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

RECEIVED
DEC 0 2 1999

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

12/1/99

#10629

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: WSW-VICKERY
Prism Sample ID: AB49732
Login Group: PGN30F2
Sample Collection Date/Time: 11/23/99 14:15
Lab Submittal Date/Time: 11/23/99 15:25

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/30/99 10:55	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/30/99 10:55	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	11/30/99 10:55	PEL
TOLUENE	3.45	ug/L	1.00	8260	11/30/99 10:55	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/30/99 10:55	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/30/99 10:55	PEL
SURR: TOLUENE d8	102.75	%		8260	11/30/99 10:55	PEL
SURR: 1,4-DCB-D4	80.25	%		8260	11/30/99 10:55	PEL
SURR: DIBROMOFLUOROMETHANE	101.50	%		8260	11/30/99 10:55	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/1/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: WSW-HILL
Prism Sample ID: AB49733
Login Group: PGN30F2
Sample Collection Date/Time: 11/23/99 14:30
Lab Submittal Date/Time: 11/23/99 15:25

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	1.47	ug/L	1.00	8260	11/30/99 09:45	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/30/99 09:45	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	11/30/99 09:45	PEL
TOLUENE	2.91	ug/L	1.00	8260	11/30/99 09:45	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/30/99 09:45	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/30/99 09:45	PEL
SURR: TOLUENE d8	102.25	%		8260	11/30/99 09:45	PEL
SURR: 1,4-DCB-D4	91.50	%		8260	11/30/99 09:45	PEL
SURR: DIBROMOFLUOROMETHANE	106.75	%		8260	11/30/99 09:45	PEL

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2.6	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

Client: CBM Environmental Services Inc

Physical Address: [illegible]

Phone: [illegible] Fax: [illegible]

P.O.#/Billing Reference: [illegible]

Project Name: [illegible]

REPORT TO: Name [illegible]
Address
BILL TO: Name CBM
Address *11/30/99
Requested Due Date 24 hours Turnaround/ASAP

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ___ NA ✓
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	*TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: 8260						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
WSW-Vickery	11-23-99	1415	H_2O	VOA	3	40ml	HCl	✓								49732
WSW-Hill	11-23-99	1430	H_2O	VOA	3	40ml	HCl	✓								49733

Sampler's Signature: [signature] Sampled By (Print Name): SONYA PUNCH Affiliation: CBM Environmental

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
[signature]			
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: [signature]	Date 11/23/99	1525
Method of Shipment		Log-in Group No. PGN3DF2-	

Additional Comments
8260 - BTEX, MTBE + Napth.
(24 hour turnaround)
*AB465-Rush#

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ✓ OTHER ___ GROUNDWATER: NC ___ SC ✓ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

DEC 0 6 1999

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/2/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: FOSTER WSW
Prism Sample ID: AB49616
Login Group: 4137F1
Sample Collection Date/Time: 11/19/99 18:06
Lab Submittal Date/Time: 11/22/99 17:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	12/1/99 08:47	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/1/99 08:47	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/1/99 08:47	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/1/99 08:47	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/1/99 08:47	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/1/99 08:47	PEL
SURR: TOLUENE d8	102.50	%		8260	12/1/99 08:47	PEL
SURR: 1,4-DCB-D4	85.00	%		8260	12/1/99 08:47	PEL
SURR: DIBROMOFLUOROMETHANE	103.50	%		8260	12/1/99 08:47	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

PRISM LABORATORIES, INC.
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp 3°			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?			

Client CBM ENVIRONMENTAL SERVICES, INC.
Physical Address 337 ARROWINDS BLVD, SUITE 118
FORT MILL, SC 29708
Phone (803) 548-5989 Fax (803) 548-5982
P.O.#/Billing Reference 11316
Project Name SMITH'S GROCERY - JOB # 10629

REPORT TO: Name SCOTT DALL
Address CBM
BILL TO: Name
Address
Requested Due Date STANDARD TURNAROUND
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED (STD TAT, NITRATE)	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
FOSTER WSW	11/19/99	1806	WATER	VOA	3	40ml	HCl	✓			11611-1

Sampler's Signature Shannon L. Cottrill Sampled By (Print Name) SHANNON L. COTTRILL Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature) Shannon L. Cottrill	Received By: (Signature) Heath McClain	Date 11/20/99	Military/Hours 1720
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) Heath McClain	Received For Prism Laboratories By: Kathryn Wing	Date 11/20/99	1745
Method of Shipment		Log-In Group No. 11611	

Additional Comments

NPDES NC ___ UST: NC ___ GROUNDWATER: NC ___ DRINKING WATER: NC ✓ SOLID WASTE: NC ___ OTHER: NC ___
SC ___ SC ___ SC ___ SC ___ SC ___ SC ___
OTHER ___ OTHER ___ OTHER ___ OTHER ___ OTHER ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

RECEIVED
NOV 24 1999

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/22/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB49232
Login Group: PGN19F1A
Sample Collection Date/Time: 11/16/199 17:11
Lab Submittal Date/Time: 11/18/199 11:40

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/21/1999 08:35	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
SURR: TOLUENE d8	100.00	%		8260	11/21/1999 08:35	PEL
SURR: 1,4-DCB-D4	106.50	%		8260	11/21/1999 08:35	PEL
SURR: DIBROMOFLUOROMETHANE	97.25	%		8260	11/21/1999 08:35	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE # _____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 3°	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client CBM ENVIRONMENTAL SERVICES, INC
Physical Address 377 CAROWINDS BLVD. SUITE 118
FORT MILL, SC 29708
Phone (803) 548-5989 Fax (803) 548-5872
P.O.#/Billing Reference 11799
Project Name SMITH - CROCKERY - DOP # 10679

REPORT TO: Name SCOTT BAIL
Address _____
BILL TO: Name CBM
Address _____
Requested Due Date 24 HOUR TURNAROUND OR ASAP

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED BTEX + MTBE + NAP	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VICKERY WSW	11/16/99	WATER R SC	1711	VOA	3	40ML	HCL	✓			9911

Sampler's Signature _____ Sampled By (Print Name) SHANNON L. COITEILL Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature)	Received By: (Signature)	Date 11/17/99	Military/Hours 1057
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 11/19/99	Time 1140
Method of Shipment		Log-In Group No. KGNNFIA	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ✓ SC ✓ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

RECEIVED
NOV 16 1999

11/15/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB48316
Login Group: PGN12F1
Sample Collection Date/Time: 11/11/99 12:08
Lab Submittal Date/Time: 11/11/99 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/14/99 14:43	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/14/99 14:43	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	11/14/99 14:43	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/14/99 14:43	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/14/99 14:43	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/14/99 14:43	PEL
SURR: TOLUENE d8	104.75	%		8260	11/14/99 14:43	PEL
SURR: 1,4-DCB-D4	100.00	%		8260	11/14/99 14:43	PEL
SURR: DIBROMOFLUOROMETHANE	101.50	%		8260	11/14/99 14:43	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

PRISM LABORATORIES, INC.
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 4	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?	✓		

Client CBM ENVIRONMENTAL SERVICES, INC
Physical Address 377 CROWNINGS BLVD, SUITE 118
FORT MILL, SC 29708
Phone (803) 548-5989 Fax (803) 548-5892
P.O.#/Billing Reference 11164
Project Name SMITH'S GROCERY - JOB# 10629

REPORT TO: Name SCOTT BALL
Address
BILL TO: Name CBM
Address
Requested Due Date 24 HR TURNAROUND OR ASAP

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 5760 BTEX & MTBE ✓	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VICKERY WSW	11/11/99	1208	WATER	VOA	3	40 ml	HCl	✓			11-1-1

Sampler's Signature Shannon K. Cottrill Sampled By (Print Name) SHANNON COTTRILL Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature) Shannon K. Cottrill	Received By: (Signature) Walter A Ball	Date 11/11/99	Military/Hours 15:30
Relinquished By: (Signature) Walter A Ball	Received By: (Signature)	Date 11/11/99	16:00
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 11/11/99	1600
Method of Shipment		Log-In Group No.	1211271

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ✓ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

RECEIVED
NOV 12 1999

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/11/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smiths Grocery #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB47971
Login Group: PGN10F1
Sample Collection Date/Time: 11/9/99 09:50
Lab Submittal Date/Time: 11/9/99 16:50

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	1.13	ug/L	1.00	8260	11/10/99 08:38	PEL
ETHYLBENZENE	2.21	ug/L	1.00	8260	11/10/99 08:38	PEL
NAPHTHALENE	6.64	ug/L	1.00	8260	11/10/99 08:38	PEL
TOLUENE	2.47	ug/L	1.00	8260	11/10/99 08:38	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/10/99 08:38	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/10/99 08:38	PEL
SURR: TOLUENE d8	104.50	%		8260	11/10/99 08:38	PEL
SURR: 1,4-DCB-D4	96.25	%		8260	11/10/99 08:38	PEL
SURR: DIBROMOFLUOROMETHANE	102.50	%		8260	11/10/99 08:38	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

PRISM LABORATORIES, INC.
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 9.7°	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client: CBM ENVIRONMENTAL SERVICES, INC.
Physical Address: 377 GREENWINDS BLVD, SUITE 11B
FORT MILL, SC 29708
Phone: (803) 548-5989 Fax: (803) 548-5892
P.O.#/Billing Reference: 11160
Project Name: SMITH'S GROCERY - JOB # 10679

REPORT TO: Name: SCOTT BALL
Address:
BILL TO: Name: CBM
Address:
Requested Due Date: 24-HR TURNAROUND OR ASAP

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED 8260 BTEX WITH EDB	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VICKERY WSW	11/09/99	0950	WATER	VOA	3	40ml	HCl	✓			47971

Sampler's Signature: Shannon K. Cottrill Sampled By (Print Name) SHANNON L. COTTRILL Affiliation CBM ENVIRONMENTAL SERVICES

		Date	Military/Hours
Relinquished By: (Signature) Shannon K. Cottrill	Received By: (Signature)	11/10/99	11:35
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: Kathryn Wing	Date 11/9/99	1650
Method of Shipment		Log-In Group No. PGN1OF1	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ✓ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

RECEIVED
NOV 0 8 1999

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/5/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grcery Job#10629
Customer Sample ID: VICKERV'S WSW
Prism Sample ID: AB47247
Login Group: PGN4F1
Sample Collection Date/Time: 11/2/99 14:24
Lab Submittal Date/Time: 11/3/99 10:25

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/4/99 08:58	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/4/99 08:58	PEL
NAPHTHALENE	25.5	ug/L	1.00	8260	11/4/99 08:58	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/4/99 08:58	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/4/99 08:58	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/4/99 08:58	PEL
SURR: TOLUENE d8	101.75	%		8260	11/4/99 08:58	PEL
SURR: 1,4-DCB-D4	104.75	%		8260	11/4/99 08:58	PEL
SURR: DIBROMOFLUOROMETHANE	84.75	%		8260	11/4/99 08:58	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

PRISM LABORATORIES, INC.
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 4	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client CBM ENVIRONMENTAL SERVICES, INC.
Physical Address 377 CAROLINA BLVD., SUITE 118
FORT MILL, SC 29708
Phone (803) 548-5989 Fax (803) 548-5992
P.O.#/Billing Reference 11176
Project Name SMITH'S GROCERY - JOB#110629

REPORT TO: Name SCOTT BALL
Address
BILL TO: Name CBM
Address
Requested Due Date 24-HOUR OR ASAP
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8260 BTEX MTBE TMB	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VICKERY'S WSW)	11/02/99	1424	WATER	VOA	3	40ml	HCl	✓			47247

Sampler's Signature Shannon L. Cottrill Sampled By (Print Name) SHANNON L. COTTRILL Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature) Shannon L. Cottrill	Received By: (Signature)	Date 11/03/99	Military/Hours 1200
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Method of Shipment		Log-In Group No. PGN4F-1	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ✓ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

RECEIVED
NOV 0 2 1999

10/29/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: WSW VICKERY
Prism Sample ID: AB46575
Login Group: PGO29F1
Sample Collection Date/Time: 10/27/99 15:35
Lab Submittal Date/Time: 10/27/99 16:20

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
TOLUENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
XYLENES	Not detected	ug/L	2.00	8260	10/28/99 21:16	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
SURR: TOLUENE d8	104.25	%		8260	10/28/99 21:16	PEL
SURR: 1,4-DCB-D4	110.75	%		8260	10/28/99 21:16	PEL
SURR: DIBROMOFLUOROMETHANE	95.00	%		8260	10/28/99 21:16	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF ____ QUOTE # ____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp ____			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client CRA

Physical Address 377 Interstate Blvd Suite 115
Fort Mill SC 29708

Phone ____ Fax 548-5847

P.O.#/Billing Reference 1112

Project Name Smiths Grocery/10679

REPORT TO: Name Scott Ball
Address ____

BILL TO: Name CRA
Address ____

Requested Due Date 24 hour turnaround

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ____ SC ____ Other ____ NA ____
Water Chlorinated Yes ____ No ____ NA ____
Sample Iced Upon Collection Yes ✓ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8260 STEX MTBE	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
WSW	10-27-99	1535	Water	VOA	3	40ml	HCl				

Sampler's Signature Chip Beach Sampled By (Print Name) Chip Beach Affiliation CRA

Relinquished By: (Signature) Chip Beach	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: Raymond King	Date 10/27/99	1620
Method of Shipment		Log-In Group No. P1-0[illegible]	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ✓ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

RECEIVED
OCT 2 2 1999

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

10/21/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: WSW-1 VCPOC
Prism Sample ID: AB45482
Login Group: PGO19F1
Sample Collection Date/Time: 10/18/99 13:35
Lab Submittal Date/Time: 10/18/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3510	Completed				10/19/99	PEL
EDB	Not detected	ug/L	0.020	8011	10/20/99 10:05	PEL

BENZENE	64.6	ug/L	1.00	8260	10/20/99 09:45	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	10/20/99 09:45	PEL
NAPHTHALENE	5.41	ug/L	1.00	8260	10/20/99 09:45	PEL
TOLUENE	Not detected	ug/L	1.00	8260	10/20/99 09:45	PEL
XYLENES	39.82	ug/L	2.00	8260	10/20/99 09:45	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	10/20/99 09:45	PEL
SURR: TOLUENE d8	102.75	%		8260	10/20/99 09:45	PEL
SURR: 1,4-DCB-D4	104.25	%		8260	10/20/99 09:45	PEL
SURR: DIBROMOFLUOROMETHANE	112.75	%		8260	10/20/99 09:45	PEL

NAPHTHALENE	Not detected	ug/L	5.00	8270	10/20/99 11:36	PEL
ACENAPHTHENE	Not detected	ug/L	3.00	8270	10/20/99 11:36	PEL
ANTHRACENE	Not detected	ug/L	0.30	8270	10/20/99 11:36	PEL
FLUORANTHENE	Not detected	ug/L	0.30	8270	10/20/99 11:36	PEL
FLUORENE	Not detected	ug/L	5.00	8270	10/20/99 11:36	PEL
PYRENE	Not detected	ug/L	0.30	8270	10/20/99 11:36	PEL
BENZO(a)ANTHRACENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
BENZO(a)PYRENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
BENZO(b)FLUORANTHENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
BENZO(k)FLUORANTHENE	Not detected	ug/L	0.50	8270	10/20/99 11:36	PEL
CHRYSENE	Not detected	ug/L	1.00	8270	10/20/99 11:36	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
ACENAPTHYLENE	Not detected	ug/L	3.00	8270	10/20/99 11:36	PEL
BENZO(g,h,i)PERYLENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
PHENANTHRENE	Not detected	ug/L	5.00	8270	10/20/99 11:36	PEL
SURR: D5-NITROBENZENE	51.70	%		8270	10/20/99 11:36	PEL

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

10/21/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **WSW-1**
Prism Sample ID: **AB45482**
Login Group: PGO19F1
Sample Collection Date/Time: 10/18/99 13:35
Lab Submittal Date/Time: 10/18/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SURR: 2-FLUOROBIPHENYL	54.90	%		8270	10/20/99 11:36	PEL
SURR: 4-TERPHENYL, D14	60.30	%		8270	10/20/99 11:36	PEL

LEAD, TOTAL	Less than	mg/L	0.005	EPA 200.7	10/19/99 16:27	MSP
METALS DIGESTION	Completed			EPA 200.7	10/18/99 16:00	GRR

Sample Comments:

Sample for organics was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 7.0	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client CBM Environmental Services Inc
Physical Address 377 CAROWINDS BLVD
Suite 118 FORT MILL, SC 29708
Phone (803) 548-5989 Fax (803) 548-5892
P.O.#/Billing Reference 10474
Project Name Smith's Grocery
Job # 10529

REPORT TO: Name Scott BALL
Address
BILL TO: Name CBM
Address
Requested Due Date 24 hour turnaround

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ___ NA ✓
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED: BTEX + MTBE by 8260	ANALYSES REQUESTED: PAH's by 8270	ANALYSES REQUESTED: EDB	ANALYSES REQUESTED: LEAD	ANALYSES REQUESTED:	ANALYSES REQUESTED:	ANALYSES REQUESTED:	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
WSW-1	10-18-99	1335	Water	VOA/VOA/P/A	3/3/1/2	40 ml/40 ml/500 ml	-/HCl/HNO3	✓	✓	✓	✓						45452

Sampler's Signature Sonya Runch Sampled By (Print Name) SONYA RUNCH Affiliation CBM

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) Sonya Runch	Received For Prism Laboratories By:	Date 10/18/99	1430
Method of Shipment —		Log-In Group No. 19901171	

Additional Comments

* 24-hour Turnaround *
on BTEX + MTBE - 8260
PAH's by 8270
EDB
Lead.

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

RECEIVED
NOV 24 1999

11/22/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery # 10629
Customer Sample ID: HILL WSW
Prism Sample ID: AB49231
Login Group: PGN19F1
Sample Collection Date/Time: 11/17/199 10:40
Lab Submittal Date/Time: 11/18/199 11:40

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/21/1999 08:35	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
SURR: TOLUENE d8	99.75	%		8260	11/21/1999 08:35	PEL
SURR: 1,4-DCB-D4	113.25	%		8260	11/21/1999 08:35	PEL
SURR: DIBROMOFLUOROMETHANE	95.50	%		8260	11/21/1999 08:35	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE # _____

PRISM LABORATORIES, INC.
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 5			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client CBM ENVIRONMENTAL SERVICES, INC.
Physical Address 377 CAROWINDS BLVD, SUITE 118
FORT MILL SC 29708
Phone (803) 548-5989 Fax (803) 548-5992
P.O.#/Billing Reference 11798
Project Name SMITH'S GROCERY - JOB# 10629

REPORT TO: Name SCOTT BALL
Address CBM
BILL TO: Name
Address
Requested Due Date 24 HOURS OR ASAP
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8260 BTEX MTBE	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
HILL WSW	11/17/99	1040	WATER	VOA	3	40ml	HCl	✓			[illegible]

Sampler's Signature Shannon L. Cottrill Sampled By (Print Name) SHANNON L. COTTRILL Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature)	Received By: (Signature)	Date	Military Hours
Shannon L. Cottrill	Heath McClure	11/18/99	1105
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Heath McClure	Kathryn Wing	11/18/99	1140
Method of Shipment		Log-In Group No.	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ✓ SC ✓ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CH[illegible] OF CUSTODY RECORD

PA
4
P
P

Precision Environmental Lab
10200 USA Today Way
Miramar, FL 33025-3905

3217
0543
0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?			

Client: Ryan Corporation
Physical Address: [illegible]
Cornelius NC 28031-[illegible]
Phone: 704-527-6364 Fax: 704-895-0401
P.O.#/Billing Reference:
Project Name: FONTET

PRESS DOWN FIRMLY - 3 COPIES

REPORT TO: Name: Paula Gilchrist
Address:
BILL TO: Name:
Address:
Requested Due Date: Fax Results 11/27/97

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED: 8260 BTEX + MTBE + NAPH	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
AB4(1)31	11/11/97	1040	water	VOA	2	40 ml	HCl	✓			

Sampler's Signature: _____ Sampled By (Print Name): _____ Affiliation: _____

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
[signature]	[signature]	11/11/97	1700
Relinquished By: (Signature) [signature]	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Method of Shipment		Log-In Group No.	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ✓ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

CUSTOMER COPY

Lab Report

RECEIVED
NOV 1?

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/10/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: HILL WSW
Prism Sample ID: AB47787
Login Group: PGN9F1
Sample Collection Date/Time: 11/5/99 08:55
Lab Submittal Date/Time: 11/8/99 10:05

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	1.43	ug/L	1.00	8260	11/10/99 10:54	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/10/99 10:54	PEL
NAPHTHALENE	2.46	ug/L	1.00	8260	11/10/99 10:54	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/10/99 10:54	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/10/99 10:54	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/10/99 10:54	PEL
SURR: TOLUENE d8	89.75	%		8260	11/10/99 10:54	PEL
SURR: 1,4-DCB-D4	94.75	%		8260	11/10/99 10:54	PEL
SURR: DIBROMOFLUOROMETHANE	95.00	%		8260	11/10/99 10:54	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # ____

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 5.2	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client CBM ENVIRONMENTAL SERVICES, INC.
Physical Address 371 GAINSBORO BLVD, SUITE 118
FORT MILL, SC 29715
Phone 803 548 1984 Fax (803) 548-5892
P.O.#/Billing Reference 11152
Project Name JOB - 11152 - SMITH'S BAKERY

REPORT TO: Name SCOTT BALL
Address ____
BILL TO: Name CBM
Address ____
Requested Due Date 24 HOUR TURNAROUND OR ASAP
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested NC ____ SC ✓ Other ____ NA ____
Water Chlorinated Yes ____ No ✓ NA ____
Sample Iced Upon Collection Yes ✓ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED SOLID/SOIL	ANALYSES REQUESTED WATER	ANALYSES REQUESTED	ANALYSES REQUESTED	ANALYSES REQUESTED	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
HILL WSW	11/5/99	0855	WATER	VOA	3	40ml	HCl	✓								47757

Sampler's Signature Shannon Cottrill Sampled By (Print Name) SHANNON COTTRILL Affiliation CBM ENVIRINMENTAL

Relinquished By: (Signature) Shannon Cottrill	Received By: (Signature)	Date 11/08/99	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 11/8/99	1005
Method of Shipment		Log-In Group No. 36723-1 (FW)	

Additional Comments

PSNPF1

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ✓ SC ✓ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

DATE: 12/06/99
PAGE: 1

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210527
Client Project ID: Smiths Grocery/10629

Attn: Mr. Scott Ball
Phone: (803)548-5989

Solid results are reported on a dry weight basis

Pace Sample No: 92744556
Client Sample ID: HILL WSW RAW
Date Collected: 12/03/99
Date Received: 12/03/99
Matrix: Water

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Wet Chemistry								
Sulfide, Total	Method: EPA 376.2				Prep Method: EPA 376.2			
Sulfide	ND	mg/l	0.05	1.00	12/06/99	KAG		
Total Coliform in Water	Method: SM 9223				Prep Method:			
Coliform, Total	Absent	No units	0	1.00	12/04/99	GCW		
Date Prepared					12/03/99	17		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210527
Client Project ID: Smiths Grocery/10629

Pace Sample No: 92744580 Date Collected: 12/03/99 Matrix: Water
Client Sample ID: HILL WSW TREATED Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Wet Chemistry								
Sulfide, Total	Method: EPA 376.2				Prep Method: EPA 376.2			
Sulfide	ND	mg/l	0.05	1.00	12/06/99	KAG		
Total Coliform in Water	Method: SM 9223				Prep Method:			
Coliform, Total	Present	No units	0	1.00	12/04/99	GCW		
Date Prepared					12/03/99 17			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210527
Client Project ID: Smiths Grocery/10629

PARAMETER FOOTNOTES

ND	Not Detected
NC	Not Calculable
PRL	Pace Reporting Limit
App. DF	Applied Dilution Factor

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210527
Client Project ID: Smiths Grocery/10629

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20242
QC Batch Method:
Analysis Method: SM 9223
Analysis Description: Total Coliform in Water
Associated Pace Samples: 92744556 92744580

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

DATE: 12/06/99

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210527
Client Project ID: Smiths Grocery/10629

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20272
Analysis Method: EPA 376.2
Associated Pace Samples: 92744556 92744580

QC Batch Method: EPA 376.2
Analysis Description: Sulfide, Total

METHOD BLANK: 92745967
Associated Pace Samples: 92744556 92744580

Parameter	Units	Method Blank Result	PRL	Footnotes
Sulfide	mg/l	ND	0.05	

MATRIX SPIKE: 92745975

Parameter	Units	92744556	Spike Conc.	Matrix Spike Result	Spike % Rec	Footnotes
Sulfide	mg/l	0	0.5000	0.4780	95.6	

LABORATORY CONTROL SAMPLE: 92745991

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Sulfide	mg/l	0.5000	0.4750	95.0	

SAMPLE DUPLICATE: 92745983

Parameter	Units	92744580	Dup. Result	RPD	Footnotes
Sulfide	mg/l	ND	ND	NC	

Laboratory Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Laboratory Certification IDs
KY Drinking Water 90090
TN UST List
VA Drinking Water 213

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210527
Client Project ID: Smiths Grocery/10629

QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

ND	Not Detected
NC	Not Calculable
PRL	Pace Reporting Limit
RPD	Relative Percent Difference

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

The Right Chemistry, The Right Solution®

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

473309

Page: of

Required Client Information: **Section A**

Company:

Address:

Phone: Fax:

Required Client Information: **Section B**

Report To:

Invoice To:

P.O.

Project Name:

Project Number:

Client Information (Check quote/contract):

Requested Due Date: 12/16/19 *TAT:

* Under 14 day turnaround subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calender days.

To Be Completed by Pace Analytical and Client **Section C**

Quote Reference:

Project Manager:

Project #:

Profile #:

Requested Analysis:

Section D Required Client Information:

SAMPLE ID

One character per box.
(A-Z, 0-9 / .-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED mm / dd / yy	TIME COLLECTED mm:hh a/p	# Containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Remarks / Lab ID
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Sample Condition		Sample Notes	Item No.	Relinquished By / Company	Date	Time	Accepted By / Company	Date	Time
Temp in °C:									
Received on ICE:	Y / N								
Sealed Cooler:	Y / N								
Samples Intact:	Y / N								

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed: (MM / DD / YY)

SEE REVERSE SIDE FOR INSTRUCTIONS

Pace Analytical

INVOICE

9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: (704) 875-9092
Fax: (704) 875-9091

Number: 92048946
Date: 12/06/1999

Sold To:

Mr. Scott Ball
CBM Environmental Services.Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Please Remit To:

Pace Analytical Services, Inc.
NW 8922
P.O. Box 1450
Minneapolis, MN 55485-8922

Client No	Purchase Order No	Project Manager	Terms	Page No
614745/CBM	11351	Sherri Howard	Due Upon Receipt	1

Client Reference: Smiths Grocery/10629
Pace Project No: 9210527

Quantity	U/M	Description	Method	Matrix	Price	Total
ANALYTICAL Charges:						
2.00	ea	Sulfide, Total	EPA 376.2	Water	30.00	$ 60.00
2.00	ea	Total Coliform in Water	SM 9223	Water	50.00	$ 100.00
				ANALYTICAL SUBTOTAL:		$ 160.00
				TOTAL INVOICE AMOUNT:		$ 160.00

The above charges are for the following samples:

Spl#	Description/Client ID	Received
92744556	HILL WSW RAW	12/03/99
92744580	HILL WSW TREATED	12/03/99

1.5% MONTHLY FINANCE CHARGE ASSESSED AFTER 30 DAYS.
PLEASE SEND REMITTANCE PAGE OR REFER TO INVOICE NUMBER 92048946 WHEN REMITTING.

AN EQUAL OPPORTUNITY EMPLOYER

CLIENT

Pace Analytical

INVOICE

9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: (704) 875-9092
Fax: (704) 875-9091

Number: 92048946
Date: 12/06/1999

Sold To:

Mr. Scott Ball
CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Please Remit To:

Pace Analytical Services, Inc.
NW 8922
P.O. Box 1450
Minneapolis, MN 55485-8922

Client No	Purchase Order No	Project Manager	Terms	Page No
614745/CBM	11351	Sherri Howard	Due Upon Receipt	2

PLEASE REMIT THIS PAGE WITH PAYMENT

TOTAL INVOICE AMOUNT: $ 160.00

PLEASE PRINT
INVOICE # AND CLIENT #
ON YOUR CHECK

1.5% MONTHLY FINANCE CHARGE ASSESSED AFTER 30 DAYS.
REMITTANCE PAGE

CLIENT

AN EQUAL OPPORTUNITY EMPLOYER

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: Conductivity Meter
serial no. pH Tester 2 serial no. 45233
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____ Red Line
pH=10.0 _____ Standard _____

Chain of Custody

Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.
Relinquished by	Date/Time	Received by	Date/Time

Well # MW6

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 37.50 ft.
Depth to GW (DGW) ~~37.50~~ ft. 31.60

Length of Water Column(LWC=TWD-DGW) 5.9 ft.

1 Csg. Volume(LWC * C) = 5.9 X 0.163 = 0.961 gals.
3 Csg. Volumes = 3 X 0.961 = 2.88 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 2.88 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st water	0.961	0.961	0.961				2.88
Time (military)	0925	0930	0935	0940				0945
pH (s.u.)	6.4	6.4	6.4	6.6				6.6
Specific Cond. (umhos/cm)	90	40	39	30				30
Water Temp (°C)	16	17	16	16.5				16.5
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 3.70

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter:
serial no. pH Tester 2
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter
serial no. 45533
Standard _____
Standard _____ Red Line
Standard _____

Chain of Custody

Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.
Relinquished by	Date /Time	Received by	Date/Time

Well # MW 7

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 37.00 ft.
Depth to GW (DGW) 30.41 ft.

Length of Water Column(LWC=TWD-DGW) 6.59 ft.

1 Csg. Volume(LWC * C) = 6.59 X 0.163 = 1.07 gals.
3 Csg. Volumes = 3 X 1.07 = 3.22 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.22 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	1.07	1.07	1.07				3.22
Time (military)	1320	1325	1330	1335				1335
pH (s.u.)	6.4	6.4	6.6	6.6				6.6
Specific Cond. (umhos/cm)	60	60	60	55				55
Water Temp (°C)	18	18	18	17.9				17.9
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 1.87 (very strong HC odor)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: Conductivity Meter
serial no. pH Tester 2 serial no. 45233
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____ Red Line
pH=10.0 _____ Standard _____

Chain of Custody

Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.
Relinquished by	Date /Time	Received by	Date/Time

Well # MW 8

Well Diameter(D) 2 inch or ___ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 38.50 ft.
Depth to GW (DGW) 31.65 ft.

Length of Water Column(LWC=TWD-DGW) 6.85 ft.

1 Csg. Volume(LWC * C) = 6.85 X 0.163 = 1.116 gals.
3 Csg. Volumes = 3 X 1.116 = 3.34 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.34 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	1.116	1.116	1.116				3.34
Time (military)	1610	1615	1620	1630				1630
pH (s.u.)	6.2	6.2	6.1	6.1				6.1
Specific Cond. (umhos/cm)	70	50	50	55				55
Water Temp (°C)	15	17	17	17				17
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 2.02

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____ Red Line
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 45533

Chain of Custody

Scott Ball / Rodney Hinger	12-2-99 / 12-3-99	PACE ANALYTICAL	12-2-99 / 12-3-99.
Relinquished by	Date /Time	Received by	Date/Time

Well # MW 9

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 37.00 ft.
Depth to GW (DGW) 29.31 ft.

Length of Water Column(LWC=TWD-DGW) 7.69 ft.

1 Csg. Volume(LWC * C) = 7.69 X 0.163 = 1.253 gals.
3 Csg. Volumes = 3 X 1.253 = 3.760 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.760 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	1.253	1.253	1.253				3.760
Time (military)	1030	1035	1040	1045				1045
pH (s.u.)	6.5	6.4	6.4	6.4				6.4
Specific Cond. (umhos/cm)	250	65	45	35				35
Water Temp (°C)	16	16	17	18				18
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 4.60

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____ Red Line
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 45233

Chain of Custody

Scott Ball / Rodney Hinger	12-2-99 / 12-3-99	PACE ANALYTICAL	12-2-99 / 12-3-99.
Relinquished by	Date / Time	Received by	Date/Time

Well # MW 10

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 44 ft.
Depth to GW (DGW) 37.30 ft.

Length of Water Column(LWC=TWD-DGW) 6.7 ft.

1 Csg. Volume(LWC * C) = 6.7 X 0.163 = 1.092 gals.
3 Csg. Volumes = 3 X 1.092 = 3.276 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.276 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	1.092	1.092	*				2.184
Time (military)	1050	1100	1105	D				1110
pH (s.u.)	6.4	6.4	6.4					6.4
Specific Cond. (umhos/cm)	100	90	70	R				70
Water Temp (°C)	17	18	18	Y				18
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 4.80

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter serial no. 45233
Standard _____
Standard _____ Red Line
Standard _____

Chain of Custody

Scott Ball / Rodney Hinger	12-2-99 / 12-3-99	PACE ANALYTICAL	12-2-99 / 12-3-99.
Relinquished by	Date /Time	Received by	Date/Time

Well # MW 11

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 45 ft.
Depth to GW (DGW) 38.23 ft.

Length of Water Column(LWC=TWD-DGW) 6.77 ft.

1 Csg. Volume(LWC * C) = 6.77 X 0.163 = 1.103 gals.
3 Csg. Volumes = 3 X 1.103 = 3.310 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.310 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	1.103	1.103	1.103				3.310
Time (military)	1125	1130	1135	1137				1140
pH (s.u.)	6.2	6.3	6.3	6.3				6.3
Specific Cond. (umhos/cm)	75	75	70	70				70
Water Temp (°C)	14	16	15	16				16
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 5.46

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____ Red Line
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 45233

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.

Well # MW 12

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 45 ft.
Depth to GW (DGW) 37.53 ft.

Length of Water Column(LWC=TWD-DGW) 7.47 ft.

1 Csg. Volume(LWC * C) = 7.47 X 0.163 = 1.217 gals.
3 Csg. Volumes = 3 X 1.217 = 3.652 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.652 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	1.217	1.217	1.217				3.652
Time (military)	1352	1404	1410	1415				1415
pH (s.u.)	6.6	6.7	6.6	6.6				6.6
Specific Cond. (umhos/cm)	53	49	49	49				49
Water Temp (°C)	17	16	16	16				16
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 2.93 (HC odor)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____ Red Line
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 45L33

Chain of Custody

Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.
Relinquished by	Date/Time	Received by	Date/Time

Well # MW 13

Well Diameter(D) 2 inch or ___ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 48.00 ft.
Depth to GW (DGW) 41.22 ft.

Length of Water Column(LWC=TWD-DGW) 6.78 ft.

1 Csg. Volume(LWC * C) = 6.78 X 0.163 = 1.105 gals.
3 Csg. Volumes = 3 X 1.105 = 3.31 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.31 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1* bailer	1.105	1.105	1.105			...	3.31
Time (military)	1715	1720	1725	1730				1730
pH (s.u.)	6.7	6.6	6.6	6.6				6.6
Specific Cond. (umhos/cm)	40	40	35	30				30
Water Temp (°C)	14	15	15	14				14
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 5.53

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____ Red Line
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 45233

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.

Well # MW 14

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 51 ft.
Depth to GW (DGW) 41.85 ft.

Length of Water Column(LWC=TWD-DGW) 9.15 ft.

1 Csg. Volume(LWC * C) = 9.15 X 0.163 = 1.49 gals.
3 Csg. Volumes = 3 X 1.49 = 4.47 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 4.47 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1* bailer	1.49	1.49	1.49				4.47
Time (military)	1625	1630	1635	1640				1640
pH (s.u.)	6.9	6.9	6.9	6.9				6.9
Specific Cond. (umhos/cm)	70	40	45	45				45
Water Temp (°C)	14	15	15	15				15
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 5.41

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____ Red Line
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 45133

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.

Well # MW 15

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 50.00 ft.
Depth to GW (DGW) 43.23 ft.

Length of Water Column(LWC=TWD-DGW) 6.77 ft.

1 Csg. Volume(LWC * C) = 6.77 X 0.163 = 1.10 gals.
3 Csg. Volumes = 3 X 1.10 = 3.31 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.31 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	1.10	1.10					2.20
Time (military)	1650	1655	1700	D				1705
pH (s.u.)	6.9	6.8	6.8					6.8
Specific Cond. (umhos/cm)	100	70	70	R				70
Water Temp (°C)	14	15	15					15
Turbidity (*)				Y				
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 5.42

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____ Red Line
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 45233

Chain of Custody

Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.
Relinquished by	Date/Time	Received by	Date/Time

Well # MW 16

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 38.00 ft.
Depth to GW (DGW) 30.00 ft.

Length of Water Column(LWC=TWD-DGW) 8 ft.

1 Csg. Volume(LWC * C) = 8 X 0.163 = 1.304 gals.
3 Csg. Volumes = 3 X 1.304 = 3.912 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.912 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	1.304	2.608	3.912				3.912
Time (military)	1450	1455	1500	1505				1505
pH (s.u.)	6.5	6.5	6.5	6.5				6.5
Specific Cond. (umhos/cm)	20	20	20	20				20
Water Temp (°C)	15	15	15	15				15
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 4.88 (mild odor)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel JONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name Smith's Grocery Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____ Red Line
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 45233

Chain of Custody

Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.
Relinquished by	Date /Time	Received by	Date/Time

Well # MW 17

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 40.50 ft.
Depth to GW (DGW) 34.67 ft.

Length of Water Column(LWC=TWD-DGW) 5.83 ft.

1 Csg. Volume(LWC * C) = 5.83 X 0.163 = 0.95 gals.
3 Csg. Volumes = 3 X 0.95 = 2.85 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 2.85 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	(1st bailer	0.95	0.95	0.95				2.85
Time (military)	1430	1435	1440	1445				1445
pH (s.u.)	6.4	6.4	6.4	6.4				6.4
Specific Cond. (umhos/cm)	20	20	20	20				20
Water Temp (°C)	15	15	15	15				15
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 2.70 (odor)

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____ Red Line
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 45133

Chain of Custody

Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.
Relinquished by	Date /Time	Received by	Date/Time

Well # MW 18

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 47.00 ft.
Depth to GW (DGW) 40.87 ft.

Length of Water Column(LWC=TWD-DGW) 6.13 ft.

1 Csg. Volume(LWC * C) = 6.13 X 0.163 = 0.99 gals.
3 Csg. Volumes = 3 X 0.99 = 2.99 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 2.99 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	0.99	0.99	0.99				2.99
Time (military)	1515	1520	1525	1530				1535
pH (s.u.)	6.4	6.8	6.7	6.7				6.7
Specific Cond. (umhos/cm)	70	50	50	50				50
Water Temp (°C)	15	15	15	15				15
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 5.93

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____ Standard _____
pH=7.0 _____ Standard _____ Red Line
pH=10.0 _____ Standard _____

Conductivity Meter serial no. 45233

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.

Well # MW 19

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 51.00 ft.
Depth to GW (DGW) 43.51 ft.

Length of Water Column(LWC=TWD-DGW) 7.49 ft.

1 Csg. Volume(LWC * C) = 7.49 X 0.163 = 1.22 gals.
3 Csg. Volumes = 3 X 1.22 = 3.66 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.66 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1* bailer	1.22	1.22	1.22				3.66
Time (military)	1550	1600	1605	1610				1610
pH (s.u.)	6.4	6.8	6.7	6.8				6.8
Specific Cond. (umhos/cm)	60	60	50	50				50
Water Temp (°C)	14	15	14	15				15
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 6.00

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel Sonya Punch | Rodney Minger
General Weather Conditions Sunny, cold
Ambient Air Temperature 50 °C

Facility Name Smith's Grocery Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter serial no. YSI 33
Standard _____
Standard Red Line
Standard _____

Chain of Custody

Scott Ball	12-2-99	PACE	12-2-99
Rodney Minger	12-3-99	ANALYTICAL	12-3-99
Relinquished by	Date /Time	Received by	Date/Time

Well # TW-1

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 61 ft.
Depth to GW (DGW) 23.64 ft.

Length of Water Column(LWC=TWD-DGW) 37.36 ft.

1 Csg. Volume(LWC * C) = 37.36 X 0.163 = 6.089 gals.
3 Csg. Volumes = 3 X 6.089 = 18.26 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 18.26 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	6.089	6.089	6.089				18.26.
Time (military)	1435	1445	1508	1530				1532
pH (s.u.)	6.4	6.6	6.4	6.3				6.3
Specific Cond. (umhos/cm)	120	135	110	120				120
Water Temp (°C)	15.5	18.0	18.0	16.5				16.5
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 4.35

Pace Analytical

The Right Chemistry. The Right Solution

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

473303

Page: of

Section A — Required Client Information:

Company: CBM ENVIRONMENTAL SERVICES
Address: 377 CARCWINDS BLVD. SUITE 118
FORT MILL S.C. 29708
Phone: (803) 546-5989 Fax: (803) 5485892

Section B — Required Client Information:

Report To: SCOTT BALL
Invoice To: ←
P.O. 11342
Project Name: SMITHS GROCERY
Project Number: 10629

Client Information (Check quote/contract):
Requested Due Date: STANDARD TA *TAT:
* Under 14 day turnaround subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calender days.

Section C — To Be Completed by Pace Analytical and Client

Quote Reference:
Project Manager:
Project #:
Profile #:
Requested Analysis: BTEX MTBE NAPH 8260; PAHS 8270; Pb/Iron; NITRATE; SULFATE; METHANE; EDB

Section D — Required Client Information:

SAMPLE ID — One character per box. (A-Z, 0-9 / .-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes: MATRIX / CODE — WATER WT, SOIL SL, OIL OL, WIPE WP, AIR AR, TISSUE TS, OTHER OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED mm/dd/yy	TIME COLLECTED mm:hh a/p	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	BTEX MTBE NAPH 8260	PAHS 8270	Pb/Iron	NITRATE	SULFATE	METHANE	EDB	Remarks / Lab ID
1	MW-1	WT	12/1/99	1130	14	6	1	1	6			✓	✓	✓	✓	✓	✓	✓	
2	MW-2	WT	12/1/99	1600	14	6	1	1	6			✓	✓	✓	✓	✓	✓	✓	
3	MW-3	WT	12/1/99	1415	14	6	1	1	6			✓	✓	✓	✓	✓	✓	✓	
4	MW-8	WT	12/1/99	1630	14	6	1	1	6			✓	✓	✓	✓	✓	✓	✓	
5	TW-1	WT	12/1/99	1530	14	6	1	1	6			✓	✓	✓	✓	✓	✓	✓	
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Sample Condition		Sample Notes	Item No.	Relinquished By / Company	Date	Time	Accepted By / Company	Date	Time
Temp in °C:	2.9			[illegible] Ball / CBM	12/2	5:35	[illegible]	12/2	5 5
Received on ICE:	(Y) / N								
Sealed Cooler:	Y / (N)								
Samples Intact:	(Y) / N								

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed: (MM / DD / YY)

SEE REVERSE SIDE FOR INSTRUCTIONS

APPENDIX I
LABORATORY REPORT – GROUNDWATER SAMPLES

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

DATE: 12/23/99

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Attn: Mr. Scott Ball
Phone: (803)548-5989

Solid results are reported on a dry weight basis

Pace Sample No: 92742600 Date Collected: 12/01/99 Matrix: Water
Client Sample ID: MW-1 Date Received: 12/02/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	2.6	mg/l	0.05	1.00	12/09/99	RWF	7439-89-6	
Lead	0.0073	mg/l	0.005	1.00	12/09/99	RWF	7439-92-1	
Date Digested					12/03/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	ND	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	6.2	mg/l	5	1.00	12/08/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	610	ug/l	100	20.0	12/04/99	JSS	71-43-2	
Toluene	11000	ug/l	500	100	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/04/99	JSS	106-93-4	
Ethylbenzene	3200	ug/l	100	20.0	12/04/99	JSS	100-41-4	
m&p-Xylene	13000	ug/l	1000	100	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	5500	ug/l	500	100	12/04/99	JSS	95-47-6	
Naphthalene	610	ug/l	100	20.0	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	95	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	100	%		1.00	12/04/99	JSS	2037-26-5	

Laboratory Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Laboratory Certification IDs
KY Drinking Water 90090
TN UST List
VA Drinking Water 213

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92742600 Date Collected: 12/01/99 Matrix: Water
Client Sample ID: MW-1 Date Received: 12/02/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
4-Bromofluorobenzene (S)	85	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/08/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/08/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/08/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/08/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	120-12-7	
Fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/08/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/08/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	8	%		1.00	12/08/99	DHJ	4165-60-0	1
2-Fluorobiphenyl (S)	56	%		1.00	12/08/99	DHJ	321-60-8	
Terphenyl-d14 (S)	41	%		1.00	12/08/99	DHJ	1718-51-0	
Date Extracted					12/06/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92742618 Date Collected: 12/01/99 Matrix: Water
Client Sample ID: MW-2 Date Received: 12/02/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals		Method: EPA 200.7			Prep Method: EPA 200.7			
Iron	8.2	mg/l	0.05	1.00	12/09/99	RWF	7439-89-6	
Lead	1.3	mg/l	0.005	1.00	12/09/99	RWF	7439-92-1	
Date Digested					12/03/99			
Wet Chemistry								
Nitrogen, Nitrate		Method: SM 4500-NO3 F			Prep Method: EPA 353.2			
Nitrate as N	ND	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric		Method: EPA 375.2			Prep Method: EPA 375.2			
Sulfate	20	mg/l	5	1.00	12/08/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260		Method: EPA 8260			Prep Method: EPA 8260			
Methyl-tert-butyl Ether	1600	ug/l	250	50.0	12/04/99	JSS	1634-04-4	
Benzene	36000	ug/l	1200	250	12/04/99	JSS	71-43-2	
Toluene	49000	ug/l	1200	250	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	260	ug/l	250	50.0	12/04/99	JSS	106-93-4	
Ethylbenzene	2800	ug/l	250	50.0	12/04/99	JSS	100-41-4	
m&p-Xylene	9400	ug/l	500	50.0	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	4800	ug/l	250	50.0	12/04/99	JSS	95-47-6	
Naphthalene	890	ug/l	250	50.0	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	96	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	90	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	101	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	93	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics		Method: EPA 8270			Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/08/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/08/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/08/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/08/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	120-12-7	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92742618 Date Collected: 12/01/99 Matrix: Water
Client Sample ID: MW-2 Date Received: 12/02/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/08/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/08/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	0	%		1.00	12/08/99	DHJ	4165-60-0	1
2-Fluorobiphenyl (S)	69	%		1.00	12/08/99	DHJ	321-60-8	
Terphenyl-d14 (S)	42	%		1.00	12/08/99	DHJ	1718-51-0	
Date Extracted					12/06/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92742626 Date Collected: 12/01/99 Matrix: Water
Client Sample ID: MW-3 Date Received: 12/02/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals		Method: EPA 200.7			Prep Method: EPA 200.7			
Iron	1.2	mg/l	0.05	1.00	12/09/99	RWF	7439-89-6	
Lead	ND	mg/l	0.005	1.00	12/09/99	RWF	7439-92-1	
Date Digested					12/03/99			
Wet Chemistry								
Nitrogen, Nitrate		Method: SM 4500-NO3 F			Prep Method: EPA 353.2			
Nitrate as N	1.0	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric		Method: EPA 375.2			Prep Method: EPA 375.2			
Sulfate	6.6	mg/l	5	1.00	12/08/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260		Method: EPA 8260			Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	ND	ug/l	5	1.00	12/04/99	JSS	71-43-2	
Toluene	ND	ug/l	5	1.00	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/04/99	JSS	106-93-4	
Ethylbenzene	ND	ug/l	5	1.00	12/04/99	JSS	100-41-4	
m&p-Xylene	ND	ug/l	10	1.00	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	ND	ug/l	5	1.00	12/04/99	JSS	95-47-6	
Naphthalene	ND	ug/l	5	1.00	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	97	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	92	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	98	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	104	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics		Method: EPA 8270			Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/08/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/08/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/08/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/08/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	120-12-7	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92742626
Client Sample ID: MW-3

Date Collected: 12/01/99
Date Received: 12/02/99

Matrix: Water

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/08/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/08/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	34	%		1.00	12/08/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	26	%		1.00	12/08/99	DHJ	321-60-8	2
Terphenyl-d14 (S)	25	%		1.00	12/08/99	DHJ	1718-51-0	2
Date Extracted					12/06/99			

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92742634 Date Collected: 12/01/99 Matrix: Water
Client Sample ID: MW-8 Date Received: 12/02/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	0.44	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.014	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	ND	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	ND	mg/l	5	1.00	12/08/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	14000	ug/l	2500	500	12/04/99	JSS	71-43-2	
Toluene	60000	ug/l	2500	500	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/04/99	JSS	106-93-4	
Ethylbenzene	4900	ug/l	250	50.0	12/04/99	JSS	100-41-4	
m&p-Xylene	17000	ug/l	500	50.0	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	7900	ug/l	250	50.0	12/04/99	JSS	95-47-6	
Naphthalene	900	ug/l	250	50.0	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	92	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	86	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	92	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	93	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/08/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/08/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/08/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/08/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	120-12-7	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92742634
Client Sample ID: MW-8

Date Collected: 12/01/99
Date Received: 12/02/99

Matrix: Water

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/08/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/08/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	33	%		1.00	12/08/99	DHJ	4165-60-0	2
2-Fluorobiphenyl (S)	22	%		1.00	12/08/99	DHJ	321-60-8	2
Terphenyl-d14 (S)	20	%		1.00	12/08/99	DHJ	1718-51-0	2
Date Extracted					12/06/99			

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92742642 Date Collected: 12/01/99 Matrix: Water
Client Sample ID: TW-1 Date Received: 12/02/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	0.92	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.008	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	0.19	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	15	mg/l	5	1.00	12/08/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	5800	ug/l	500	100	12/04/99	JSS	71-43-2	
Toluene	13000	ug/l	500	100	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/04/99	JSS	106-93-4	
Ethylbenzene	1000	ug/l	100	20.0	12/04/99	JSS	100-41-4	
m&p-Xylene	3600	ug/l	200	20.0	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	1700	ug/l	100	20.0	12/04/99	JSS	95-47-6	
Naphthalene	190	ug/l	100	20.0	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	95	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	92	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	107	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	98	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/08/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/08/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/08/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/08/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	120-12-7	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92742642
Client Sample ID: TW-1

Date Collected: 12/01/99
Date Received: 12/02/99

Matrix: Water

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/08/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/08/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	69	%		1.00	12/08/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	20	%		1.00	12/08/99	DHJ	321-60-8	2
Terphenyl-d14 (S)	10	%		1.00	12/08/99	DHJ	1718-51-0	2
Date Extracted					12/06/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743574 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW4 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	0.28	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.0063	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	2.1	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	ND	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	ND	ug/l	5	1.00	12/04/99	JSS	71-43-2	
Toluene	ND	ug/l	5	1.00	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/04/99	JSS	106-93-4	
Ethylbenzene	ND	ug/l	5	1.00	12/04/99	JSS	100-41-4	
m&p-Xylene	ND	ug/l	10	1.00	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	ND	ug/l	5	1.00	12/04/99	JSS	95-47-6	
Naphthalene	ND	ug/l	5	1.00	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	96	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	92	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	97	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	107	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/08/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/08/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/08/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/08/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	120-12-7	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743574 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW4 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/08/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/08/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	68	%		1.00	12/08/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	59	%		1.00	12/08/99	DHJ	321-60-8	
Terphenyl-d14 (S)	60	%		1.00	12/08/99	DHJ	1718-51-0	
Date Extracted					12/07/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743582 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW5 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	1.4	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.018	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	0.72	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	5.0	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	ND	ug/l	5	1.00	12/04/99	JSS	71-43-2	
Toluene	ND	ug/l	5	1.00	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/04/99	JSS	106-93-4	
Ethylbenzene	20	ug/l	5	1.00	12/04/99	JSS	100-41-4	
m&p-Xylene	26	ug/l	10	1.00	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	51	ug/l	5	1.00	12/04/99	JSS	95-47-6	
Naphthalene	ND	ug/l	5	1.00	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	99	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	101	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	98	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/08/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/08/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/08/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/08/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	120-12-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743582 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW5 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/08/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/08/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/08/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/08/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/08/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	66	%		1.00	12/08/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	60	%		1.00	12/08/99	DHJ	321-60-8	
Terphenyl-d14 (S)	46	%		1.00	12/08/99	DHJ	1718-51-0	
Date Extracted					12/07/99			

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743590 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW6 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	0.63	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.032	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	ND	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	ND	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	3300	ug/l	100	20.0	12/04/99	JSS	71-43-2	
Toluene	11000	ug/l	500	100	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	9.6	ug/l	5	1.00	12/04/99	JSS	106-93-4	
Ethylbenzene	1300	ug/l	100	20.0	12/04/99	JSS	100-41-4	
m&p-Xylene	4600	ug/l	200	20.0	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	2400	ug/l	100	20.0	12/04/99	JSS	95-47-6	
Naphthalene	270	ug/l	100	20.0	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	95	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	90	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	106	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	101	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/09/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/09/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/09/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/09/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	120-12-7	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743590 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW6 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/09/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/09/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	77	%		1.00	12/09/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	73	%		1.00	12/09/99	DHJ	321-60-8	
Terphenyl-d14 (S)	67	%		1.00	12/09/99	DHJ	1718-51-0	
Date Extracted					12/07/99			

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743608 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW7 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	0.70	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.059	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	0.052	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	6.7	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	1800	ug/l	100	20.0	12/04/99	JSS	71-43-2	
Toluene	3100	ug/l	100	20.0	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/04/99	JSS	106-93-4	
Ethylbenzene	2000	ug/l	100	20.0	12/04/99	JSS	100-41-4	
m&p-Xylene	8200	ug/l	200	20.0	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	3000	ug/l	100	20.0	12/04/99	JSS	95-47-6	
Naphthalene	780	ug/l	100	20.0	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	95	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	89	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	107	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	97	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/09/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/09/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/09/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/09/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	120-12-7	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743608 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW7 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/09/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/09/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	28	%		1.00	12/09/99	DHJ	4165-60-0	1
2-Fluorobiphenyl (S)	71	%		1.00	12/09/99	DHJ	321-60-8	
Terphenyl-d14 (S)	69	%		1.00	12/09/99	DHJ	1718-51-0	
Date Extracted					12/07/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743616 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW9 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	0.57	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.011	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	ND	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	5.3	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	18	ug/l	5	1.00	12/04/99	JSS	71-43-2	
Toluene	59	ug/l	5	1.00	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/04/99	JSS	106-93-4	
Ethylbenzene	250	ug/l	50	10.0	12/04/99	JSS	100-41-4	
m&p-Xylene	2600	ug/l	100	10.0	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	1400	ug/l	50	10.0	12/04/99	JSS	95-47-6	
Naphthalene	260	ug/l	50	10.0	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	97	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	93	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	101	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	108	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/09/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/09/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/09/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/09/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	120-12-7	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743616 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW9 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/09/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/09/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	78	%		1.00	12/09/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	70	%		1.00	12/09/99	DHJ	321-60-8	
Terphenyl-d14 (S)	67	%		1.00	12/09/99	DHJ	1718-51-0	
Date Extracted					12/07/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743624 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW10 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	0.17	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.022	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	ND	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	7.2	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	10000	ug/l	500	100	12/04/99	JSS	71-43-2	
Toluene	23000	ug/l	500	100	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	290	ug/l	100	20.0	12/04/99	JSS	106-93-4	
Ethylbenzene	2200	ug/l	100	20.0	12/04/99	JSS	100-41-4	
m&p-Xylene	7500	ug/l	200	20.0	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	3600	ug/l	100	20.0	12/04/99	JSS	95-47-6	
Naphthalene	320	ug/l	100	20.0	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	96	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	90	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	107	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	98	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/09/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/09/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/09/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/09/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	120-12-7	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743624 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW10 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/09/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/09/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	74	%		1.00	12/09/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	59	%		1.00	12/09/99	DHJ	321-60-8	
Terphenyl-d14 (S)	54	%		1.00	12/09/99	DHJ	1718-51-0	
Date Extracted					12/07/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743632 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW11 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals		Method: EPA 200.7			Prep Method: EPA 200.7			
Iron	0.81	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.016	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate		Method: SM 4500-NO3 F			Prep Method: EPA 353.2			
Nitrate as N	3.8	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric		Method: EPA 375.2			Prep Method: EPA 375.2			
Sulfate	5.7	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260		Method: EPA 8260			Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	ND	ug/l	5	1.00	12/04/99	JSS	71-43-2	
Toluene	ND	ug/l	5	1.00	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/04/99	JSS	106-93-4	
Ethylbenzene	ND	ug/l	5	1.00	12/04/99	JSS	100-41-4	
m&p-Xylene	ND	ug/l	10	1.00	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	ND	ug/l	5	1.00	12/04/99	JSS	95-47-6	
Naphthalene	ND	ug/l	5	1.00	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	98	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	92	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	100	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	110	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics		Method: EPA 8270			Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/09/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/09/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/09/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/09/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	120-12-7	

Laboratory Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Laboratory Certification IDs
KY Drinking Water 90090
TN UST List
VA Drinking Water 213

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743632 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW11 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/09/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/09/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	42	%		1.00	12/09/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	38	%		1.00	12/09/99	DHJ	321-60-8	1
Terphenyl-d14 (S)	35	%		1.00	12/09/99	DHJ	1718-51-0	
Date Extracted					12/07/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743640 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW12 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	0.36	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.0077	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	0.62	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	ND	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	500	ug/l	25	5.00	12/04/99	JSS	71-43-2	
Toluene	9.8	ug/l	5	1.00	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	30	ug/l	5	1.00	12/04/99	JSS	106-93-4	
Ethylbenzene	130	ug/l	5	1.00	12/04/99	JSS	100-41-4	
m&p-Xylene	730	ug/l	50	5.00	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	150	ug/l	5	1.00	12/04/99	JSS	95-47-6	
Naphthalene	37	ug/l	5	1.00	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	98	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	101	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	113	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/09/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/09/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/09/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/09/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	120-12-7	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743640 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW12 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/09/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/09/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	54	%		1.00	12/09/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	48	%		1.00	12/09/99	DHJ	321-60-8	
Terphenyl-d14 (S)	50	%		1.00	12/09/99	DHJ	1718-51-0	
Date Extracted					12/07/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743657 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW13 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals		Method: EPA 200.7			Prep Method: EPA 200.7			
Iron	0.065	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	ND	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate		Method: SM 4500-NO3 F			Prep Method: EPA 353.2			
Nitrate as N	0.80	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric		Method: EPA 375.2			Prep Method: EPA 375.2			
Sulfate	7.1	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260		Method: EPA 8260			Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/04/99	JSS	1634-04-4	
Benzene	ND	ug/l	5	1.00	12/04/99	JSS	71-43-2	
Toluene	ND	ug/l	5	1.00	12/04/99	JSS	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/04/99	JSS	106-93-4	
Ethylbenzene	ND	ug/l	5	1.00	12/04/99	JSS	100-41-4	
m&p-Xylene	ND	ug/l	10	1.00	12/04/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	ND	ug/l	5	1.00	12/04/99	JSS	95-47-6	
Naphthalene	ND	ug/l	5	1.00	12/04/99	JSS	91-20-3	
Dibromofluoromethane (S)	99	%		1.00	12/04/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%		1.00	12/04/99	JSS	17060-07-0	
Toluene-d8 (S)	100	%		1.00	12/04/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	114	%		1.00	12/04/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics		Method: EPA 8270			Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/09/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/09/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/09/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/09/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	120-12-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743657 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW13 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/09/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/09/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	22	%		1.00	12/09/99	DHJ	4165-60-0	2
2-Fluorobiphenyl (S)	32	%		1.00	12/09/99	DHJ	321-60-8	2
Terphenyl-d14 (S)	42	%		1.00	12/09/99	DHJ	1718-51-0	
Date Extracted					12/07/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743665 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW14 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals		Method: EPA 200.7			Prep Method: EPA 200.7			
Iron	0.23	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	ND	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate		Method: SM 4500-NO3 F			Prep Method: EPA 353.2			
Nitrate as N	0.80	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric		Method: EPA 375.2			Prep Method: EPA 375.2			
Sulfate	35	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260		Method: EPA 8260			Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/05/99	JSS	1634-04-4	
Benzene	ND	ug/l	5	1.00	12/05/99	JSS	71-43-2	
Toluene	ND	ug/l	5	1.00	12/05/99	JSS	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/05/99	JSS	106-93-4	
Ethylbenzene	ND	ug/l	5	1.00	12/05/99	JSS	100-41-4	
m&p-Xylene	ND	ug/l	10	1.00	12/05/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	ND	ug/l	5	1.00	12/05/99	JSS	95-47-6	
Naphthalene	ND	ug/l	5	1.00	12/05/99	JSS	91-20-3	
Dibromofluoromethane (S)	97	%		1.00	12/05/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	93	%		1.00	12/05/99	JSS	17060-07-0	
Toluene-d8 (S)	99	%		1.00	12/05/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	112	%		1.00	12/05/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics		Method: EPA 8270			Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/09/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/09/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/09/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/09/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	120-12-7	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743665 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW14 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/09/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/09/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	47	%		1.00	12/09/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	46	%		1.00	12/09/99	DHJ	321-60-8	
Terphenyl-d14 (S)	42	%		1.00	12/09/99	DHJ	1718-51-0	
Date Extracted					12/07/99			

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743673 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW15 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	0.66	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.016	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	3.4	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	5.5	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/09/99	RPJ	1634-04-4	
Benzene	ND	ug/l	5	1.00	12/09/99	RPJ	71-43-2	
Toluene	ND	ug/l	5	1.00	12/09/99	RPJ	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/09/99	RPJ	106-93-4	
Ethylbenzene	ND	ug/l	5	1.00	12/09/99	RPJ	100-41-4	
m&p-Xylene	ND	ug/l	10	1.00	12/09/99	RPJ	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	ND	ug/l	5	1.00	12/09/99	RPJ	95-47-6	
Naphthalene	ND	ug/l	5	1.00	12/09/99	RPJ	91-20-3	
Dibromofluoromethane (S)	103	%		1.00	12/09/99	RPJ	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%		1.00	12/09/99	RPJ	17060-07-0	
Toluene-d8 (S)	104	%		1.00	12/09/99	RPJ	2037-26-5	
4-Bromofluorobenzene (S)	96	%		1.00	12/09/99	RPJ	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/09/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/09/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/09/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/09/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	120-12-7	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743673 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW15 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/09/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/09/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/09/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/09/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/09/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	62	%		1.00	12/09/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	58	%		1.00	12/09/99	DHJ	321-60-8	
Terphenyl-d14 (S)	48	%		1.00	12/09/99	DHJ	1718-51-0	
Date Extracted					12/08/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743681 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW16 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	0.79	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.0079	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	0.059	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	10	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/09/99	RPJ	1634-04-4	
Benzene	ND	ug/l	5	1.00	12/09/99	RPJ	71-43-2	
Toluene	ND	ug/l	5	1.00	12/09/99	RPJ	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/09/99	RPJ	106-93-4	
Ethylbenzene	ND	ug/l	5	1.00	12/09/99	RPJ	100-41-4	
m&p-Xylene	ND	ug/l	10	1.00	12/09/99	RPJ	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	ND	ug/l	5	1.00	12/09/99	RPJ	95-47-6	
Naphthalene	ND	ug/l	5	1.00	12/09/99	RPJ	91-20-3	
Dibromofluoromethane (S)	99	%		1.00	12/09/99	RPJ	1868-53-7	
1,2-Dichloroethane-d4 (S)	99	%		1.00	12/09/99	RPJ	17060-07-0	
Toluene-d8 (S)	100	%		1.00	12/09/99	RPJ	2037-26-5	
4-Bromofluorobenzene (S)	92	%		1.00	12/09/99	RPJ	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/14/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/14/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/14/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/14/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/14/99	DHJ	120-12-7	

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743681 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW16 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/14/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/14/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/14/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/14/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/14/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/14/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/14/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/14/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/14/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/14/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	80	%		1.00	12/14/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	62	%		1.00	12/14/99	DHJ	321-60-8	
Terphenyl-d14 (S)	41	%		1.00	12/14/99	DHJ	1718-51-0	
Date Extracted					12/08/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743699 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW17 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals		Method: EPA 200.7			Prep Method: EPA 200.7			
Iron	0.90	mg/l	0.05	1.00	12/10/99	RWF	7439-89-6	
Lead	0.015	mg/l	0.005	1.00	12/10/99	RWF	7439-92-1	
Date Digested					12/07/99			
Wet Chemistry								
Nitrogen, Nitrate		Method: SM 4500-NO3 F			Prep Method: EPA 353.2			
Nitrate as N	ND	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric		Method: EPA 375.2			Prep Method: EPA 375.2			
Sulfate	12	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260		Method: EPA 8260			Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/09/99	RPJ	1634-04-4	
Benzene	ND	ug/l	5	1.00	12/09/99	RPJ	71-43-2	
Toluene	ND	ug/l	5	1.00	12/09/99	RPJ	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/09/99	RPJ	106-93-4	
Ethylbenzene	ND	ug/l	5	1.00	12/09/99	RPJ	100-41-4	
m&p-Xylene	ND	ug/l	10	1.00	12/09/99	RPJ	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	ND	ug/l	5	1.00	12/09/99	RPJ	95-47-6	
Naphthalene	ND	ug/l	5	1.00	12/09/99	RPJ	91-20-3	
Dibromofluoromethane (S)	104	%		1.00	12/09/99	RPJ	1868-53-7	
1,2-Dichloroethane-d4 (S)	104	%		1.00	12/09/99	RPJ	17060-07-0	
Toluene-d8 (S)	104	%		1.00	12/09/99	RPJ	2037-26-5	
4-Bromofluorobenzene (S)	95	%		1.00	12/09/99	RPJ	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics		Method: EPA 8270			Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/15/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/15/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/15/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/15/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/15/99	DHJ	120-12-7	

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743699 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW17 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/15/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/15/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/15/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/15/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/15/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/15/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/15/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/15/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/15/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/15/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	68	%		1.00	12/15/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	70	%		1.00	12/15/99	DHJ	321-60-8	
Terphenyl-d14 (S)	63	%		1.00	12/15/99	DHJ	1718-51-0	
Date Extracted					12/08/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743707 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW18 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals		Method: EPA 200.7			Prep Method: EPA 200.7			
Iron	18	mg/l	0.05	1.00	12/09/99	RWF	7439-89-6	
Lead	0.05	mg/l	0.005	1.00	12/09/99	RWF	7439-92-1	
Date Digested					12/09/99			
Wet Chemistry								
Nitrogen, Nitrate		Method: SM 4500-NO3 F			Prep Method: EPA 353.2			
Nitrate as N	1.9	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric		Method: EPA 375.2			Prep Method: EPA 375.2			
Sulfate	ND	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260		Method: EPA 8260			Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/09/99	RPJ	1634-04-4	
Benzene	ND	ug/l	5	1.00	12/09/99	RPJ	71-43-2	
Toluene	ND	ug/l	5	1.00	12/09/99	RPJ	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/09/99	RPJ	106-93-4	
Ethylbenzene	ND	ug/l	5	1.00	12/09/99	RPJ	100-41-4	
m&p-Xylene	ND	ug/l	10	1.00	12/09/99	RPJ	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	ND	ug/l	5	1.00	12/09/99	RPJ	95-47-6	
Naphthalene	ND	ug/l	5	1.00	12/09/99	RPJ	91-20-3	
Dibromofluoromethane (S)	104	%		1.00	12/09/99	RPJ	1868-53-7	
1,2-Dichloroethane-d4 (S)	106	%		1.00	12/09/99	RPJ	17060-07-0	
Toluene-d8 (S)	104	%		1.00	12/09/99	RPJ	2037-26-5	
4-Bromofluorobenzene (S)	97	%		1.00	12/09/99	RPJ	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics		Method: EPA 8270			Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/14/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/14/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/14/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/14/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/14/99	DHJ	120-12-7	

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743707 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW18 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/14/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/14/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/14/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/14/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/14/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/14/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/14/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/14/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/14/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/14/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	70	%		1.00	12/14/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	59	%		1.00	12/14/99	DHJ	321-60-8	
Terphenyl-d14 (S)	56	%		1.00	12/14/99	DHJ	1718-51-0	
Date Extracted					12/08/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743715 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW19 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals	Method: EPA 200.7				Prep Method: EPA 200.7			
Iron	10	mg/l	0.05	1.00	12/09/99	RWF	7439-89-6	
Lead	0.083	mg/l	0.005	1.00	12/09/99	RWF	7439-92-1	
Date Digested					12/09/99			
Wet Chemistry								
Nitrogen, Nitrate	Method: SM 4500-NO3 F				Prep Method: EPA 353.2			
Nitrate as N	2.6	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric	Method: EPA 375.2				Prep Method: EPA 375.2			
Sulfate	ND	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260				Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/09/99	RPJ	1634-04-4	
Benzene	ND	ug/l	5	1.00	12/09/99	RPJ	71-43-2	
Toluene	ND	ug/l	5	1.00	12/09/99	RPJ	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/09/99	RPJ	106-93-4	
Ethylbenzene	ND	ug/l	5	1.00	12/09/99	RPJ	100-41-4	
m&p-Xylene	ND	ug/l	10	1.00	12/09/99	RPJ	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	ND	ug/l	5	1.00	12/09/99	RPJ	95-47-6	
Naphthalene	ND	ug/l	5	1.00	12/09/99	RPJ	91-20-3	
Dibromofluoromethane (S)	103	%		1.00	12/09/99	RPJ	1868-53-7	
1,2-Dichloroethane-d4 (S)	104	%		1.00	12/09/99	RPJ	17060-07-0	
Toluene-d8 (S)	102	%		1.00	12/09/99	RPJ	2037-26-5	
4-Bromofluorobenzene (S)	96	%		1.00	12/09/99	RPJ	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics	Method: EPA 8270				Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/14/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/14/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/14/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/14/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/14/99	DHJ	120-12-7	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743715 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW19 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/14/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/14/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/14/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/14/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/14/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/14/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/14/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/14/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/14/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/14/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	63	%		1.00	12/14/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	52	%		1.00	12/14/99	DHJ	321-60-8	
Terphenyl-d14 (S)	49	%		1.00	12/14/99	DHJ	1718-51-0	
Date Extracted					12/08/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743723 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: WSW1/Smith Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Metals								
Trace ICP Metals		Method: EPA 200.7			Prep Method: EPA 200.7			
Iron	ND	mg/l	0.05	1.00	12/09/99	RWF	7439-89-6	
Lead	ND	mg/l	0.005	1.00	12/09/99	RWF	7439-92-1	
Date Digested					12/09/99			
Wet Chemistry								
Nitrogen, Nitrate		Method: SM 4500-NO3 F			Prep Method: EPA 353.2			
Nitrate as N	2.2	mg/l	0.05	1.00	12/23/99	TYM		
Sulfate,Automated Colorimetric		Method: EPA 375.2			Prep Method: EPA 375.2			
Sulfate	ND	mg/l	5	1.00	12/13/99	DJD		
GC/MS Volatiles								
GC/MS VOCs by 8260		Method: EPA 8260			Prep Method: EPA 8260			
Methyl-tert-butyl Ether	ND	ug/l	5	1.00	12/10/99	JSS	1634-04-4	
Benzene	ND	ug/l	5	1.00	12/10/99	JSS	71-43-2	
Toluene	ND	ug/l	5	1.00	12/10/99	JSS	108-88-3	
1,2-Dibromoethane	ND	ug/l	5	1.00	12/10/99	JSS	106-93-4	
Ethylbenzene	ND	ug/l	5	1.00	12/10/99	JSS	100-41-4	
m&p-Xylene	ND	ug/l	10	1.00	12/10/99	JSS	7816-60-0	
o-Xylene (1,2-Dimethylbenzene)	ND	ug/l	5	1.00	12/10/99	JSS	95-47-6	
Naphthalene	ND	ug/l	5	1.00	12/10/99	JSS	91-20-3	
Dibromofluoromethane (S)	111	%		1.00	12/10/99	JSS	1868-53-7	
1,2-Dichloroethane-d4 (S)	112	%		1.00	12/10/99	JSS	17060-07-0	
Toluene-d8 (S)	107	%		1.00	12/10/99	JSS	2037-26-5	
4-Bromofluorobenzene (S)	98	%		1.00	12/10/99	JSS	460-00-4	
GC/MS Semivolatiles								
Semivolatile Organics		Method: EPA 8270			Prep Method: EPA 3510			
Acenaphthylene	ND	ug/l	10	1.00	12/15/99	DHJ	208-96-8	
Acenaphthene	ND	ug/l	10	1.00	12/15/99	DHJ	83-32-9	
Fluorene	ND	ug/l	10	1.00	12/15/99	DHJ	86-73-7	
Phenanthrene	ND	ug/l	10	1.00	12/15/99	DHJ	85-01-8	
Anthracene	ND	ug/l	10	1.00	12/15/99	DHJ	120-12-7	

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Pace Sample No: 92743723 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: WSW1 Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Fluoranthene	ND	ug/l	10	1.00	12/15/99	DHJ	206-44-0	
Pyrene	ND	ug/l	10	1.00	12/15/99	DHJ	129-00-0	
Benzo(a)anthracene	ND	ug/l	10	1.00	12/15/99	DHJ	56-55-3	
Chrysene	ND	ug/l	10	1.00	12/15/99	DHJ	218-01-9	
Benzo(b)fluoranthene	ND	ug/l	10	1.00	12/15/99	DHJ	205-99-2	
Benzo(k)fluoranthene	ND	ug/l	10	1.00	12/15/99	DHJ	207-08-9	
Benzo(a)pyrene	ND	ug/l	10	1.00	12/15/99	DHJ	50-32-8	
Indeno(1,2,3-cd)pyrene	ND	ug/l	10	1.00	12/15/99	DHJ	193-39-5	
Dibenz(a,h)anthracene	ND	ug/l	10	1.00	12/15/99	DHJ	53-70-3	
Benzo(g,h,i)perylene	ND	ug/l	10	1.00	12/15/99	DHJ	191-24-2	
Nitrobenzene-d5 (S)	54	%		1.00	12/15/99	DHJ	4165-60-0	
2-Fluorobiphenyl (S)	56	%		1.00	12/15/99	DHJ	321-60-8	
Terphenyl-d14 (S)	51	%		1.00	12/15/99	DHJ	1718-51-0	
Date Extracted					12/08/99			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

PARAMETER FOOTNOTES

ND	Not Detected
NC	Not Calculable
PRL	Pace Reporting Limit
(S)	Surrogate
App. DF	Applied Dilution Factor
[1]	Base/neutral surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.
[2]	Surrogate recovery outside of acceptance window confirmed as matrix effect by second analysis past sample holdtime.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue
Suite 100
Huntersville, NC 28078

Pace Project Number: 1027839
Client Project ID: 9210484

Attn: Client Service
Phone: 704-875-9092

Solid results are reported on a dry weight basis

Pace Sample No: 101743672 Date Collected: 12/01/99 Matrix: Water
Client Sample ID: MW-1 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis	Method:				Prep Method: EPA 3810 Modified		
Methane	27	ug/l	8.6	12/11/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743680 Date Collected: 12/01/99 Matrix: Water
Client Sample ID: MW-2 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/11/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743698 Date Collected: 12/01/99 Matrix: Water
Client Sample ID: MW-3 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis	Method:				Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/11/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743706 Date Collected: 12/01/99 Matrix: Water
Client Sample ID: MW-8 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis	Method:				Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/11/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743714
Client Sample ID: TW-1

Date Collected: 12/01/99
Date Received: 12/07/99

Matrix: Water

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/11/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743722
Client Sample ID: MW-4

Date Collected: 12/02/99
Date Received: 12/07/99

Matrix: Water

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743730 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW-5 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743748
Client Sample ID: MW-6

Date Collected: 12/02/99
Date Received: 12/07/99

Matrix: Water

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743755 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW-7 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743763 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW-9 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743771 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW-10 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis	Method:				Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743789 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW-11 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743797 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW-12 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743805
Client Sample ID: MW-13

Date Collected: 12/02/99
Date Received: 12/07/99

Matrix: Water

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743813 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW-14 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743821 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW-15 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743839 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW-16 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis	Method:				Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743847 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW-17 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis	Method:				Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743854 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW-18 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis	Method:				Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/13/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743862 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: MW-19 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis	Method:				Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/14/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612-607-6444

Pace Project Number: 1027839
Client Project ID: 9210484

Pace Sample No: 101743870 Date Collected: 12/02/99 Matrix: Water
Client Sample ID: WSW-1 Date Received: 12/07/99

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GC/MS Volatiles							
Headspace Analysis		Method:			Prep Method: EPA 3810 Modified		
Methane	ND	ug/l	8.6	12/14/99	RJS	74-82-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612-607-6444

Pace Project Number: 1027839
Client Project ID: 9210484

PARAMETER FOOTNOTES

ND	Not Detected
NC	Not Calculable
PRL	Pace Reporting Limit

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20160
QC Batch Method: EPA 3510
Analysis Method: EPA 8270
Analysis Description: Semivolatile Organics
Associated Pace Samples: 92742600 92742618 92742626 92742634 92742642

METHOD BLANK: 92745587
Associated Pace Samples: 92742600 92742618 92742626 92742634 92742642

Parameter	Units	Method Blank Result	PRL	Footnotes
Acenaphthylene	ug/l	ND	10	
Acenaphthene	ug/l	ND	10	
Fluorene	ug/l	ND	10	
Phenanthrene	ug/l	ND	10	
Anthracene	ug/l	ND	10	
Fluoranthene	ug/l	ND	10	
Pyrene	ug/l	ND	10	
Benzo(a)anthracene	ug/l	ND	10	
Chrysene	ug/l	ND	10	
Benzo(b)fluoranthene	ug/l	ND	10	
Benzo(k)fluoranthene	ug/l	ND	10	
Benzo(a)pyrene	ug/l	ND	10	
Indeno(1,2,3-cd)pyrene	ug/l	ND	10	
Dibenz(a,h)anthracene	ug/l	ND	10	
Benzo(g,h,i)perylene	ug/l	ND	10	
Nitrobenzene-d5 (S)	%	45		
2-Fluorobiphenyl (S)	%	47		
Terphenyl-d14 (S)	%	48		

LABORATORY CONTROL SAMPLE & LCSD: 92740992 92741008

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Acenaphthylene	ug/l	50	37.23	74.5	35.47	70.9	5	

Laboratory Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Laboratory Certification IDs
KY Drinking Water 90090
TN UST List
VA Drinking Water 213

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

LABORATORY CONTROL SAMPLE & LCSD: 92740992 92741008

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Acenaphthene	ug/l	50	36.54	73.1	34.47	68.9	6	
Fluorene	ug/l	50	37.40	74.8	34.27	68.5	9	
Phenanthrene	ug/l	50	38.15	76.3	35.36	70.7	8	
Anthracene	ug/l	50	39.30	78.6	36.07	72.1	9	
Fluoranthene	ug/l	50	35.71	71.4	31.51	63.0	12	
Pyrene	ug/l	50	39.08	78.2	37.16	74.3	5	
Benzo(a)anthracene	ug/l	50	38.21	76.4	35.37	70.7	8	
Chrysene	ug/l	50	38.15	76.3	34.96	69.9	9	
Benzo(b)fluoranthene	ug/l	50	36.96	73.9	33.46	66.9	10	
Benzo(k)fluoranthene	ug/l	50	37.89	75.8	36.12	72.2	5	
Benzo(a)pyrene	ug/l	50	39.47	78.9	35.90	71.8	9	
Indeno(1,2,3-cd)pyrene	ug/l	50	37.13	74.3	34.92	69.8	6	
Dibenz(a,h)anthracene	ug/l	50	37.70	75.4	35.14	70.3	7	
Benzo(g,h,i)perylene	ug/l	50	37.38	74.8	34.61	69.2	8	
Nitrobenzene-d5 (S)				65		66		
2-Fluorobiphenyl (S)				68		68		
Terphenyl-d14 (S)				64		55		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

SAMPLE DUPLICATE: 92742972

Parameter	Units	92735380	Dup. Result	RPD	Footnotes
Lead	mg/l	0.009200	0.008500	8	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20201
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: Trace ICP Metals
Associated Pace Samples: 92742600 92742618 92742626

METHOD BLANK: 92742949
Associated Pace Samples:
92742600 92742618 92742626

Parameter	Units	Method Blank Result	PRL	Footnotes
Iron	mg/l	ND	0.05	
Lead	mg/l	ND	0.005	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92742956 92742964

Parameter	Units	92739390	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Iron	mg/l	1.550	10	10.80	92.5	10.90	93.5	1	
Lead	mg/l	0	0.2500	0.2220	88.8	0.2230	89.2	0	

LABORATORY CONTROL SAMPLE: 92742980

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Iron	mg/l	10	9.720	97.2	
Lead	mg/l	0.2500	0.2350	94.0	

SAMPLE DUPLICATE: 92742972

Parameter	Units	92735380	Dup. Result	RPD	Footnotes
Iron	mg/l	0.5800	0.5500	6	

Laboratory Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Laboratory Certification IDs
KY Drinking Water 90090
TN UST List
VA Drinking Water 213

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20207
QC Batch Method: EPA 375.2
Analysis Method: EPA 375.2
Analysis Description: Sulfate,Automated Colorimetric
Associated Pace Samples: 92742600 92742618 92742626 92742634 92742642

METHOD BLANK: 92743236
Associated Pace Samples:
92742600 92742618 92742626 92742634 92742642

Parameter	Units	Method Blank Result	PRL	Footnotes
Sulfate	mg/l	ND	5	

MATRIX SPIKE: 92743244

Parameter	Units	92741115	Spike Conc.	Matrix Spike Result	Spike % Rec	Footnotes
Sulfate	mg/l	3.113	25	19.03	63.7	1

LABORATORY CONTROL SAMPLE: 92743269

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Sulfate	mg/l	25	23.59	94.4	

SAMPLE DUPLICATE: 92743251

Parameter	Units	92742600	Dup. Result	RPD	Footnotes
Sulfate	mg/l	6.200	7.300	15	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

SAMPLE DUPLICATE: 92743277

Parameter	Units	92742261	Dup. Result	RPD	Footnotes
Sulfate	mg/l	23.00	23.00	1	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20285
Analysis Method: EPA 8260
QC Batch Method: EPA 8260
Analysis Description: GC/MS VOCs by 8260
Associated Pace Samples: 92742600 92742618 92742626 92742634 92742642 92743574 92743582 92743590 92743608 92743616 92743624 92743632 92743640 92743657 92743665 92743673 92743681 92743699 92743707 92743715

METHOD BLANK: 92746361
Associated Pace Samples: 92742600 92742618 92742626 92742634 92742642 92743574 92743582 92743590 92743608 92743616 92743624 92743632 92743640 92743657 92743665

Parameter	Units	Method Blank Result	PRL	Footnotes
Methyl-tert-butyl Ether	ug/l	ND	5	
Benzene	ug/l	ND	5	
Toluene	ug/l	ND	5	
1,2-Dibromoethane	ug/l	ND	5	
Ethylbenzene	ug/l	ND	5	
m&p-Xylene	ug/l	ND	10	
o-Xylene (1,2-Dimethylbenzene)	ug/l	ND	5	
Naphthalene	ug/l	ND	5	
Dibromofluoromethane (S)	%	97		
1,2-Dichloroethane-d4 (S)	%	96		
Toluene-d8 (S)	%	97		
4-Bromofluorobenzene (S)	%	100		

METHOD BLANK: 92750090
Associated Pace Samples: 92743673 92743681 92743699 92743707 92743715

Parameter	Units	Method Blank Result	PRL	Footnotes

Laboratory Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Laboratory Certification IDs
KY Drinking Water 90090
TN UST List
VA Drinking Water 213

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

METHOD BLANK: 92750090
Associated Pace Samples:

92743673 92743681 92743699 92743707 92743715

Parameter	Units	Method Blank Result	PRL	Footnotes
Methyl-tert-butyl Ether	ug/l	ND	5	
Benzene	ug/l	ND	5	
Toluene	ug/l	ND	5	
1,2-Dibromoethane	ug/l	ND	5	
Ethylbenzene	ug/l	ND	5	
m&p-Xylene	ug/l	ND	10	
o-Xylene (1,2-Dimethylbenzene)	ug/l	ND	5	
Naphthalene	ug/l	ND	5	
Dibromofluoromethane (S)	%	98		
1,2-Dichloroethane-d4 (S)	%	99		
Toluene-d8 (S)	%	99		
4-Bromofluorobenzene (S)	%	93		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92746387 92746395

Parameter	Units	92742600	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Dibromofluoromethane (S)					95		97		
1,2-Dichloroethane-d4 (S)					94		95		
Toluene-d8 (S)					103		105		
4-Bromofluorobenzene (S)					86		91		

LABORATORY CONTROL SAMPLE: 92746379

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Methyl-tert-butyl Ether	ug/l	50	50.61	101	
Benzene	ug/l	50	52.57	105	
Toluene	ug/l	50	52.29	105	
1,2-Dibromoethane	ug/l	50	49.07	98.1	
Ethylbenzene	ug/l	50	52.40	105	
m&p-Xylene	ug/l	100	104.0	104	
o-Xylene (1,2-Dimethylbenzene)	ug/l	50	50.64	101	
Naphthalene	ug/l	50	98.52	197	2
Dibromofluoromethane (S)				101	
1,2-Dichloroethane-d4 (S)				100	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

LABORATORY CONTROL SAMPLE: 92746379

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Toluene-d8 (S)				101	
4-Bromofluorobenzene (S)				95	

SAMPLE DUPLICATE: 92746403

Parameter	Units	92742618	Dup. Result	RPD	Footnotes
Methyl-tert-butyl Ether	ug/l	1600	1200	24	
Benzene	ug/l	36000	27000	26	
Toluene	ug/l	49000	38000	25	
1,2-Dibromoethane	ug/l	260.0	230.0	13	
Ethylbenzene	ug/l	2800	2200	26	
m&p-Xylene	ug/l	9400	7400	23	
o-Xylene (1,2-Dimethylbenzene)	ug/l	4800	3800	23	
Naphthalene	ug/l	890.0	610.0	38	
Dibromofluoromethane (S)	%	96	95	0	
1,2-Dichloroethane-d4 (S)	%	90	91	0	
Toluene-d8 (S)	%	101	102	0	
4-Bromofluorobenzene (S)	%	93	93	0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20297
QC Batch Method: EPA 3510
Analysis Method: EPA 8270
Analysis Description: Semivolatile Organics
Associated Pace Samples: 92743574 92743582 92743590 92743608 92743616 92743624 92743632 92743640 92743657 92743665 92743673 92743681 92743699 92743707 92743715 92743723

METHOD BLANK: 92746791
Associated Pace Samples: 92743574 92743582 92743590 92743608 92743616 92743624 92743632 92743640 92743657 92743665

Parameter	Units	Method Blank Result	PRL	Footnotes
Benzo(a)anthracene	ug/l	ND	10	
Chrysene	ug/l	ND	10	
Benzo(b)fluoranthene	ug/l	ND	10	
Benzo(k)fluoranthene	ug/l	ND	10	
Dibenz(a,h)anthracene	ug/l	ND	10	
Nitrobenzene-d5 (S)	%	83		
2-Fluorobiphenyl (S)	%	78		
Terphenyl-d14 (S)	%	77		

METHOD BLANK: 92748730
Associated Pace Samples: 92743673 92743681 92743699 92743707 92743715 92743723

Parameter	Units	Method Blank Result	PRL	Footnotes
Acenaphthylene	ug/l	ND	10	
Acenaphthene	ug/l	ND	10	
Fluorene	ug/l	ND	10	
Phenanthrene	ug/l	ND	10	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

METHOD BLANK: 92748730
Associated Pace Samples:

92743673 92743681 92743699 92743707 92743715 92743723

Parameter	Units	Method Blank Result	PRL	Footnotes
Anthracene	ug/l	ND	10	
Fluoranthene	ug/l	ND	10	
Pyrene	ug/l	ND	10	
Benzo(a)anthracene	ug/l	ND	10	
Chrysene	ug/l	ND	10	
Benzo(b)fluoranthene	ug/l	ND	10	
Benzo(k)fluoranthene	ug/l	ND	10	
Benzo(a)pyrene	ug/l	ND	10	
Indeno(1,2,3-cd)pyrene	ug/l	ND	10	
Dibenz(a,h)anthracene	ug/l	ND	10	
Benzo(g,h,i)perylene	ug/l	ND	10	
Nitrobenzene-d5 (S)	%	82		
2-Fluorobiphenyl (S)	%	76		
Terphenyl-d14 (S)	%	90		

LABORATORY CONTROL SAMPLE: 92746809

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Acenaphthylene	ug/l	50	41.60	83.2	
Acenaphthene	ug/l	50	40.71	81.4	
Fluorene	ug/l	50	41.33	82.7	
Phenanthrene	ug/l	50	43.29	86.6	
Anthracene	ug/l	50	45.08	90.2	
Fluoranthene	ug/l	50	41.94	83.9	
Pyrene	ug/l	50	45.30	90.6	
Benzo(a)anthracene	ug/l	50	45.06	90.1	
Chrysene	ug/l	50	44.08	88.2	
Benzo(b)fluoranthene	ug/l	50	43.76	87.5	
Benzo(k)fluoranthene	ug/l	50	41.50	83.0	
Benzo(a)pyrene	ug/l	50	44.58	89.2	
Indeno(1,2,3-cd)pyrene	ug/l	50	40.90	81.8	
Dibenz(a,h)anthracene	ug/l	50	39.89	79.8	
Benzo(g,h,i)perylene	ug/l	50	40.11	80.2	
Nitrobenzene-d5 (S)				82	
2-Fluorobiphenyl (S)				79	
Terphenyl-d14 (S)				81	

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20300
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: Trace ICP Metals
Associated Pace Samples: 92742634 92742642 92743574 92743582 92743590 92743608 92743616 92743624 92743632 92743640 92743657 92743665 92743673 92743681 92743699

METHOD BLANK: 92746916
Associated Pace Samples: 92742634 92742642 92743574 92743582 92743590 92743608 92743616 92743624 92743632 92743640 92743657 92743665 92743673 92743681 92743699

Parameter	Units	Method Blank Result	PRL	Footnotes
Iron	mg/l	ND	0.05	
Lead	mg/l	ND	0.005	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92746924 92746932

Parameter	Units	92742634	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Iron	mg/l	0.4410	10	9.100	86.6	9.370	89.3	3	
Lead	mg/l	0.01360	0.2500	0.2220	83.4	0.2270	85.4	2	

LABORATORY CONTROL SAMPLE: 92746957

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Iron	mg/l	10	8.750	87.5	
Lead	mg/l	0.2500	0.2100	84.0	

Laboratory Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Laboratory Certification IDs
KY Drinking Water 90090
TN UST List
VA Drinking Water 213

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

QUALITY CONTROL DATA

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

SAMPLE DUPLICATE: 92746940

Parameter	Units	92742642	Dup. Result	RPD	Footnotes
Iron	mg/l	0.9200	0.9200	1	
Lead	mg/l	0.008000	0.007500	6	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20386
Analysis Method: EPA 8260
Associated Pace Samples: 92743723

QC Batch Method: EPA 8260
Analysis Description: GC/MS VOCs by 8260

METHOD BLANK: 92758028
Associated Pace Samples:
92743723

Parameter	Units	Method Blank Result	PRL	Footnotes
Methyl-tert-butyl Ether	ug/l	ND	5	
Benzene	ug/l	ND	5	
Toluene	ug/l	ND	5	
1,2-Dibromoethane	ug/l	ND	5	
Ethylbenzene	ug/l	ND	5	
m&p-Xylene	ug/l	ND	10	
o-Xylene (1,2-Dimethylbenzene)	ug/l	ND	5	
Naphthalene	ug/l	ND	5	
Dibromofluoromethane (S)	%	101		
1,2-Dichloroethane-d4 (S)	%	103		
Toluene-d8 (S)	%	101		
4-Bromofluorobenzene (S)	%	94		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92750330 92750348

Parameter	Units	92743772	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/l	18.57	50	63.21	89.3	63.89	90.6	1	
Toluene	ug/l	13.22	50	58.20	90.0	59.51	92.6	3	
Dibromofluoromethane (S)					102		101		
1,2-Dichloroethane-d4 (S)					105		101		
Toluene-d8 (S)					101		100		
4-Bromofluorobenzene (S)					97		95		

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

LABORATORY CONTROL SAMPLE: 92750314

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Methyl-tert-butyl Ether	ug/l	50	56.27	113	
Benzene	ug/l	50	57.62	115	
Toluene	ug/l	50	58.17	116	
1,2-Dibromoethane	ug/l	50	51.58	103	
Ethylbenzene	ug/l	50	55.64	111	
m&p-Xylene	ug/l	100	110.5	110	
o-Xylene (1,2-Dimethylbenzene)	ug/l	50	53.35	107	
Naphthalene	ug/l	50	100.5	201	2
Dibromofluoromethane (S)				108	
1,2-Dichloroethane-d4 (S)				108	
Toluene-d8 (S)				106	
4-Bromofluorobenzene (S)				95	

SAMPLE DUPLICATE: 92750322

Parameter	Units	92743764	Dup. Result	RPD	Footnotes
Methyl-tert-butyl Ether	ug/l	ND	ND	NC	
Benzene	ug/l	ND	ND	NC	
Toluene	ug/l	ND	ND	NC	
1,2-Dibromoethane	ug/l	ND	ND	NC	
Ethylbenzene	ug/l	ND	ND	NC	
m&p-Xylene	ug/l	ND	ND	NC	
o-Xylene (1,2-Dimethylbenzene)	ug/l	ND	ND	NC	
Naphthalene	ug/l	ND	ND	NC	
Dibromofluoromethane (S)	%	104	101	0	
1,2-Dichloroethane-d4 (S)	%	105	105	0	
Toluene-d8 (S)	%	104	101	0	
4-Bromofluorobenzene (S)	%	100	98	0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

DATE: 12/23/99

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20399
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: Trace ICP Metals
Associated Pace Samples: 92743707 92743715 92743723

METHOD BLANK: 92751155
Associated Pace Samples:
92743707 92743715 92743723

Parameter	Units	Method Blank Result	PRL	Footnotes
Iron	mg/l	ND	0.05	
Lead	mg/l	ND	0.005	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92751163 92751171

Parameter	Units	92747880	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Iron	mg/l	0.1320	10	8.550	84.2	8.430	83.0	1	
Lead	mg/l	0.0008680	0.2500	0.2060	82.1	0.2050	81.7	0	

LABORATORY CONTROL SAMPLE: 92751197

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Iron	mg/l	10	8.840	88.4	
Lead	mg/l	0.2500	0.2180	87.2	

SAMPLE DUPLICATE: 92751189

Parameter	Units	92747898	Dup. Result	RPD	Footnotes
Iron	mg/l	0.07300	0.07700	5	

Laboratory Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Laboratory Certification IDs
KY Drinking Water 90090
TN UST List
VA Drinking Water 213

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

QUALITY CONTROL DATA

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

SAMPLE DUPLICATE: 92751189

Parameter	Units	92747898	Dup. Result	RPD	Footnotes
Lead	mg/l	ND	ND	NC	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

QUALITY CONTROL DATA

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20559
QC Batch Method: EPA 375.2
Analysis Method: EPA 375.2
Analysis Description: Sulfate,Automated Colorimetric
Associated Pace Samples: 92743574 92743582 92743590 92743608 92743616 92743624 92743632 92743640 92743657 92743665 92743673 92743681 92743699 92743707 92743715 92743723

METHOD BLANK: 92758127
Associated Pace Samples: 92743574 92743582 92743590 92743608 92743616 92743624 92743632 92743640 92743657 92743665 92743673 92743681 92743699 92743707 92743715 92743723

Parameter	Units	Method Blank Result	PRL	Footnotes
Sulfate	mg/l	ND	5	

MATRIX SPIKE: 92758135

Parameter	Units	92744150	Spike Conc.	Matrix Spike Result	Spike % Rec	Footnotes
Sulfate	mg/l	2.750	25	28.10	101	

LABORATORY CONTROL SAMPLE: 92758150

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Sulfate	mg/l	25	27.24	109	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

SAMPLE DUPLICATE: 92758143

Parameter	Units	92743574	Dup. Result	RPD	Footnotes
Sulfate	mg/l	ND	ND	NC	

SAMPLE DUPLICATE: 92758168

Parameter	Units	92743665	Dup. Result	RPD	Footnotes
Sulfate	mg/l	35.00	32.00	11	

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

QUALITY CONTROL DATA

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20924
QC Batch Method: EPA 353.2
Analysis Method: SM 4500-NO3 F
Analysis Description: Nitrogen, Nitrate
Associated Pace Samples: 92742600 92742618 92742626 92742634 92742642
92743574 92743582 92743590 92743608 92743616
92743624 92743632 92743640 92743657 92743665
92743673 92743681 92743699 92743707

METHOD BLANK: 92775022
Associated Pace Samples:
92742600 92742618 92742626 92742634 92742642 92743574 92743582
92743590 92743608 92743616 92743624 92743632 92743640 92743657
92743665 92743673 92743681 92743699 92743707

Parameter	Units	Method Blank Result	PRL	Footnotes
Nitrate as N	mg/l	ND	0.05	

MATRIX SPIKE: 92775055

Parameter	Units	92742600	Spike Conc.	Matrix Spike Result	Spike % Rec	Footnotes
Nitrate as N	mg/l	0	5.000	4.747	94.9	

LABORATORY CONTROL SAMPLE: 92775030

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Nitrate as N	mg/l	5.000	5.306	106	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

QUALITY CONTROL DATA

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

SAMPLE DUPLICATE: 92775048

Parameter	Units	92738988	Dup. Result	RPD	Footnotes
Nitrate as N	mg/l	3.100	3.200	1	

SAMPLE DUPLICATE: 92775063

Parameter	Units	92743616	Dup. Result	RPD	Footnotes
Nitrate as N	mg/l	ND	ND	NC	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

QUALITY CONTROL DATA

CBM Environmental Services,Inc
377 Carowinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

Attn: Mr. Scott Ball
Phone: (803)548-5989

QC Batch ID: 20925
QC Batch Method: EPA 353.2
Analysis Method: SM 4500-NO3 F
Analysis Description: Nitrogen, Nitrate
Associated Pace Samples: 92743715 92743723

METHOD BLANK: 92775071
Associated Pace Samples:

Parameter	Units	92743715 92743723 Method Blank Result	PRL	Footnotes
Nitrate as N	mg/l	ND	0.05	

MATRIX SPIKE: 92775097

Parameter	Units	92743715	Spike Conc.	Matrix Spike Result	Spike % Rec	Footnotes
Nitrate as N	mg/l	2.620	5.000	6.854	84.7	

LABORATORY CONTROL SAMPLE: 92775089

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Nitrate as N	mg/l	5.000	5.238	105	

SAMPLE DUPLICATE: 92775105

Parameter	Units	92743723	Dup. Result	RPD	Footnotes
Nitrate as N	mg/l	2.200	2.100	2	

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

QUALITY CONTROL DATA

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

SAMPLE DUPLICATE: 92775113

Parameter	Units	92745223	Dup. Result	RPD	Footnotes
Nitrate as N	mg/l	ND	ND	NC	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Project Number: 9210484
Client Project ID: 10629/Smith's Grocery

QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

ND	Not Detected
NC	Not Calculable
PRL	Pace Reporting Limit
RPD	Relative Percent Difference
(S)	Surrogate
[1]	The spike recovery was outside acceptance limits for the MS and /or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
[2]	The surrogate and/or spike recovery was outside acceptance limits.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
Tel: 612-607-1700
Fax: 612-607-6444

Pace Analytical

QUALITY CONTROL DATA

Pace Analytical Services, Inc.
9800 Kincey Avenue
Suite 100
Huntersville, NC 28078

Pace Project Number: 1027839
Client Project ID: 9210484

Attn: Client Service
Phone: 704-875-9092

QC Batch ID: 39668
QC Batch Method: EPA 3810 Modified
Analysis Method:
Analysis Description: Headspace Analysis
Associated Pace Samples: 101743672 101743680 101743698 101743706 101743714

METHOD BLANK: 101756641
Associated Pace Samples:
101743672 101743680 101743698 101743706 101743714

Parameter	Units	Method Blank Result	PRL	Footnotes
Methane	ug/l	ND	8.6	

LABORATORY CONTROL SAMPLE & LCSD: 101756625 101756633

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Methane	ug/l	60.1	68.70	114	64.29	112	2	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612-607-6444

QUALITY CONTROL DATA

Pace Analytical Services, Inc.
9800 Kincey Avenue
Suite 100
Huntersville, NC 28078

Pace Project Number: 1027839
Client Project ID: 9210484

Attn: Client Service
Phone: 704-875-9092

QC Batch ID: 39717
Analysis Method:
QC Batch Method: EPA 3810 Modified
Analysis Description: Headspace Analysis
Associated Pace Samples: 101743722 101743730 101743748 101743755 101743763
101743771 101743789 101743797 101743805 101743813
101743821 101743839 101743847 101743854

METHOD BLANK: 101758837
Associated Pace Samples:
101743722 101743730 101743748 101743755 101743763 101743771 101743789
101743797 101743805 101743813 101743821 101743839 101743847 101743854

Parameter	Units	Method Blank Result	PRL	Footnotes
Methane	ug/l	ND	8.6	

LABORATORY CONTROL SAMPLE & LCSD: 101758811 101758829

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Methane	ug/l	60.1	47.80	79.5	43.60	72.5	9	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612-607-6444

QUALITY CONTROL DATA

Pace Analytical Services, Inc.
9800 Kincey Avenue
Suite 100
Huntersville, NC 28078

Pace Project Number: 1027839
Client Project ID: 9210484

Attn: Client Service
Phone: 704-875-9092

QC Batch ID: 39793
Analysis Method:
Associated Pace Samples: 101743862 101743870

QC Batch Method: EPA 3810 Modified
Analysis Description: Headspace Analysis

METHOD BLANK: 101763142
Associated Pace Samples: 101743862 101743870

Parameter	Units	Method Blank Result	PRL	Footnotes
Methane	ug/l	ND	8.6	

LABORATORY CONTROL SAMPLE & LCSD: 101763126 101763134

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Methane	ug/l	60.1	52.10	86.7	43.00	71.5	19	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612-607-6444

Pace Project Number: 1027839
Client Project ID: 9210484

QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

ND	Not Detected
NC	Not Calculable
PRL	Pace Reporting Limit
RPD	Relative Percent Difference

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612-607-6444

QUALITY CONTROL DATA
CROSS REFERENCE TABLE

Pace Analytical Services, Inc.
9800 Kincey Avenue
Suite 100
Huntersville, NC 28078

Pace Project Number: 1027839
Client Project ID: 9210484

Attn: Client Service
Phone: 704-875-9092

Pace Sample No Identifier	Client Sample Identifier	QC Batch Method	QC Batch Identifier	Analytical Method	Analytical Batch Identifier
101743672	MW-1		39668		
101743680	MW-2		39668		
101743698	MW-3		39668		
101743706	MW-8		39668		
101743714	TW-1		39668		
101743722	MW-4		39717		
101743730	MW-5		39717		
101743748	MW-6		39717		
101743755	MW-7		39717		
101743763	MW-9		39717		
101743771	MW-10		39717		
101743789	MW-11		39717		
101743797	MW-12		39717		
101743805	MW-13		39717		
101743813	MW-14		39717		
101743821	MW-15		39717		
101743839	MW-16		39717		
101743847	MW-17		39717		
101743854	MW-18		39717		
101743862	MW-19		39793		
101743870	WSW-1		39793		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Pace Analytical

The Right Chemistry, The Right Solution®

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

473303

Page: of

Required Client Information: Section A

Company:

Address:

Phone: Fax:

Required Client Information: Section B

Report To:

Invoice To:

P.O. 11342

Project Name:

Project Number:

Client Information (Check quote/contract):

Requested Due Date: *TAT:

* Under 14 day turnaround subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calender days.

To Be Completed by Pace Analytical and Client Section C

Quote Reference:

Project Manager:

Project #: 10484

Profile #:

Requested Analysis:

Section D Required Client Information:

SAMPLE ID

One character per box.
(A–Z, 0–9 / ,–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (mm:hh a/p)	# Containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Remarks / Lab ID
1	MW-1	WT			4		1	1	6			742600
2	MW-2	WT			4		1	1	6			742618
3	MW-3	WT			4		1	1	6			742626
4	MW-8	WT			4		1	1	6			742634
5	TW-1	WT			4		1	1	6			742642
6												
7												
8												
9												
10												
11												
12												

Sample Condition		Sample Notes	Item No.	Relinquished By / Company	Date	Time	Accepted By / Company	Date	Time
Temp in °C:	4.9				12/12	5:35		12/12	5:35
Received on ICE:	(Y) / N								
Sealed Cooler:	Y / N								
Samples Intact:	(Y) / N								

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed: (MM / DD / YY)

SEE REVERSE SIDE FOR INSTRUCTIONS

Pace Analytical

The Right Chemistry, The Right Solution®

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

473644

Page: 1 of 2

Required Client Information: Section A

Company: RM

Address: [illegible] Blvd > Blvd

Dr 118 E 4 Mill St

29715

Phone: 5035555999 Fax: [illegible]

Required Client Information: Section B

Report To: Scott Bell

Invoice To:

P.O.: 11542

Project Name: Sin this Century

Project Number: 10629

Client Information (Check quote/contract):

Requested Due Date: Normal *TAT: Normal

* Under 14 day turnaround subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calender days.

To Be Completed by Pace Analytical and Client Section C

Quote Reference:

Project Manager:

Project #:

Profile #:

Requested Analysis:

Section D Required Client Information:

SAMPLE ID

One character per box.
(A–Z, 0–9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED mm / dd / yy	TIME COLLECTED mm:hh a/p	# Containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	8260 BTEX MTBE	8270 PAHs	Pb	Fe	EDB	Nitrate	Sulfate	Methane	Remarks / Lab ID
1	MW 4	WT	12/4/09	0915	14	✓	✓	✓				-	✓	✓	✓	✓	✓	✓	✓	743574
2	MW 5			0945	14							✓	-	✓	✓	✓	✓	✓	✓	743582
3	MW 6			0945	3								✓	-	✓	✓	✓	✓	✓	743590
4	MW 7			1310	14							-	✓	✓	✓	✓	✓	✓	✓	743608
5	MW 9			1045								✓	✓	✓	✓	-	✓	✓	✓	743616
6	MW 10			1110								✓	✓	-	✓	✓	✓	✓	✓	743624
7	MW 11			1110								✓	✓	✓	✓	✓	✓	✓	✓	743632
8	MW 12			1115								✓	✓	✓	✓	✓	✓	✓	✓	743640
9	MW 13			1730								✓	✓	✓	✓	✓	✓	✓	✓	743657
10	MW 14			1510								✓	✓	✓	✓	✓	✓	-	✓	743665
11	MW 15			1705								✓	✓	✓	✓	✓	-	✓	✓	743673
12	MW 16		↓	1505	↓	↓	↓	↓	↓	↓	↓	✓	✓	✓	✓	✓	✓	✓	✓	743681

Sample Condition		Sample Notes	Item No.	Relinquished By / Company	Date	Time	Accepted By / Company	Date	Time
Temp in °C:	2 4			Rodney M / RM	12/3	0930	J Maloney PACE	12/3	1120 A
Received on ICE:	(Y) / N			J Maloney PACE	12/3	1155 A	S Marble	12/3	1155
Sealed Cooler:	Y / (N)								
Samples Intact:	(Y) / N								

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Rodney Manager

SIGNATURE of SAMPLER: [signature] DATE Signed: (MM / DD / YY) 12/3/09

SEE REVERSE SIDE FOR INSTRUCTIONS

Pace Analytical

The Right Chemistry, The Right Solution®

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

473645

Required Client Information: Section A

Company	[illegible]
Address	[illegible]
	[illegible] SC
	24715
Phone	[illegible]
Fax	[illegible]

Required Client Information: Section B

Report To:	[illegible]
Invoice To:	
P.O.	11342
Project Name:	[illegible]
Project Number:	10629

Client Information (Check quote/contract):

Requested Due Date: *TAT:

* Under 14 day turnaround subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calender days.

To Be Completed by Pace Analytical and Client — Section C

Quote Reference:	
Project Manager:	[illegible]
Project #:	
Profile #:	

Section D — Required Client Information:

SAMPLE ID — One character per box. (A–Z, 0–9 / .–) Sample IDs MUST BE UNIQUE

Valid Matrix Codes: MATRIX / CODE — WATER WT; SOIL SL; OIL OL; WIPE WP; AIR AR; TISSUE TS; OTHER OT

Requested Analysis:

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED mm / dd / yy	TIME COLLECTED mm:hh a/p	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	8260 [illegible]	8270 PAHs	Pb	Fe	EDB	nitrate	sulfate	[illegible]			Remarks / Lab ID
1	MW17	[illegible]	[illegible]	[illegible]	14	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓			743699
2	MW18	[illegible]		1535								✓	✓	✓	✓	✓	✓	✓	✓			743707
3	MW19	WT		1610								✓	✓	✓	✓	✓	✓	✓	✓			743715
4	~~MW20R~~											~~✓~~	~~✓~~	~~✓~~	~~✓~~	~~✓~~	~~✓~~	~~✓~~	~~✓~~			
5	MSW1	WT		1545								✓	✓	✓	✓	✓	✓	✓	✓			743723
6																						
7																						
8																						
9																						
10																						
11																						
12																						

Sample Condition		Sample Notes	Item No.	Relinquished By / Company	Date	Time	Accepted By / Company	Date	Time
Temp in °C:	2.4			[illegible] / [illegible]	[illegible]	[illegible]	J Maloney PACE	12/3	1190
Received on ICE:	(Y) / N			J Maloney PACE	12/3	1155 A	[illegible]	12/3	1155
Sealed Cooler:	Y / (N)								
Samples Intact:	Y / N								

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible]

SIGNATURE of SAMPLER: [illegible] DATE Signed: (MM / DD / YY) 12/3/99

SEE REVERSE SIDE FOR INSTRUCTIONS

APPENDIX J
LABORATORY REPORTS – WATER SUPPLY WELL SAMPLES

Lab Report

RECEIVED
OCT 22 1999

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

10/21/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: WSW-1 VCKEY
Prism Sample ID: AB45482
Login Group: PGO19F1
Sample Collection Date/Time: 10/18/99 13:35
Lab Submittal Date/Time: 10/18/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3510	Completed				10/19/99	PEL
EDB	Not detected	ug/L	0.020	8011	10/20/99 10:05	PEL

BENZENE	64.6	ug/L	1.00	8260	10/20/99 09:45	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	10/20/99 09:45	PEL
NAPHTHALENE	5.41	ug/L	1.00	8260	10/20/99 09:45	PEL
TOLUENE	Not detected	ug/L	1.00	8260	10/20/99 09:45	PEL
XYLENES	39.82	ug/L	2.00	8260	10/20/99 09:45	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	10/20/99 09:45	PEL
SURR: TOLUENE d8	102.75	%		8260	10/20/99 09:45	PEL
SURR: 1,4-DCB-D4	104.25	%		8260	10/20/99 09:45	PEL
SURR: DIBROMOFLUOROMETHANE	112.75	%		8260	10/20/99 09:45	PEL

NAPHTHALENE	Not detected	ug/L	5.00	8270	10/20/99 11:36	PEL
ACENAPHTHENE	Not detected	ug/L	3.00	8270	10/20/99 11:36	PEL
ANTHRACENE	Not detected	ug/L	0.30	8270	10/20/99 11:36	PEL
FLUORANTHENE	Not detected	ug/L	0.30	8270	10/20/99 11:36	PEL
FLUORENE	Not detected	ug/L	5.00	8270	10/20/99 11:36	PEL
PYRENE	Not detected	ug/L	0.30	8270	10/20/99 11:36	PEL
BENZO(a)ANTHRACENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
BENZO(a)PYRENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
BENZO(b)FLUORANTHENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
BENZO(k)FLUORANTHENE	Not detected	ug/L	0.50	8270	10/20/99 11:36	PEL
CHRYSENE	Not detected	ug/L	1.00	8270	10/20/99 11:36	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
ACENAPTHYLENE	Not detected	ug/L	3.00	8270	10/20/99 11:36	PEL
BENZO(g,h,i)PERYLENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
PHENANTHRENE	Not detected	ug/L	5.00	8270	10/20/99 11:36	PEL
SURR: D5-NITROBENZENE	51.70	%		8270	10/20/99 11:36	PEL

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

10/21/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **WSW-1**
Prism Sample ID: **AB45482**
Login Group: PGO19F1
Sample Collection Date/Time: 10/18/99 13:35
Lab Submittal Date/Time: 10/18/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SURR: 2-FLUOROBIPHENYL	54.90	%		8270	10/20/99 11:36	PEL
SURR: 4-TERPHENYL, D14	60.30	%		8270	10/20/99 11:36	PEL

LEAD, TOTAL	Less than	mg/L	0.005	EPA 200.7	10/19/99 16:27	MSP
METALS DIGESTION	Completed			EPA 200.7	10/18/99 16:00	GRR

Sample Comments:

Sample for organics was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 7.0	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client CBM Environmental Services Inc
Physical Address 377 CAROWINDS BLVD
Suite 118 FORT MILL, SC 29708
Phone (803) 548-5989 Fax (803) 548-5892
P.O.#/Billing Reference 10474
Project Name Smith's Grocery
Job # 10529

REPORT TO: Name Scott BALL
Address
BILL TO: Name CBM
Address
Requested Due Date 24 hour turnaround

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ___ NA ✓
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: BTEX + MTBE 8260	PAH's by 8270	EDB	LEAD			REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
WSW-1	10-18-99	1335	Water	VOA/VOA	P/A	2/2/1/2	40 ml / 40 ml / 500 ml	- / HCl / HNO3 / -	✓	✓	✓	✓				4542

Sampler's Signature Sonya Punch Sampled By (Print Name) SONYA PUNCH Affiliation CBM

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) Sonya Punch	Received For Prism Laboratories By:	Date 10/18/99	1430
Method of Shipment		Log-In Group No. 12017-1	

Additional Comments

* 24-hour Turnaround *
on BTEX + MTBE - 8260
PAH's by 8270
EDB
Lead.

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ✓ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

SPECIALIZED ASSAYS, INC.
2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ESTAMERICA/HYDROLOGIC, INC 8320
2440 TWO NOTCH STE B
COLUMBIA, SC 29223

Project: 09322
Project Name: SMITH'S GROCERY
Sampler: E. FALLER

Lab Number: 99-A161127
Sample ID: STRIFE RES.
Sample Type: Ground water
Site ID:

Date Collected: 10/21/99
Time Collected: 12:07
Date Received: 10/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Sub Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS*										
Acetone	ND	ug/l	10	10	1	10/25/99	1:14	C. Wani	8260B	5812
Benzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Bromobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Bromochloromethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Bromoform	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Bromomethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
2-Butanone	ND	ug/l	10	10	1	10/25/99	1:14	C. Wani	8260B	5812
n-Butylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
sec-Butylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
t-Butylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Carbon disulfide	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Carbon tetrachloride	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Chlorobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Chloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
2-Chloroethylvinylether	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Chloroform	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Chloromethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
2-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
4-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	10/25/99	1:14	C. Wani	8260B	5812
Dibromochloromethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2-Dibromoethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Dibromomethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,3-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,4-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Dichlorodifluoromethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1-Dichloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2-Dichloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1-Dichloroethene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
cis-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,3-Dichloropropane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
2,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1 Dichloropropene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812

COPY 1

NOV.03'1999 14:19 19038984333 DIV_UST MGMT #2037 P.032/039

SPECIALIZED ASSAYS, INC.

2060 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161127
Sample ID: STRIFE RES.

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Ethylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Hexachlorobutadiene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
2-Hexanone	ND	ug/l	10	10	1	10/25/99	1:14	C. Wani	8260B	5812
Isopropylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
4 Isopropyltoluene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
4-Methyl-2-pentanone	ND	ug/l	10	10	1	10/25/99	1:14	C. Wani	8260B	5812
Methylene chloride	ND	ug/l	10	10	1	10/25/99	1:14	C. Wani	8260B	5812
Naphthalene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
n-Propylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C Wani	8260B	5812
Styrene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Tetrachloroethene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Toluene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1,1-Trichloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1,2-Trichloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Trichloroethene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2,3-Trichloropropane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Vinyl chloride	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Xylenes	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Bromodichloromethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Trichlorofluoromethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	85.	60. - 138.
VOA Surr, Toluene d8	87.	80. - 123.
VOA Surr, 4-BFB	93.	73. - 122.
VOA Surr, DBFM	104.	74. - 133.

COPY 1
DIV UST MGMT
NOV.03'1999 14:19 13038984330 #2037 P.033/039

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TESTAMERICA/HYDROLOGIC, INC 8320

9440 TWO NOTCH STE B
COLUMBIA, SC 29223

Lab Number: 99-A161129
Sample ID: BEASLEY RES.
Sample Type: Ground water
Site ID:

Date Collected: 10/21/99
Time Collected: 12:18
Date Received: 10/22/99
Time Received: 9:00

Project: 09322
Project Name: SMITH'S GROCERY
Sampler: B. FALLER

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS*										
Acetone	ND	ug/l	10	10	1	10/25/99	2:34	C. Wani	8260B	5812
Benzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Bromobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Bromochloromethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Bromoform	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Bromomethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
2-Butanone	ND	ug/l	10	10	1	10/25/99	2:34	C. Wani	8260B	5812
n-Butylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
sec-Butylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
t-Butylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Carbon disulfide	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Carbon tetrachloride	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Chlorobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Chloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
2-Chloroethylvinylether	ND	ug/l	5	2	1	10/25/99	2:34	C. Wani	8260B	5812
Chloroform	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Chloromethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
2-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
4-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	10/25/99	2:34	C. Wani	8260B	5812
Dibromochloromethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,2-Dibromoethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Dibromomethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,2-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,3-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,4-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Dichlorodifluoromethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,1-Dichloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,2-Dichloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,1-Dichloroethene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
cis-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,3-Dichloropropane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
2,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,1-Dichloropropene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812

NOV.03'1999 14:20 13038984330 DIV UST MGMT #2037 P.034/039

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161129
Sample ID: BEASLEY RES.

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
Ethylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
Hexachlorobutadiene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
2-Hexanone	ND	ug/l	10	10	1	10/25/99	2:34	C. Wasi	8260B	5812
Isopropylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
4-Isopropyltoluene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
4-Methyl-2-pentanone	ND	ug/l	10	10	1	10/25/99	2:34	C. Wasi	8260B	5812
Methylene chloride	ND	ug/l	10	10	1	10/25/99	2:34	C. Wasi	8260B	5812
Naphthalene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
n-Propylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
Styrene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
Tetrachloroethene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
Toluene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
1,1,1-Trichloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
1,1,2-Trichloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
Trichloroethene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
1,2,3-Trichloropropane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
Vinyl chloride	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
Xylenes	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
Dibromodichloromethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812
Trichlorofluoromethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wasi	8260B	5812

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	89.	60. - 138.
VOA Surr, Toluene d8	90.	80. - 123.
VOA Surr, 4-BFB	98.	73. - 122.
VOA Surr, DBFM	99.	74. - 133.

COPY 1
DIV UST MGMT
NOV.03'1999 14:21 13038984330
#2037 P.035/039

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TESTAMERICA/HYDROLOGIC, INC 8320

9440 TWO NOTCH STE B
COLUMBIA, SC 29223

Project: 09322
Project Name: SMITH'S GROCERY
Sampler: B. FALLER

Lab Number: 99-A161130
Sample ID: 3040 RES.-WOOD
Sample Type: Ground water
Site ID:

Date Collected: 10/21/99
Time Collected: 12:11
Date Received: 10/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	10/25/99	3:13	C. Wani	8260B	5812
Benzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Bromobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Bromochloromethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Bromoform	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Bromomethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
2-Butanone	ND	ug/l	10	10	1	10/25/99	3:13	C. Wani	8260B	5812
n-Butylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
sec-Butylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
t-Butylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Carbon disulfide	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Carbon tetrachloride	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Chlorobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Chloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
2-Chloroethylvinylether	ND	ug/l	5	2	1	10/25/99	3:13	C. Wani	8260B	5812
Chloroform	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Chloromethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
2-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
4-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	10/25/99	3:13	C. Wani	8260B	5812
Dibromochloromethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2-Dibromoethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Dibromomethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,3-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,4-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Dichlorodifluoromethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,1-Dichloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2-Dichloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,1-Dichloroethene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
cis-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,3-Dichloropropane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
2,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,1-Dichloropropene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812

COPY 1
DIV UST MGMT
NOV.03'1999 14:21 13038984330
#2037 P.036/039

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161130
Sample ID: 3040 RES.-WOOD

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Ethylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Hexachlorobutadiene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
2-Hexanone	ND	ug/l	10	10	1	10/25/99	3:13	C. Wani	8260B	5812
Isopropylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
4-Isopropyltoluene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
4-Methyl-2-pentanone	ND	ug/l	10	10	1	10/25/99	3:13	C. Wani	8260B	5812
Methylene chloride	ND	ug/l	10	10	1	10/25/99	3:13	C. Wani	8260B	5812
Naphthalene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
n-Propylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Styrene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Tetrachloroethene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Toluene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,1,1-Trichloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,1,2-Trichloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Trichloroethene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2,3-Trichloropropane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Vinyl chloride	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Xylenes	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Bromodichloromethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Trichlorofluoromethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	85.	60. - 138.
VOA Surr, Toluene d8	87.	80. - 123.
VOA Surr, 4-BFB	90.	73. - 122.
VOA Surr, DBFM	104.	74. - 133.

COPY 1

DIV UST MGMT

NOV.03'1999 14:22 19039898330 #2037 P.037/039

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TESTAMERICA/HYDROLOGIC, INC 8320

7440 TWO NOTCH STE D
COLUMBIA, SC 29223

Project: 09322
Project Name: SMITH'S GROCERY
Sampler. B. FALLER

Lab Number: 99-A161131
Sample ID: BARNETTE RES.
Sample Type: Ground water
Site ID:

Date Collected: 10/21/99
Time Collected: 12:20
Date Received: 10/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Mdsn Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS*										
Acetone	ND	ug/l	10	10	1	10/25/99	3:53	C. Wani	8260B	5812
Benzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Bromobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Bromochloromethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Bromoform	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Bromomethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
2-Butanone	ND	ug/l	10	10	1	10/25/99	3:53	C. Wani	8260B	5812
n-Butylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
sec-Butylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
t-Butylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Carbon disulfide	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Carbon tetrachloride	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Chlorobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Chloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
2-Chloroethylvinylether	ND	ug/l	5	2	1	10/25/99	3:53	C. Wani	8260B	5812
Chloroform	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Chloromethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
2-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
4-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	10/25/99	3:53	C. Wani	8260B	5812
Dibromochloromethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2-Dibromoethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Dibromomethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,3-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,4-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Dichlorodifluoromethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,1-Dichloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2-Dichloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,1-Dichloroethene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
cis-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,3-Dichloropropane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
2,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,1-Dichloropropene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161131
Sample ID: BARNETTE RES.

Analyte	Result	Units	Report Limit	Run Limit	Dil. Factor	Date	Time	Analyst	Method	Batch
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
Ethylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
Hexachlorobutadiene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
2-Hexanone	ND	ug/l	10	10	1	10/25/99	3:53	C. Wani	82608	5812
Isopropylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
4-Isopropyltoluene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
4-Methyl-2-pentanone	ND	ug/l	10	10	1	10/25/99	3:53	C. Wani	82608	5812
Methylene chloride	ND	ug/l	10	10	1	10/25/99	3:53	C. Wani	82608	5812
Naphthalene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
n-Propylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
Styrene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
Tetrachloroethene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
Toluene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
1,1,1-Trichloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
1,1,2-Trichloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
Trichloroethene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
1,2,3-Trichloropropane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
Vinyl chloride	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
Xylenes	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
Bromodichloromethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812
Trichlorofluoromethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	82608	5812

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	86.	60. - 138.
VOA Surr, Toluene d8	86.	80. - 123.
VOA Surr, 4-BFB	89.	73. - 122.
VOA Surr, DBFM	104.	74. - 133.

COPY 1
DIV UST MGMT
NOV.03'1999 14:23 13038984330
#2037 P.039/039

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

RECEIVED
NOV 0 2 1999

10/29/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: WSW VICKERY
Prism Sample ID: AB46575
Login Group: PGO29F1
Sample Collection Date/Time: 10/27/99 15:35
Lab Submittal Date/Time: 10/27/99 16:20

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
TOLUENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
XYLENES	Not detected	ug/L	2.00	8260	10/28/99 21:16	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
SURR: TOLUENE d8	104.25	%		8260	10/28/99 21:16	PEL
SURR: 1,4-DCB-D4	110.75	%		8260	10/28/99 21:16	PEL
SURR: DIBROMOFLUOROMETHANE	95.00	%		8260	10/28/99 21:16	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE # _____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 4.1°	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client CBRA

Physical Address 5727 Executive Blvd Suite 115 Fairfield, OH 45014

Phone _____ Fax 548-5747

P.O.#/Billing Reference 1112

Project Name Sam Tig's Grocery/10679

REPORT TO: Name Scott Ball

Address _____

BILL TO: Name CBRA

Address _____

Requested Due Date 24 hour Turnaround

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification

Requested NC ___ SC ✓ Other ___ NA ___

Water Chlorinated Yes ___ No ✓ NA ___

Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
WSW	10-27-94	1335	Water	VOA	3	40ml	HCl	8240 TCL Volatiles			[illegible]

Sampler's Signature Chip Crouch Sampled By (Print Name) Chip Crouch Affiliation CBRA

Relinquished By: (Signature) Chip Crouch	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: Katherine Lewis	Date 10/27/94	1620
Method of Shipment		Log-In Group No. 410291	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ✓ OTHER ___ GROUNDWATER: NC ___ SC ✓ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

RECEIVED
NOV 0 8 1999

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/5/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grcery Job#10629
Customer Sample ID: VICKERV'S WSW
Prism Sample ID: AB47247
Login Group: PGN4F1
Sample Collection Date/Time: 11/2/99 14:24
Lab Submittal Date/Time: 11/3/99 10:25

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/4/99 08:58	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/4/99 08:58	PEL
NAPHTHALENE	25.5	ug/L	1.00	8260	11/4/99 08:58	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/4/99 08:58	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/4/99 08:58	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/4/99 08:58	PEL
SURR: TOLUENE d8	101.75	%		8260	11/4/99 08:58	PEL
SURR: 1,4-DCB-D4	104.75	%		8260	11/4/99 08:58	PEL
SURR: DIBROMOFLUOROMETHANE	84.75	%		8260	11/4/99 08:58	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

PRISM LABORATORIES, INC.
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 4	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client CBM ENVIRONMENTAL SERVICES, INC.
Physical Address 377 CAROWINDS BLVD., SUITE 116
FORT MILL, SC 29708
Phone (803) 548-5989 Fax (803) 548-5999
P.O.#/Billing Reference 11176
Project Name SMITH'S GROCERY - JOB#101629

REPORT TO: Name SCOTT BALL
Address
BILL TO: Name CBM
Address
Requested Due Date 24-HOUR OF ASAP
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8260 BTEX MTBE TNAP	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VICKERY'S WS#1	11/02/99	1424	WATER	VOA	3	40ml	HCl	✓			47247

Sampler's Signature Shannon L. Cottrill Sampled By (Print Name) SHANNON L. COTTRILL Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Shannon L. Cottrill		11/03/99	1000
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Method of Shipment		Log-In Group No.	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ✓ SC ✓ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

RECEIVED
NOV 1 [illegible]

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/10/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: HILL WSW
Prism Sample ID: AB47787
Login Group: PGN9F1
Sample Collection Date/Time: 11/5/99 08:55
Lab Submittal Date/Time: 11/8/99 10:05

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	1.43	ug/L	1.00	8260	11/10/99 10:54	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/10/99 10:54	PEL
NAPHTHALENE	2.46	ug/L	1.00	8260	11/10/99 10:54	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/10/99 10:54	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/10/99 10:54	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/10/99 10:54	PEL
SURR: TOLUENE d8	89.75	%		8260	11/10/99 10:54	PEL
SURR: 1,4-DCB-D4	94.75	%		8260	11/10/99 10:54	PEL
SURR: DIBROMOFLUOROMETHANE	95.00	%		8260	11/10/99 10:54	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # ____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 5.2	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client CBM ENVIRONMENTAL SERVICES, INC.
Physical Address 371 GASTONIA BLVD SUITE 118
FORT MILL, SC 29715
Phone 803 548 1121 Fax (803) 548-5892
P.O.#/Billing Reference 11152
Project Name JOB # 11179 - SMITH'S WORKS

REPORT TO: Name SCOTT BALL
Address CBM
BILL TO: Name
Address
Requested Due Date 24 HOUR TURNAROUND OR ASAP

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED SOLID/SLUDGE	WATER					REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
HILL WSW	11/5/99	0855	WATER	VOA	3	40ml	HCl	✓								47757

Sampler's Signature Shannon Cottrill Sampled By (Print Name) SHANNON COTTRILL Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Shannon Cottrill		11/09/99	
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 11/9/99	1005
Method of Shipment		Log-In Group No. 36725-1 (FW)	

Additional Comments

PAGE 1

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ✓ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT

Lab Report

RECEIVED
NOV 12 1999

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/11/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smiths Grocery #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB47971
Login Group: PGN10F1
Sample Collection Date/Time: 11/9/99 09:50
Lab Submittal Date/Time: 11/9/99 16:50

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	1.13	ug/L	1.00	8260	11/10/99 08:38	PEL
ETHYLBENZENE	2.21	ug/L	1.00	8260	11/10/99 08:38	PEL
NAPHTHALENE	6.64	ug/L	1.00	8260	11/10/99 08:38	PEL
TOLUENE	2.47	ug/L	1.00	8260	11/10/99 08:38	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/10/99 08:38	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/10/99 08:38	PEL
SURR: TOLUENE d8	104.50	%		8260	11/10/99 08:38	PEL
SURR: 1,4-DCB-D4	96.25	%		8260	11/10/99 08:38	PEL
SURR: DIBROMOFLUOROMETHANE	102.50	%		8260	11/10/99 08:38	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE # _____

PRISM LABORATORIES, INC.
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 9.7°	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client: CBM ENVIRONMENTAL SERVICES, INC.
Physical Address: 377 GREENWOOD BLVD, SUITE 118 FORT MILL, SC 29708
Phone: (803) 548-5989 Fax: (803) 548-5892
P.O.#/Billing Reference: 11160
Project Name: SMITH'S GROCERY - JOB # 10679

REPORT TO: Name: SCOTT BALL
Address:
BILL TO: Name: CBM
Address:
Requested Due Date: 24-HR TURNAROUND OR ASAP

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: 5260 BTEX WITH TBA	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VICKERY WSW	11/09/99	0950	WATER	VOA	3	40ml	HCl	✓			47971

Sampler's Signature: Shannon K. Cottrill Sampled By (Print Name) SHANNON L. COTTRILL Affiliation CBM ENVIRONMENTAL SERVICES

Relinquished By: (Signature) Shannon K. Cottrill	Received By: (Signature)	Date 11/10/99	Military/Hours 11:35
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: Kathryn Wing	Date 11/9/99	1650
Method of Shipment		Log-In Group No. PGN1071	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ✓ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

RECEIVED
NOV 16 1999

11/15/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB48316
Login Group: PGN12F1
Sample Collection Date/Time: 11/11/99 12:08
Lab Submittal Date/Time: 11/11/99 16:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/14/99 14:43	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/14/99 14:43	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	11/14/99 14:43	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/14/99 14:43	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/14/99 14:43	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/14/99 14:43	PEL
SURR: TOLUENE d8	104.75	%		8260	11/14/99 14:43	PEL
SURR: 1,4-DCB-D4	100.00	%		8260	11/14/99 14:43	PEL
SURR: DIBROMOFLUOROMETHANE	101.50	%		8260	11/14/99 14:43	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE # _____

PRISM LABORATORIES, INC.
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 4	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

Client CBM ENVIRONMENTAL SERVICES, INC
Physical Address 377 CROWNDS BLVD, SUITE 118
FORT MILL, SC 29708
Phone (803) 548-5989 Fax (803) 548-5892
P.O.#/Billing Reference 11164
Project Name SMITH'S GROCERY - JOB# 10629

REPORT TO: Name SCOTT BALL
Address
BILL TO: Name CBM
Address
Requested Due Date 72 HR TURNAROUND OR ASAP
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: 5260 BTX MTBE & NAP	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VICKERY WSW	11/11/99	1208	WATER	VOA	3	40ml	HCl	✓			

Sampler's Signature Shannon K. Cottrill Sampled By (Print Name) SHANNON COTTRILL Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature) Shannon K. Cottrill	Received By: (Signature) W. Scott Ball	Date 11/11/99	Military/Hours 15:30
Relinquished By: (Signature) W. Scott Ball	Received By: (Signature)	Date 11/11/99	16:00
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 11/11/99	1600
Method of Shipment		Log-In Group No.	00N1251

Additional Comments

NPDES NC ___ UST: NC ___ GROUNDWATER: NC ___ DRINKING WATER: NC ✓ SOLID WASTE: NC ___ OTHER: NC ___
SC ___ SC ___ SC ___ SC ✓ SC ___ SC ___
OTHER ___ OTHER ___ OTHER ___ OTHER ___ OTHER ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

RECEIVED
NOV 24 1999

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/22/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB49232
Login Group: PGN19F1A
Sample Collection Date/Time: 11/16/199 17:11
Lab Submittal Date/Time: 11/18/199 11:40

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/21/1999 08:35	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
SURR: TOLUENE d8	100.00	%		8260	11/21/1999 08:35	PEL
SURR: 1,4-DCB-D4	106.50	%		8260	11/21/1999 08:35	PEL
SURR: DIBROMOFLUOROMETHANE	97.25	%		8260	11/21/1999 08:35	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 3°	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client CBM ENVIRONMENTAL SERVICES, INC.
Physical Address 377 CAROWINDS BLVD. SUITE 118
FORT MILL, SC 29708
Phone (803) 548-5489 Fax (803) 548-5892
P.O.#/Billing Reference 1299
Project Name SMITH GROCERY - JOB # 106124

REPORT TO: Name SCOTT BAIL
Address
BILL TO: Name CBM
Address
Requested Due Date 24 HOUR TURNAROUND OK'D SAP

State Certification Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: BTEX BY 8021B MTBE	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VICKERY WSW	11/16/99	WATER	1711	VOA	3	40ML	HCl	✓			4106
		RSC									

Sampler's Signature Shannon L. Coitrill Sampled By (Print Name) SHANNON L. COITRILL Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature) Shannon L. Coitrill	Received By: (Signature) Heidi McClain	Date 11/17/99	Military/Hours 1057
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) Heidi McClain	Received For Prism Laboratories By: Kathryn Avery	Date 11/19/99	Hours 1045
Method of Shipment		Log-In Group No. AGINFIA	

Additional Comments

11/18

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ✓ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

RECEIVED NOV 24 1999

11/22/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: HILL WSW
Prism Sample ID: AB49231
Login Group: PGN19F1
Sample Collection Date/Time: 11/17/199 10:40
Lab Submittal Date/Time: 11/18/199 11:40

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/21/1999 08:35	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
SURR: TOLUENE d8	99.75	%		8260	11/21/1999 08:35	PEL
SURR: 1,4-DCB-D4	113.25	%		8260	11/21/1999 08:35	PEL
SURR: DIBROMOFLUOROMETHANE	95.50	%		8260	11/21/1999 08:35	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 3	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client CBM ENVIRONMENTAL SERVICES, INC.
Physical Address 377 CAROWINDS BLVD, SUITE 118
FORT MILL, SC 29708
Phone (803) 548-5989 Fax (803) 548-5892
P.O.#/Billing Reference 11298
Project Name SMITH'S GROCERY - JOB# 10629

REPORT TO: Name SCOTT BALL
Address
BILL TO: Name CBM
Address
Requested Due Date 24 HOURS OR ASAP
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVA-TIVES	ANALYSES REQUESTED: 8260 BTEX MTBE NA						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
HILL WSW	11/17/99	1040	WATER	VOA	3	40ml	HCl	✓								[illegible]

Sampler's Signature [signature] Sampled By (Print Name) SHANNON L. COTTRILL Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
[signature]	[signature]	11/18/99	1005
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) [signature]	Received For Prism Laboratories By: [signature]	Date 11/18/99	1140
Method of Shipment		Log-In Group No. [illegible]	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ✓ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CH[illegible]ORD

PA

4 Precision Environmental Lab 3217

P 10200 USA Today Way)543

P Miramar. FL 33025-3905)409

PRESS DOWN FIRMLY - 3 COPIES

Client: Prism Laboratories

Physical Address: [illegible]

Charlotte NC [illegible]

Phone: 704-5[illegible] Fax: 704-5[illegible]

P.O.#/Billing Reference:

Project Name: FONTE[illegible]

REPORT TO: Name: Paula Gilleland

Address:

BILL TO: Name:

Address:

Requested Due Date: *Fax Results 11/27/[illegible]

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp ___			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?			

State Certification Requested: NC ___ SC ✓ Other ___ NA ___

Water Chlorinated: Yes ___ No ✓ NA ___

Sample Iced Upon Collection: Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: [illegible] BTEX MTBE [illegible]					REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
AB[illegible]031	11/11/[illegible]	1040	Water	VOA	2	40ml	HCl	✓							

Sampler's Signature ______ Sampled By (Print Name) ______ Affiliation ______

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
[signature]	Fed Ex	11/11/[illegible]	1700
Relinquished By: (Signature) Fed Ex	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Method of Shipment		Log-In Group No.	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ✓ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

CUSTOMER COPY

Lab Report

DEC 0 6 1999

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

12/2/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: FOSTER WSW
Prism Sample ID: AB49616
Login Group: 4137F1
Sample Collection Date/Time: 11/19/99 18:06
Lab Submittal Date/Time: 11/22/99 17:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	12/1/99 08:47	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/1/99 08:47	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/1/99 08:47	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/1/99 08:47	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/1/99 08:47	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/1/99 08:47	PEL
SURR: TOLUENE d8	102.50	%		8260	12/1/99 08:47	PEL
SURR: 1,4-DCB-D4	85.00	%		8260	12/1/99 08:47	PEL
SURR: DIBROMOFLUOROMETHANE	103.50	%		8260	12/1/99 08:47	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 3	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

Client: CBM ENVIRONMENTAL SERVICES, INC.
Physical Address: 377 AROWINDS BLVD, SUITE 118
FORT MILL, SC 29708
Phone: (803) 548-5989 Fax: (803) 548-5892
P.O.#/Billing Reference: 11316
Project Name: SMITH'S GROCERY - JOB # 10629

REPORT TO: Name: SCOTT BALL
Address:
BILL TO: Name: CBM
Address:
Requested Due Date: STANDARD TURNAROUND

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested: NC ___ SC ✓ Other ___ NA ___
Water Chlorinated: Yes ___ No ✓ NA ___
Sample Iced Upon Collection: Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: 6210 BTEX MTBE NAP						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
FOSTER WSW	11/19/99	1806	WATER	VOA	3	40ml	HCl	✓								44611

Sampler's Signature: Shannon L. Cottrill Sampled By (Print Name): SHANNON L. COTTRILL Affiliation: CBM ENVIRONMENTAL

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Shannon L. Cottrill	Heath McClure	11/22/99	17:20
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Heath McClure	Kathryn Wing	11/22/99	1745
Method of Shipment		Log-In Group No. 44461	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ✓ SC ✓ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

RECEIVED
DEC 0 2 1999

12/1/99

#10629

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: WSW-VICKERY
Prism Sample ID: AB49732
Login Group: PGN30F2
Sample Collection Date/Time: 11/23/99 14:15
Lab Submittal Date/Time: 11/23/99 15:25

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/30/99 10:55	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/30/99 10:55	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	11/30/99 10:55	PEL
TOLUENE	3.45	ug/L	1.00	8260	11/30/99 10:55	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/30/99 10:55	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/30/99 10:55	PEL
SURR: TOLUENE d8	102.75	%		8260	11/30/99 10:55	PEL
SURR: 1,4-DCB-D4	80.25	%		8260	11/30/99 10:55	PEL
SURR: DIBROMOFLUOROMETHANE	101.50	%		8260	11/30/99 10:55	PEL

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/1/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: WSW-HILL
Prism Sample ID: AB49733
Login Group: PGN30F2
Sample Collection Date/Time: 11/23/99 14:30
Lab Submittal Date/Time: 11/23/99 15:25

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	1.47	ug/L	1.00	8260	11/30/99 09:45	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/30/99 09:45	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	11/30/99 09:45	PEL
TOLUENE	2.91	ug/L	1.00	8260	11/30/99 09:45	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/30/99 09:45	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/30/99 09:45	PEL
SURR: TOLUENE d8	102.25	%		8260	11/30/99 09:45	PEL
SURR: 1,4-DCB-D4	91.50	%		8260	11/30/99 09:45	PEL
SURR: DIBROMOFLUOROMETHANE	106.75	%		8260	11/30/99 09:45	PEL

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2.0	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

Client CBM Environmental Services Inc.
Physical Address [illegible]
Suite 118, [illegible]
Phone [illegible] Fax [illegible] 5792
P.O.#/Billing Reference [illegible]
Project Name [illegible]
[illegible] 10629

REPORT TO: Name Scott [illegible]
Address
BILL TO: Name CBM
Address *11/30/99
Requested Due Date 24 hours Turnaround / ASAP

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested NC ____ SC ✓ Other ____ NA ____
Water Chlorinated Yes ____ No ____ NA ✓
Sample Iced Upon Collection Yes ✓ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	*TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: 8260 BTEX MTBE Naph						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
WSW-Vickery	11-23-99	1415	H_2O	VOA	3	40ml	HCl	✓								49132
WSW-Hill	11-23-99	1430	H_2O	VOA	3	40ml	HCl	✓								49133

Sampler's Signature [signature] Sampled By (Print Name) SONYA PUNCH Affiliation CBM Environmental

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
[signature]			
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: [signature]	Date 11/23/99	1525
Method of Shipment		Log-In Group No. PGN30E2-	

Additional Comments
8260 - BTEX, MTBE + Naph
(24 hour turnaround)
*AB465-Rush#

NPDES NC ____ SC ____ OTHER ____
UST: NC ____ SC ✓ OTHER ____
GROUNDWATER: NC ____ SC ✓ OTHER ____
DRINKING WATER: NC ____ SC ____ OTHER ____
SOLID WASTE: NC ____ SC ____ OTHER ____
OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

RECEIVED DEC 07 1999

12/2/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB50144
Login Group: PGD1F2
Sample Collection Date/Time: 11/30/1999 11:45
Lab Submittal Date/Time: 11/30/1999 13:23

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	12/1/1999 13:10	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/1/1999 13:10	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/1/1999 13:10	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/1/1999 13:10	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/1/1999 13:10	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/1/1999 13:10	PEL
SURR: TOLUENE d8	98.00	%		8260	12/1/1999 13:10	PEL
SURR: 1,4-DCB-D4	101.50	%		8260	12/1/1999 13:10	PEL
SURR: DIBROMOFLUOROMETHANE	101.75	%		8260	12/1/1999 13:10	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/2/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: HILL WSW
Prism Sample ID: AB50145
Login Group: PGD1F2
Sample Collection Date/Time: 11/30/1999 12:00
Lab Submittal Date/Time: 11/30/1999 13:23

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	1.31	ug/L	1.00	8260	12/1/1999 13:34	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/1/1999 13:34	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/1/1999 13:34	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/1/1999 13:34	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/1/1999 13:34	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/1/1999 13:34	PEL
SURR: TOLUENE d8	98.50	%		8260	12/1/1999 13:34	PEL
SURR: 1,4-DCB-D4	100.25	%		8260	12/1/1999 13:34	PEL
SURR: DIBROMOFLUOROMETHANE	104.75	%		8260	12/1/1999 13:34	PEL

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

PAGE ____ OF ____ QUOTE # ____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp ____	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client ____
Physical Address ____
Phone ____ Fax ____
P.O.#/Billing Reference ____
Project Name ____

REPORT TO: Name ____
Address ____
BILL TO: Name ____
Address ____
Requested Due Date 24 hour turnaround (RUSH)

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested NC ____ SC ____ Other ____ NA ____
Water Chlorinated Yes ____ No ____ NA ✓
Sample Iced Upon Collection Yes ✓ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.

Sampler's Signature ____ Sampled By (Print Name) ____ Affiliation ____

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 11-20-19	1523
Method of Shipment		Log-In Group No.	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

Lab Report

DEC 2 2 1999

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/20/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB51171
Login Group: 4692F2
Sample Collection Date/Time: 12/08/99 14:20
Lab Submittal Date/Time: 12/08/99 16:35

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	12/16/99 23:29	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/16/99 23:29	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/16/99 23:29	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/16/99 23:29	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/16/99 23:29	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/16/99 23:29	PEL
SURR: TOLUENE d8	93.50	%		8260	12/16/99 23:29	PEL
SURR: 1,4-DCB-D4	97.75	%		8260	12/16/99 23:29	PEL
SURR: DIBROMOFLUOROMETHANE	97.25	%		8260	12/16/99 23:29	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/20/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: HILL WSW
Prism Sample ID: AB51172
Login Group: 4692F2
Sample Collection Date/Time: 12/08/99 14:25
Lab Submittal Date/Time: 12/08/99 16:35

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	2.18	ug/L	1.00	8260	12/16/99 12:00	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/16/99 12:00	PEL
NAPHTHALENE	1.85	ug/L	1.00	8260	12/16/99 12:00	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/16/99 12:00	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/16/99 12:00	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/16/99 12:00	PEL
SURR: TOLUENE d8	94.00	%		8260	12/16/99 12:00	PEL
SURR: 1,4-DCB-D4	97.50	%		8260	12/16/99 12:00	PEL
SURR: DIBROMOFLUOROMETHANE	96.00	%		8260	12/16/99 12:00	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

PAGE ____ OF ____ QUOTE # ____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NC	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2°	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client ____
Physical Address ____
Phone ____ Fax ____
P.O.#/Billing Reference ____
Project Name ____

REPORT TO: Name ____ Address ____
BILL TO: Name ____ Address ____
Requested Due Date ____

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED (BTEX + NITRATE BY 8260)						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VICKERY WSW	12/8/99	1120	WATER	VOA	3	40ml	HCL	X								51171
PHILLIPS WSW	12/8/99	1125	WATER	VOA	3	40ml	HCL	X								51172

Sampler's Signature ____ Sampled By (Print Name) W. Scott Bell Affiliation CBM Environmental Services

Relinquished By: (Signature)	Received By: (Signature)	Date 12/8/99	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 12/8/99	1635
Method of Shipment		Log-In Group No. 40957	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

Lab Report

RECEIVED

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/16/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB51831
Login Group: PGD16F2
Sample Collection Date/Time: 12/14/1999 10:30
Lab Submittal Date/Time: 12/14/1999 16:35

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	Not detected	ug/L	5	8260	12/15/1999 13:26	MP
BENZENE	Not detected	ug/L	5	8260	12/15/1999 13:26	MP
TOLUENE	Not detected	ug/L	5	8260	12/15/1999 13:26	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	12/15/1999 13:26	MP
XYLENES	Not detected	ug/L	10	8260	12/15/1999 13:26	MP
NAPHTHALENE	Not detected	ug/L	5	8260	12/15/1999 13:26	MP
SURR: DIBROMOFLUOROMETHANE	93	%	86-118	8260	12/15/1999 13:26	MP
SURR: TOLUENE, D8	98	%	88-110	8260	12/15/1999 13:26	MP
SURR: BROMOFLUOROBENZENE	108	%	86-115	8260	12/15/1999 13:26	MP
DILUTION FACTOR	1	ug/L		8260	12/15/1999 13:26	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/16/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: HILL WSW
Prism Sample ID: AB51832
Login Group: PGD16F2
Sample Collection Date/Time: 12/14/1999 10:35
Lab Submittal Date/Time: 12/14/1999 16:35

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	Not detected	ug/L	5	8260	12/15/1999 14:07	MP
BENZENE	Not detected	ug/L	5	8260	12/15/1999 14:07	MP
TOLUENE	Not detected	ug/L	5	8260	12/15/1999 14:07	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	12/15/1999 14:07	MP
XYLENES	Not detected	ug/L	10	8260	12/15/1999 14:07	MP
NAPHTHALENE	Not detected	ug/L	5	8260	12/15/1999 14:07	MP
SURR: DIBROMOFLUOROMETHANE	89	%	86-118	8260	12/15/1999 14:07	MP
SURR: TOLUENE, D8	94	%	88-110	8260	12/15/1999 14:07	MP
SURR: BROMOFLUOROBENZENE	108	%	86-115	8260	12/15/1999 14:07	MP
DILUTION FACTOR	1	ug/L		8260	12/15/1999 14:07	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # ____

PRISM LABORATORIES, INC.

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

Client ____
Physical Address ____
Phone ____ Fax ____
P.O.#/Billing Reference ____
Project Name ____

REPORT TO: Name ____
Address ____
BILL TO: Name ____
Address ____
Requested Due Date ____

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp ____	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

State Certification
Requested NC ____ SC ✓ Other ____ NA ____
Water Chlorinated Yes ____ No ✓ NA ____
Sample Iced Upon Collection Yes ✓ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
[illegible]	12/14/99	1130	GRAB	CGWP	2	40ml	HCl	X			5[illegible]
[illegible]	12/14/99	1155	WATER	CGWP	2	40ml	HCl	✓			5[illegible]

Sampler's Signature ____ Sampled By (Print Name) W SCOTT BALL Affiliation CBM ENVIRONMENTAL SERVICES

Relinquished By: (Signature)	Received By: (Signature)	Date 12/14/99	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 12/14/99	1155
Method of Shipment		Log-In Group No.	

Additional Comments

NPDES NC SC OTHER ____ UST: NC SC OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/29/99

FILE COPY

12/28/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB52916
Login Group: 5148F2
Sample Collection Date/Time: 12/21/99 10:30
Lab Submittal Date/Time: 12/21/99 16:50

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/26/99 10:44	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
SURR: TOLUENE d8	98.25	%		8260	12/26/99 10:44	PEL
SURR: 1,4-DCB-D4	102.00	%		8260	12/26/99 10:44	PEL
SURR: DIBROMOFLUOROMETHANE	94.25	%		8260	12/26/99 10:44	PEL

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/28/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: HILL WSW
Prism Sample ID: AB52917
Login Group: 5148F2
Sample Collection Date/Time: 12/21/99 10:35
Lab Submittal Date/Time: 12/21/99 16:50

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
TOLUENE	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
XYLENES	Not detected	ug/L	2.00	8260	12/26/99 10:44	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/26/99 10:44	PEL
SURR: TOLUENE d8	100.75	%		8260	12/26/99 10:44	PEL
SURR: 1,4-DCB-D4	102.25	%		8260	12/26/99 10:44	PEL
SURR: DIBROMOFLUOROMETHANE	92.75	%		8260	12/26/99 10:44	PEL

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # ____

PRISM LABORATORIES, INC.
449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 4	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client CBM

Physical Address 3727 CAMPUS BLVD SUITE 16 FORT MILL SC 29708

Phone (803) 548-5869 Fax (803) 548-5892

P.O.#/Billing Reference 12-11-22

Project Name [illegible] Ready

REPORT TO: Name SCOTT BALL
Address SAME AS

BILL TO: Name ____
Address SAME AS

Requested Due Date 48 HOUR TA

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: BTEX by EPA 8260	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VICTORY WSW	12/21/99	1030	WATER	CGVOA	3 2	40ml	HCL	X			57916
HILL WSW	12/21/99	1035	WATER	CGVOA	2	40ml	HCL	X			57917

Sampler's Signature W Scott Ball Sampled By (Print Name) W SCOTT BALL Affiliation CBM

Relinquished By: (Signature) W Scott Ball	Received By: (Signature) Sonya Turner	Date 12/21/99	Military/Hours 1620
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: Kathryn Wing	Date 12/21/99	1650
Method of Shipment:		Log-In Group No. 51487 2	

Additional Comments:

NPDES: NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ✓ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

Lab Report

RECEIVED
JAN 0 3 1999

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

12/30/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB53573
Login Group: PGD30F2
Sample Collection Date/Time: 12/27/1999 10:00
Lab Submittal Date/Time: 12/28/1999 16:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	12/29/1999	USB
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/29/1999	USB
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/29/1999	USB
TOLUENE	Not detected	ug/L	1.00	8260	12/29/1999	USB
XYLENES	Not detected	ug/L	2.00	8260	12/29/1999	USB
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/29/1999	USB
SURR: TOLUENE d8	116	%		8260	12/29/1999	USB
SURR: 4-BROMOFLUOROBENZENE	102	%		8260	12/29/1999	USB
SURR: DIBROMOFLUOROMETHANE	111	%		8260	12/29/1999	USB

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96031001.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

12/30/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: HILL WSW
Prism Sample ID: AB53574
Login Group: PGD30F2
Sample Collection Date/Time: 12/27/1999 10:10
Lab Submittal Date/Time: 12/28/1999 16:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	12/29/1999	USB
ETHYLBENZENE	Not detected	ug/L	1.00	8260	12/29/1999	USB
NAPHTHALENE	Not detected	ug/L	1.00	8260	12/29/1999	USB
TOLUENE	Not detected	ug/L	1.00	8260	12/29/1999	USB
XYLENES	Not detected	ug/L	2.00	8260	12/29/1999	USB
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	12/29/1999	USB
SURR: TOLUENE d8	118	%		8260	12/29/1999	USB
SURR: 4-BROMOFLUOROBENZENE	104	%		8260	12/29/1999	USB
SURR: DIBROMOFLUOROMETHANE	113	%		8260	12/29/1999	USB

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96031001.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

PAGE ___ OF ___

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp 5.4°			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?			

Client (CBG ENVIRONMENTAL SERVICES)
Physical Address 321 CAMPOWOOD BLVD SUITE 118
FORT MILL S.C 29708
Phone (803) 548-1989 Fax (803) 548-5892
P.O.#/Billing Reference [illegible]
Project Name [illegible]

REPORT TO: Name SCOTT BAIL
Address ATTACH
BILL TO: Name ATTACH
Address
Requested Due Date 48 HR TAT

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC SC ✓ Other NA
Water Chlorinated Yes No ✓ NA
Sample Iced Upon Collection Yes ✓ No

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED (VOLATILES ANALYZED WITH 624.1)	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
[illegible] WSW	12/27/99	1010	WATER	CGVOA	2	40ml	HCl	X			55513
HILL [illegible] WSW	12/27/99	1020	WATER	CGVOA	2	40ml	HCl	X			55514

Sampler's Signature [signature] Sampled By (Print Name) SCOTT BAIL Affiliation CBG ENVIRONMENTAL SERVICES

Relinquished By: (Signature) [signature]	Received By: (Signature)	Date 12/27/99	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: [signature]	Date 12/28/99	1630
Method of Shipment:		Log-In Group No.	

Additional Comments:

NPDES: NC SC OTHER UST: NC SC OTHER GROUNDWATER: NC SC OTHER DRINKING WATER: NC SC OTHER SOLID WASTE: NC SC OTHER OTHER: NC SC OTHER

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

RECEIVED
JAN 14 1999

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

1/12/2000

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: HILL WSW
Prism Sample ID: AB54291
Login Group: 5661F2
Sample Collection Date/Time: 1/5/2000 14:40
Lab Submittal Date/Time: 1/5/2000 16:10

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	Not detected	ug/L	5	8260	1/6/2000 18:24	MP
BENZENE	Not detected	ug/L	5	8260	1/6/2000 18:24	MP
TOLUENE	Not detected	ug/L	5	8260	1/6/2000 18:24	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	1/6/2000 18:24	MP
XYLENES	Not detected	ug/L	10	8260	1/6/2000 18:24	MP
NAPHTHALENE	Not detected	ug/L	5	8260	1/6/2000 18:24	MP
SURR: DIBROMOFLUOROMETHANE	106	%	86-118	8260	1/6/2000 18:24	MP
SURR: TOLUENE, D8	110	%	88-110	8260	1/6/2000 18:24	MP
SURR: BROMOFLUOROBENZENE	111	%	86-115	8260	1/6/2000 18:24	MP
DILUTION FACTOR	1	ug/L		8260	1/6/2000 18:24	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

1/12/2000

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB54292
Login Group: 5661F2
Sample Collection Date/Time: 1/5/2000 14:35
Lab Submittal Date/Time: 1/5/2000 16:10

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
MTBE	Not detected	ug/L	5	8260	1/6/2000 19:07	MP
BENZENE	Not detected	ug/L	5	8260	1/6/2000 19:07	MP
TOLUENE	Not detected	ug/L	5	8260	1/6/2000 19:07	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	1/6/2000 19:07	MP
XYLENES	Not detected	ug/L	10	8260	1/6/2000 19:07	MP
NAPHTHALENE	Not detected	ug/L	5	8260	1/6/2000 19:07	MP
SURR: DIBROMOFLUOROMETHANE	101	%	86-118	8260	1/6/2000 19:07	MP
SURR: TOLUENE, D8	107	%	88-110	8260	1/6/2000 19:07	MP
SURR: BROMOFLUOROBENZENE	107	%	86-115	8260	1/6/2000 19:07	MP
DILUTION FACTOR	1	ug/L		8260	1/6/2000 19:07	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

PRISM LABORATORIES INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client
Physical Address
Phone Fax
P.O.#/Billing Reference
Project Name

REPORT TO: Name Scott Bell
Address
BILL TO: Name
Address
Requested Due Date

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
[illegible] WSW	[illegible]	1490	WATER	VOA	2	40ML	HCL				51091
Victory WSW	[illegible]	1435	WATER	VOA	2	40ML	HCL				51092

Sampler's Signature Sampled By (Print Name) Affiliation

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: Raymond Wong	Date 1/5/00	1610
Method of Shipment		Log-In Group No. 51091-92	

Additional Comments

rec'd no trip blank.
kw.

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

APPENDIX K
IN–SITU SOIL RISK EVALUATION DATA FORMS

Leachability Input Paramaters

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Site Data

Facility Name : SMITHS GROCERY Site ID # : 09322

Input Parameters

Percent Sand in soil		: 56.000	%			5%<sand<70%
Percent Clay in soil		: 16.000	%			5%<clay<60%
DAF		: 8.000				
Worst Case Soil Analyses	Benzene	: 0.307	mg/Kg	Cs		
	Toluene	: 5.010	mg/Kg	Cs		
	Ethylbenzene	: 9.420	mg/Kg	Cs		
	Xylenes	: 65.180	mg/Kg	Cs		
	Naphthalene	: 2.160	mg/Kg	Cs		
	Other COC	: 0.000	mg/Kg	Cs		
Natural organic carbon content		: 60.000	mg/Kg	foc		
TPH		: 0.004	mg/Kg	TPH		
Porosity		: 0.470	decimal%	phi		C1
Residual water content		: 0.070	decimal%	Wr		C2
Bulk density of soil		: 1.530	g/cc	Bd		C3
Soil hydraulic conductivity		: 0.252E-03	cm/sec	Kf		C4
Average annual recharge		: 25.000	cm	Hw		
Wetting front suction (-ve)		: -15.000	cm	Hf		C5
Distance from highest soil contamination to water table		: 430.680	cm	L		
Groundwater RBSL(or SSTL)		: 0.005	mg/L	Crbsl		

Figure

List possible human exposure pathways from soil:

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Site Data

Facility Name : SMITHS GROCERY Site ID # : 09322
Chemical of Concern(Benzene,Naphthalene,etc): BENZENE

(Please use a separate form for each COC that exceeds the RBSL in soil)

Chemical Specific Data

Biodegradation half-life period	:	16.00 days	t1/2	Refer to
Soil/water partitioning coeff.	:	81.00 mg/L	Koc	Table
Henrys law constant	:	0.226E+00	H	C2

Results

				Equation Set	Step
Total organic carbon content	:	0.600E-04 decimal%	fcs	I	1
Air filled porosity	:	0.400E+00 decimal%	f	I	2
Leachate concentration	:	0.293E+01 mg/L	Cw	I	3
Infiltration time	:	0.527E+06 seconds	t	II	1
Velocity of water	:	0.844E+03 ft/yr	Vw	II	2
Soil/water distribution coeff.	:	0.486E-02 mL/g	Kd	III	1
COC percolation rate	:	0.831E+03 ft/yr	Vc	III	2
Time to reach groundwater	:	0.620E+01 days	Tc	IV	1
Concentration to protect groundwater	:	0.382E-02 mg/L	Cp	IV	2
Site specific target level	:	0.321E-02 mg/Kg	Csstl	V	

Conclusions

Does concentration of COC in soil exceed SSTL ? Yes ___ No ___

Risk of human exposure due to contaminated soil ? Yes ___ No ___

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Site Data

Facility Name : SMITHS GROCERY Site ID # : 09322
Chemical of Concern(Benzene,Naphthalene,etc): TOLUENE

(Please use a separate form for each COC that exceeds the RBSL in soil)

Chemical Specific Data

Biodegradation half-life period	:	22.00 days	t1/2	Refer to
Soil/water partitioning coeff.	:	133.00 mg/L	Koc	Table
Henrys law constant	:	0.301E+00	H	C2

Results

					Equation Set	Step
Total organic carbon content	:	0.600E-04	decimal%	fcs	I	1
Air filled porosity	:	0.400E+00	decimal%	f	I	2
Leachate concentration	:	0.396E+02	mg/L	Cw	I	3
Infiltration time	:	0.527E+06	seconds	t	II	1
Velocity of water	:	0.844E+03	ft/yr	Vw	II	2
Soil/water distribution coeff.	:	0.798E-02	mL/g	Kd	III	1
COC percolation rate	:	0.823E+03	ft/yr	Vc	III	2
Time to reach groundwater	:	0.627E+01	days	Tc	IV	1
Concentration to protect groundwater	:	0.821E+00	mg/L	Cp	IV	2
Site specific target level	:	0.832E+00	mg/Kg	Csstl	V	

Conclusions

Does concentration of COC in soil exceed SSTL ? Yes ___ No ___

Risk of human exposure due to contaminated soil ? Yes ___ No ___

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Site Data

Facility Name : SMITHS GROCERY Site ID # : 09322
Chemical of Concern(Benzene,Naphthalene,etc): ETHYLBENZENE

(Please use a separate form for each COC that exceeds the RBSL in soil)

Chemical Specific Data

Biodegradation half-life period	:	10.00 days	t1/2	Refer to
Soil/water partitioning coeff.	:	176.00 mg/L	Koc	Table
Henrys law constant	:	0.280E+00	H	C2

Results

					Equation Set	Step
Total organic carbon content	:	0.600E-04	decimal%	fcs	I	1
Air filled porosity	:	0.400E+00	decimal%	f	I	2
Leachate concentration	:	0.761E+02	mg/L	Cw	I	3
Infiltration time	:	0.527E+06	seconds	t	II	1
Velocity of water	:	0.844E+03	ft/yr	Vw	II	2
Soil/water distribution coeff.	:	0.106E-01	mL/g	Kd	III	1
COC percolation rate	:	0.816E+03	ft/yr	Vc	III	2
Time to reach groundwater	:	0.632E+01	days	Tc	IV	1
Concentration to protect groundwater	:	0.452E+00	mg/L	Cp	IV	2
Site specific target level	:	0.448E+00	mg/Kg	Csstl	V	

Conclusions

Does concentration of COC in soil exceed SSTL ? Yes ___ No ___

Risk of human exposure due to contaminated soil ? Yes ___ No ___

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Site Data

Facility Name : SMITHS GROCERY Site ID # : 09322
Chemical of Concern(Benzene,Naphthalene,etc): XYLENE

(Please use a separate form for each COC that exceeds the RBSL in soil)

Chemical Specific Data

Biodegradation half-life period	:	28.00 days	t1/2	Refer to
Soil/water partitioning coeff.	:	639.00 mg/L	Koc	Table
Henrys law constant	:	0.278E+00	H	C2

Results

					Equation Set	Step
Total organic carbon content	:	0.600E-04	decimal%	fcs	I	1
Air filled porosity	:	0.400E+00	decimal%	f	I	2
Leachate concentration	:	0.435E+03	mg/L	Cw	I	3
Infiltration time	:	0.527E+06	seconds	t	II	1
Velocity of water	:	0.844E+03	ft/yr	Vw	II	2
Soil/water distribution coeff.	:	0.383E-01	mL/g	Kd	III	1
COC percolation rate	:	0.751E+03	ft/yr	Vc	III	2
Time to reach groundwater	:	0.687E+01	days	Tc	IV	1
Concentration to protect groundwater	:	0.844E+01	mg/L	Cp	IV	2
Site specific target level	:	0.101E+02	mg/Kg	Csstl	V	

Conclusions

Does concentration of COC in soil exceed SSTL ? Yes ___ No ___

Risk of human exposure due to contaminated soil ? Yes ___ No ___

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Site Data

Facility Name : SMITHS GROCERY Site ID # : 09322
Chemical of Concern(Benzene,Naphthalene,etc): NAPHTHALENE

(Please use a separate form for each COC that exceeds the RBSL in soil)

Chemical Specific Data

Biodegradation half-life period	:	48.00 days	t1/2	Refer to
Soil/water partitioning coeff.	:	1543.00 mg/L	Koc	Table
Henrys law constant	:	0.200E-02	H	C2

Results

					Equation Set	Step
Total organic carbon content	:	0.600E-04	decimal%	fcs	I	1
Air filled porosity	:	0.400E+00	decimal%	f	I	2
Leachate concentration	:	0.163E+02	mg/L	Cw	I	3
Infiltration time	:	0.527E+06	seconds	t	II	1
Velocity of water	:	0.844E+03	ft/yr	Vw	II	2
Soil/water distribution coeff.	:	0.926E-01	mL/g	Kd	III	1
COC percolation rate	:	0.649E+03	ft/yr	Vc	III	2
Time to reach groundwater	:	0.795E+01	days	Tc	IV	1
Concentration to protect groundwater	:	0.223E-01	mg/L	Cp	IV	2
Site specific target level	:	0.237E-01	mg/Kg	Csstl	V	

Conclusions

Does concentration of COC in soil exceed SSTL ? Yes ___ No ___

Risk of human exposure due to contaminated soil ? Yes ___ No ___

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Site Data

Facility Name : SMITHS GROCERY Site ID # : 09322
Chemical of Concern(Benzene,Naphthalene,etc): BENZO(A)ANTHRACENE

(Please use a separate form for each COC that exceeds the RBSL in soil)

Chemical Specific Data

Biodegradation half-life period	: 679.00	days	t1/2	Refer to
Soil/water partitioning coeff.	: 1380384.00	mg/L	Koc	Table
Henrys law constant	: 0.200E-03		H	C2

Results

				Equation Set	Step
Total organic carbon content	: 0.600E-04	decimal%	fcs	I	1
Air filled porosity	: 0.400E+00	decimal%	f	I	2
Leachate concentration	: 0.000E+00	mg/L	Cw	I	3
Infiltration time	: 0.527E+06	seconds	t	II	1
Velocity of water	: 0.844E+03	ft/yr	Vw	II	2
Soil/water distribution coeff.	: 0.828E+02	mL/g	Kd	III	1
COC percolation rate	: 0.312E+01	ft/yr	Vc	III	2
Time to reach groundwater	: 0.165E+04	days	Tc	IV	1
Concentration to protect groundwater	: 0.185E-02	mg/L	Cp	IV	2
Site specific target level	: N/A	mg/Kg	Csstl	V	

Conclusions

Does concentration of COC in soil exceed SSTL ? Yes ___ No ___

Risk of human exposure due to contaminated soil ? Yes ___ No ___

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Site Data

Facility Name : SMITHS GROCERY Site ID # : 09322
Chemical of Concern(Benzene,Naphthalene,etc): BENZO(B)FLUORANTHENE

(Please use a separate form for each COC that exceeds the RBSL in soil)

Chemical Specific Data

Biodegradation half-life period	:	610.00	days	t1/2	Refer to
Soil/water partitioning coeff.	:	549541.00	mg/L	Koc	Table
Henrys law constant	:	0.500E-03		H	C2

Results

					Equation Set	Step
Total organic carbon content	:	0.600E-04	decimal%	fcs	I	1
Air filled porosity	:	0.400E+00	decimal%	f	I	2
Leachate concentration	:	0.000E+00	mg/L	Cw	I	3
Infiltration time	:	0.527E+06	seconds	t	II	1
Velocity of water	:	0.844E+03	ft/yr	Vw	II	2
Soil/water distribution coeff.	:	0.330E+02	mL/g	Kd	III	1
COC percolation rate	:	0.779E+01	ft/yr	Vc	III	2
Time to reach groundwater	:	0.662E+03	days	Tc	IV	1
Concentration to protect groundwater	:	0.472E-02	mg/L	Cp	IV	2
Site specific target level	:	N/A	mg/Kg	Csstl	V	

Conclusions

Does concentration of COC in soil exceed SSTL ? Yes ___ No ___

Risk of human exposure due to contaminated soil ? Yes ___ No ___

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Site Data

Facility Name : SMITHS GROCERY Site ID # : 09322
Chemical of Concern(Benzene,Naphthalene,etc): BENZO(K)FLUORANTHENE

(Please use a separate form for each COC that exceeds the RBSL in soil)

Chemical Specific Data

Biodegradation half-life period	:	2139.00	days	t1/2	Refer to
Soil/water partitioning coeff.	:	4365158.00	mg/L	Koc	Table
Henrys law constant	:	0.430E-01		H	C2

Results

					Equation Set	Step
Total organic carbon content	:	0.600E-04	decimal%	fcs	I	1
Air filled porosity	:	0.400E+00	decimal%	f	I	2
Leachate concentration	:	0.000E+00	mg/L	Cw	I	3
Infiltration time	:	0.527E+06	seconds	t	II	1
Velocity of water	:	0.844E+03	ft/yr	Vw	II	2
Soil/water distribution coeff.	:	0.262E+03	mL/g	Kd	III	1
COC percolation rate	:	0.989E+00	ft/yr	Vc	III	2
Time to reach groundwater	:	0.521E+04	days	Tc	IV	1
Concentration to protect groundwater	:	0.185E-02	mg/L	Cp	IV	2
Site specific target level	:	N/A	mg/Kg	Csstl	V	

Conclusions

Does concentration of COC in soil exceed SSTL ? Yes ___ No ___

Risk of human exposure due to contaminated soil ? Yes ___ No ___

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Site Data

Facility Name : SMITHS GROCERY Site ID # : 09322
Chemical of Concern(Benzene,Naphthalene,etc): CHRYSENE

(Please use a separate form for each COC that exceeds the RBSL in soil)

Chemical Specific Data

Biodegradation half-life period	: 993.00	days	t1/2	Refer to
Soil/water partitioning coeff.	: 245471.00	mg/L	Koc	Table
Henrys law constant	: 0.302E-17		H	C2

Results

				Equation Set	Step
Total organic carbon content	: 0.600E-04	decimal%	fcs	I	1
Air filled porosity	: 0.400E+00	decimal%	f	I	2
Leachate concentration	: 0.000E+00	mg/L	Cw	I	3
Infiltration time	: 0.527E+06	seconds	t	II	1
Velocity of water	: 0.844E+03	ft/yr	Vw	II	2
Soil/water distribution coeff.	: 0.147E+02	mL/g	Kd	III	1
COC percolation rate	: 0.173E+02	ft/yr	Vc	III	2
Time to reach groundwater	: 0.299E+03	days	Tc	IV	1
Concentration to protect groundwater	: 0.812E-02	mg/L	Cp	IV	2
Site specific target level	: N/A	mg/Kg	Csstl	V	

Conclusions

Does concentration of COC in soil exceed SSTL ? Yes ___ No ___

Risk of human exposure due to contaminated soil ? Yes ___ No ___

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Site Data

Facility Name : SMITHS GROCERY Site ID # : 09322
Chemical of Concern(Benzene,Naphthalene,etc): DIBENZ(A,H)ANTHRACENE

(Please use a separate form for each COC that exceeds the RBSL in soil)

Chemical Specific Data

Biodegradation half-life period	: 942.00	days	t1/2	Refer to
Soil/water partitioning coeff.	: 1659587.00	mg/L	Koc	Table
Henrys law constant	: 0.305E-06		H	C2

Results

				Equation Set	Step
Total organic carbon content	: 0.600E-04	decimal%	fcs	I	1
Air filled porosity	: 0.400E+00	decimal%	f	I	2
Leachate concentration	: 0.000E+00	mg/L	Cw	I	3
Infiltration time	: 0.527E+06	seconds	t	II	1
Velocity of water	: 0.844E+03	ft/yr	Vw	II	2
Soil/water distribution coeff.	: 0.996E+02	mL/g	Kd	III	1
COC percolation rate	: 0.260E+01	ft/yr	Vc	III	2
Time to reach groundwater	: 0.199E+04	days	Tc	IV	1
Concentration to protect groundwater	: 0.232E-02	mg/L	Cp	IV	2
Site specific target level	: N/A	mg/Kg	Csstl	V	

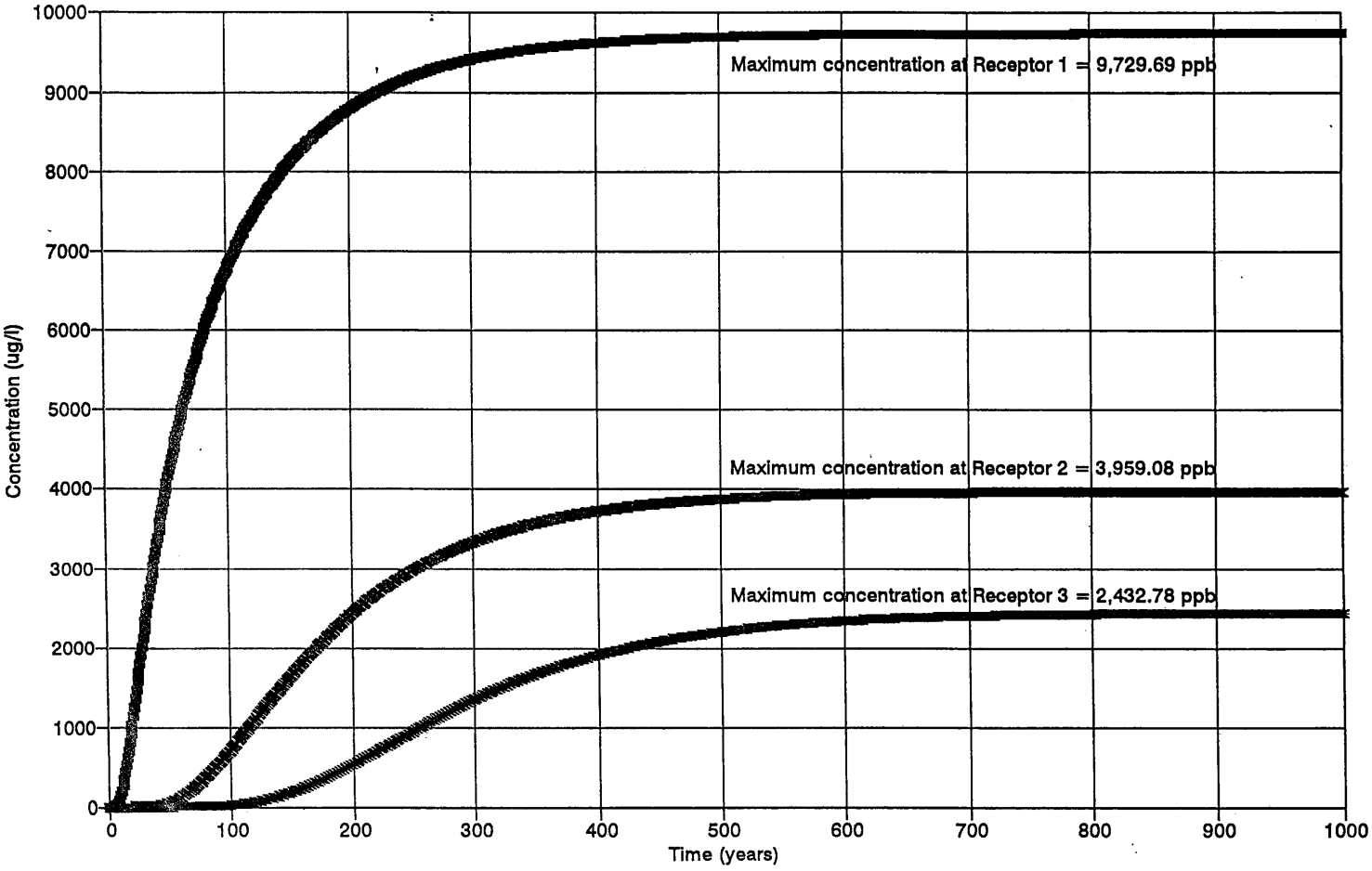
Conclusions

Does concentration of COC in soil exceed SSTL ? Yes ___ No ___

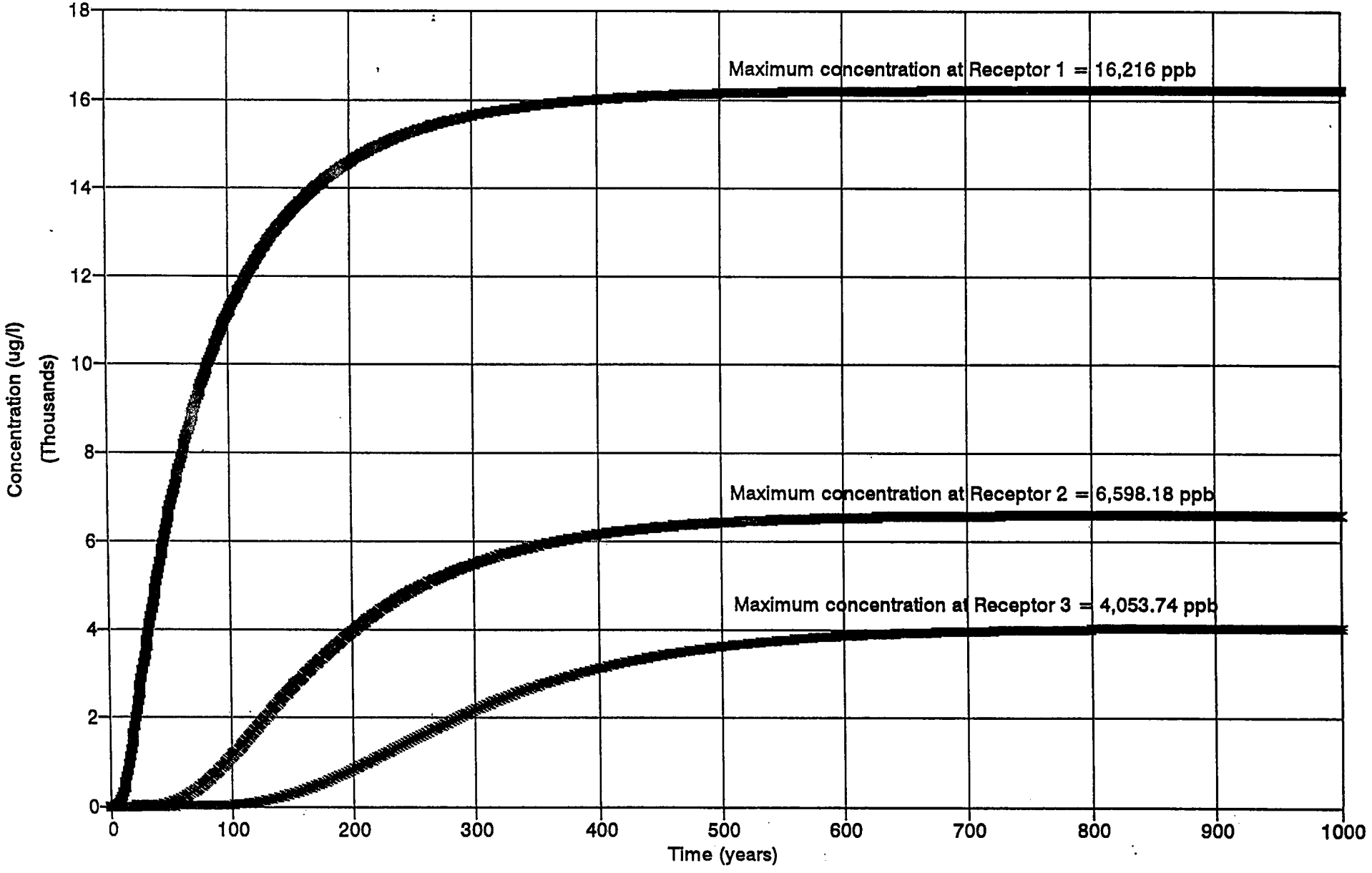
Risk of human exposure due to contaminated soil ? Yes ___ No ___

APPENDIX L
FATE AND TRANSPORT MODEL

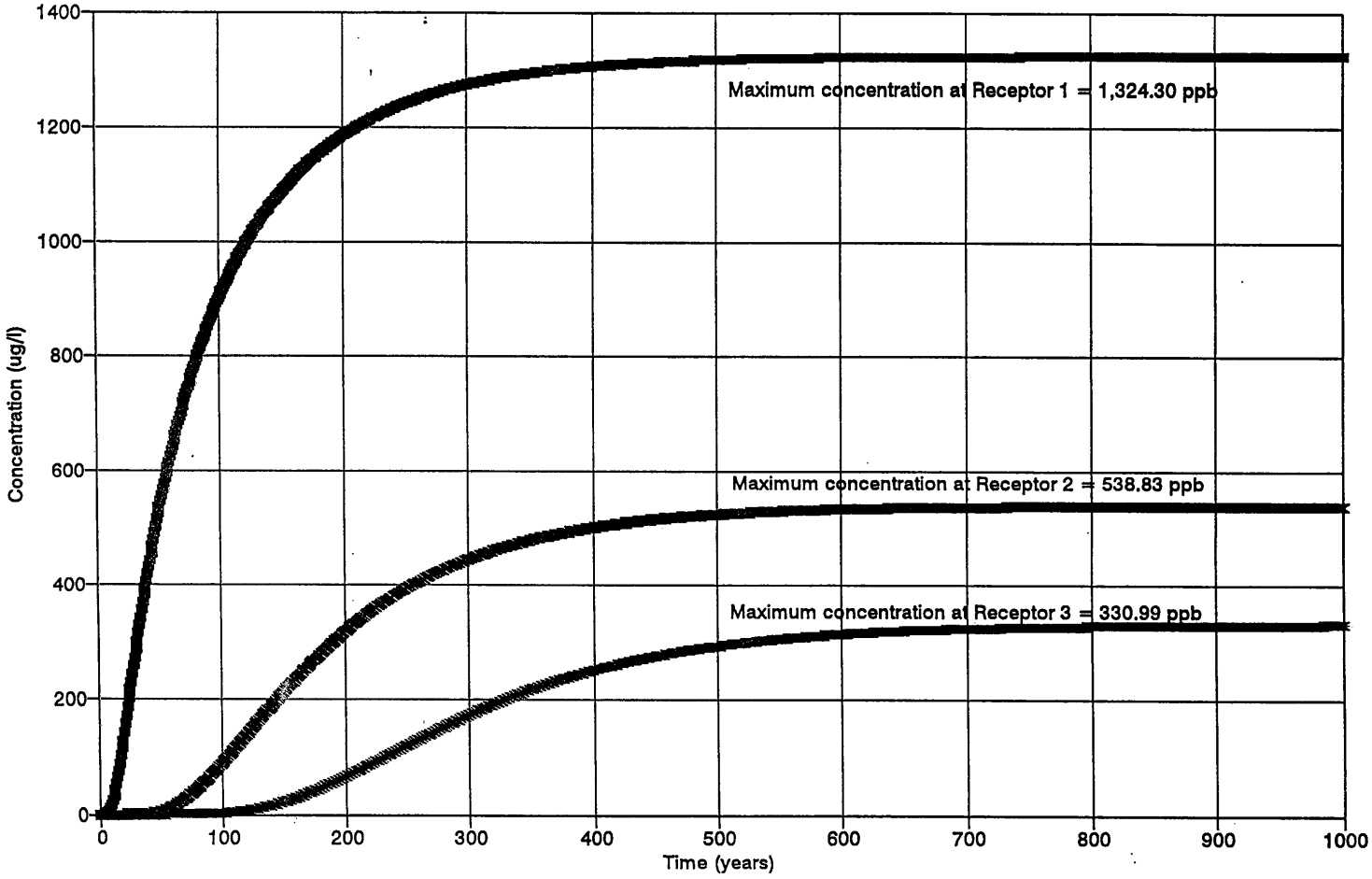
Change in Receptor Concentration
Benzene



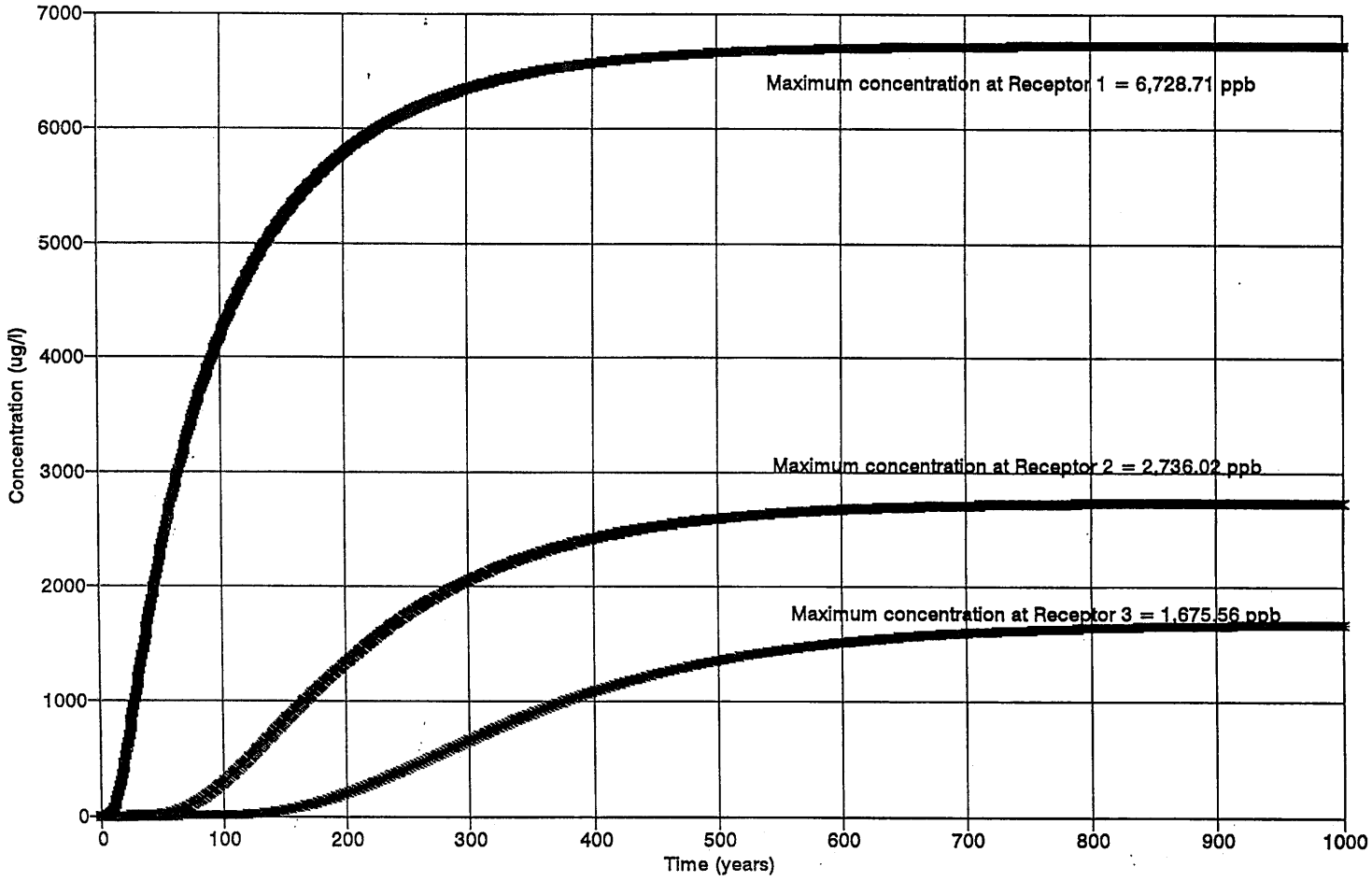
Change in Receptor Concentration
Toluene



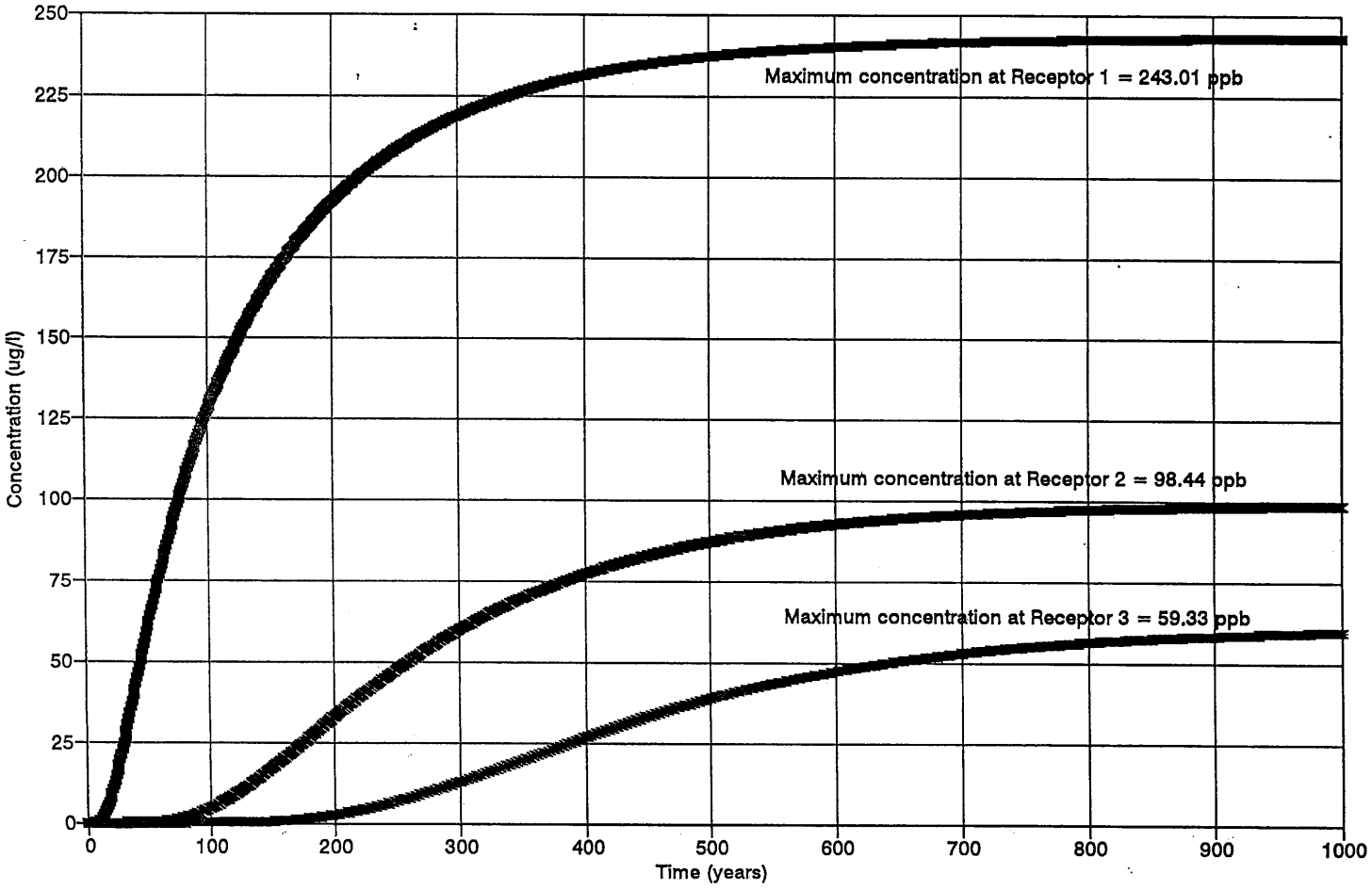
Change in Receptor Concentration
Ethylbenzene



Change in Receptor Concentration
Xylenes



Change in Receptor Concentration
Naphthalene



TITLE : SMITHS GROCERY
CBM JOB # : 10629
SC ID # : 09322

Contaminant of Concern is BENZENE

C(x,0,0,t)=(C0/2)erfc[(x-vt)/2(Ax*vt)1/2]
erf[Y/4(Ay*x)1/2]erf[Z/2(alphz*x)1/2]

INPUT PARAMETERS :
Concentration of Source (ppb) = 36000.00
Source Width (ft) = 150.00
Vertical Thickness of Source (ft) = 38.00
Distance of Recipient (ft) =1000.00
Groundwater Flow Velocity (ft/yr) = 3.65
Time of Simulation (years) = 1000.00
Longitudinal Dispersivity (ft) = 100.000000
Transverse Dispersivity (ft) = 33.333332
Vertical Dispersivity (ft) = 5.000000
Total Organic Carbon, TOC (mg/kg) = 60.00
Total Petroleum Hydrocarbons,TPH(mg/kg) = 0.00
Soil/Water Part. Coefficient,Koc(ml/g) = 81.00
Organic Carbon Fraction, foc (%) = 0.0000600
Porosity = .250
Bulk Density (g/cc) = 1.530
Retardation Factor, Rf = 1.02974
Contaminant Velocity (ft/yr) = 3.54457

CONCENTRATION COMPUTED FOR :
220.000 ft. 600.000 ft 1000.000 ft.

TIME (yrs)	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)
1.00000	0.000000	0.000000	0.000000
2.00000	0.000000	0.000000	0.000000
3.00000	0.000000	0.000000	0.000000
4.00000	0.541402	0.000000	0.000000
5.00000	3.30856	0.000000	0.000000
6.00000	11.2379	0.000000	0.000000
7.00000	27.2022	0.000000	0.000000
8.00000	53.1949	0.000000	0.000000
9.00000	90.1435	0.000000	0.000000
10.0000	138.091	0.000000	0.000000
11.0000	196.476	0.000000	0.000000
12.0000	264.382	0.000000	0.000000
13.0000	340.723	0.000000	0.000000
14.0000	424.369	0.000000	0.000000
15.0000	514.219	0.000000	0.000000
16.0000	609.249	0.000000	0.000000
17.0000	708.523	0.000000	0.000000
18.0000	811.211	0.000000	0.000000
19.0000	916.578	0.000000	0.000000
20.0000	1023.99	0.000000	0.000000
21.0000	1132.88	0.000000	0.000000
22.0000	1242.78	0.580918E-01	0.000000
23.0000	1353.28	0.974446E-01	0.000000
24.0000	1464.03	0.156707	0.000000
25.0000	1574.73	0.242799	0.000000
26.0000	1685.12	0.363959	0.000000
27.0000	1795.01	0.529745	0.000000
28.0000	1904.19	0.750985	0.000000
29.0000	2012.53	1.03970	0.000000
30.0000	2119.91	1.40900	0.000000
31.0000	2226.20	1.87293	0.000000
32.0000	2331.34	2.44633	0.000000
33.0000	2435.25	3.14465	0.000000
34.0000	2537.87	3.98382	0.000000
35.0000	2639.17	4.98003	0.000000
36.0000	2739.10	6.14957	0.000000

37.0000	2837.64	7.50871	0.000000
38.0000	2934.78	9.07349	0.000000
39.0000	3030.50	10.8596	0.000000
40.0000	3124.80	12.8823	0.000000
41.0000	3217.67	15.1564	0.000000
42.0000	3309.12	17.6957	0.000000
43.0000	3399.15	20.5135	0.000000
44.0000	3487.78	23.6224	0.000000
45.0000	3575.01	27.0338	0.000000
46.0000	3660.85	30.7585	0.000000
47.0000	3745.33	34.8062	0.000000
48.0000	3828.45	39.1857	0.000000
49.0000	3910.24	43.9049	0.000000
50.0000	3990.70	48.9705	0.000000
51.0000	4069.87	54.3886	0.000000
52.0000	4147.76	60.1641	0.000000
53.0000	4224.38	66.3010	0.342314E-01
54.0000	4299.77	72.8027	0.439094E-01
55.0000	4373.94	79.6714	0.558203E-01
56.0000	4446.90	86.9085	0.703611E-01
57.0000	4518.69	94.5150	0.879763E-01
58.0000	4589.32	102.490	0.109161
59.0000	4658.81	110.834	0.134463
60.0000	4727.18	119.545	0.164485
61.0000	4794.46	128.621	0.199886
62.0000	4860.65	138.059	0.241382
63.0000	4925.79	147.856	0.289748
64.0000	4989.89	158.008	0.345821
65.0000	5052.97	168.511	0.410495
66.0000	5115.05	179.360	0.484726
67.0000	5176.15	190.550	0.569530
68.0000	5236.28	202.076	0.665982
69.0000	5295.47	213.931	0.775216
70.0000	5353.73	226.110	0.898423
71.0000	5411.08	238.606	1.03685
72.0000	5467.54	251.413	1.19180
73.0000	5523.12	264.523	1.36462
74.0000	5577.84	277.930	1.55673
75.0000	5631.72	291.627	1.76956
76.0000	5684.76	305.605	2.00462
77.0000	5737.00	319.857	2.26345
78.0000	5788.43	334.377	2.54761
79.0000	5839.09	349.155	2.85873
80.0000	5888.97	364.185	3.19845
81.0000	5938.10	379.458	3.56844
82.0000	5986.49	394.967	3.97040
83.0000	6034.16	410.704	4.40605
84.0000	6081.10	426.662	4.87712
85.0000	6127.35	442.831	5.38539
86.0000	6172.91	459.205	5.93260
87.0000	6217.80	475.776	6.52054
88.0000	6262.02	492.536	7.15097
89.0000	6305.59	509.477	7.82568
90.0000	6348.52	526.592	8.54644
91.0000	6390.83	543.874	9.31502
92.0000	6432.51	561.314	10.1332
93.0000	6473.60	578.907	11.0026
94.0000	6514.08	596.644	11.9251
95.0000	6553.98	614.518	12.9024
96.0000	6593.31	632.523	13.9361
97.0000	6632.07	650.651	15.0279
98.0000	6670.28	668.896	16.1795
99.0000	6707.94	687.250	17.3924
100.000	6745.06	705.709	18.6682
101.000	6781.67	724.264	20.0085
102.000	6817.75	742.910	21.4147
103.000	6853.32	761.641	22.8883
104.000	6888.40	780.450	24.4308
105.000	6922.98	799.332	26.0434

106.000	6957.08	818.281	27.7276
107.000	6990.71	837.290	29.4847
108.000	7023.87	856.355	31.3158
109.000	7056.57	875.470	33.2221
110.000	7088.81	894.631	35.2049
111.000	7120.62	913.830	37.2652
112.000	7151.99	933.065	39.4040
113.000	7182.92	952.329	41.6223
114.000	7213.44	971.618	43.9211
115.000	7243.54	990.927	46.3012
116.000	7273.23	1010.25	48.7635
117.000	7302.52	1029.59	51.3088
118.000	7331.41	1048.93	53.9377
119.000	7359.91	1068.28	56.6509
120.000	7388.03	1087.62	59.4492
121.000	7415.78	1106.96	62.3329
122.000	7443.15	1126.29	65.3027
123.000	7470.16	1145.61	68.3589
124.000	7496.80	1164.91	71.5021
125.000	7523.10	1184.19	74.7324
126.000	7549.04	1203.45	78.0503
127.000	7574.65	1222.68	81.4560
128.000	7599.91	1241.88	84.9496
129.000	7624.85	1261.05	88.5313
130.000	7649.45	1280.18	92.2012
131.000	7673.74	1299.27	95.9594
132.000	7697.70	1318.33	99.8058
133.000	7721.36	1337.33	103.740
134.000	7744.71	1356.29	107.763
135.000	7767.75	1375.20	111.874
136.000	7790.50	1394.06	116.072
137.000	7812.95	1412.87	120.358
138.000	7835.11	1431.62	124.731
139.000	7856.99	1450.30	129.191
140.000	7878.59	1468.93	133.738
141.000	7899.91	1487.50	138.371
142.000	7920.96	1506.00	143.089
143.000	7941.74	1524.43	147.893
144.000	7962.26	1542.79	152.782
145.000	7982.51	1561.09	157.755
146.000	8002.51	1579.31	162.811
147.000	8022.26	1597.46	167.951
148.000	8041.76	1615.53	173.173
149.000	8061.01	1633.53	178.477
150.000	8080.02	1651.45	183.862
151.000	8098.79	1669.29	189.327
152.000	8117.32	1687.04	194.871
153.000	8135.63	1704.72	200.495
154.000	8153.70	1722.31	206.196
155.000	8171.55	1739.82	211.974
156.000	8189.18	1757.25	217.829
157.000	8206.59	1774.58	223.759
158.000	8223.79	1791.83	229.763
159.000	8240.77	1808.99	235.841
160.000	8257.54	1826.07	241.991
161.000	8274.10	1843.05	248.213
162.000	8290.46	1859.94	254.506
163.000	8306.62	1876.74	260.868
164.000	8322.59	1893.45	267.299
165.000	8338.35	1910.06	273.798
166.000	8353.93	1926.59	280.363
167.000	8369.31	1943.01	286.994
168.000	8384.51	1959.35	293.689
169.000	8399.52	1975.59	300.447
170.000	8414.35	1991.73	307.268
171.000	8429.00	2007.78	314.150
172.000	8443.47	2023.73	321.092
173.000	8457.77	2039.58	328.093
174.000	8471.89	2055.34	335.152

175.000	8485.85	2071.00	342.268
176.000	8499.64	2086.57	349.439
177.000	8513.26	2102.03	356.665
178.000	8526.72	2117.40	363.944
179.000	8540.01	2132.67	371.275
180.000	8553.15	2147.84	378.658
181.000	8566.13	2162.92	386.090
182.000	8578.96	2177.89	393.571
183.000	8591.63	2192.77	401.100
184.000	8604.16	2207.55	408.675
185.000	8616.53	2222.23	416.295
186.000	8628.76	2236.81	423.960
187.000	8640.84	2251.29	431.667
188.000	8652.79	2265.68	439.417
189.000	8664.58	2279.97	447.207
190.000	8676.24	2294.15	455.037
191.000	8687.77	2308.25	462.905
192.000	8699.16	2322.24	470.811
193.000	8710.41	2336.13	478.753
194.000	8721.53	2349.93	486.729
195.000	8732.52	2363.63	494.740
196.000	8743.39	2377.23	502.784
197.000	8754.12	2390.74	510.859
198.000	8764.73	2404.14	518.965
199.000	8775.22	2417.46	527.101
200.000	8785.58	2430.67	535.265
201.000	8795.83	2443.79	543.456
202.000	8805.96	2456.81	551.673
203.000	8815.96	2469.74	559.916
204.000	8825.86	2482.57	568.183
205.000	8835.63	2495.31	576.473
206.000	8845.30	2507.95	584.785
207.000	8854.85	2520.50	593.119
208.000	8864.30	2532.95	601.472
209.000	8873.63	2545.31	609.844
210.000	8882.86	2557.58	618.234
211.000	8891.98	2569.75	626.641
212.000	8901.00	2581.83	635.064
213.000	8909.91	2593.82	643.502
214.000	8918.72	2605.72	651.954
215.000	8927.43	2617.52	660.419
216.000	8936.04	2629.24	668.897
217.000	8944.55	2640.86	677.385
218.000	8952.97	2652.39	685.884
219.000	8961.29	2663.84	694.392
220.000	8969.51	2675.19	702.909
221.000	8977.65	2686.46	711.433
222.000	8985.68	2697.63	719.963
223.000	8993.63	2708.72	728.500
224.000	9001.49	2719.72	737.041
225.000	9009.26	2730.64	745.587
226.000	9016.94	2741.46	754.135
227.000	9024.54	2752.20	762.686
228.000	9032.04	2762.86	771.239
229.000	9039.47	2773.43	779.792
230.000	9046.81	2783.91	788.346
231.000	9054.07	2794.32	796.898
232.000	9061.24	2804.63	805.449
233.000	9068.34	2814.87	813.997
234.000	9075.36	2825.02	822.543
235.000	9082.29	2835.08	831.084
236.000	9089.15	2845.07	839.621
237.000	9095.94	2854.97	848.153
238.000	9102.64	2864.80	856.678
239.000	9109.28	2874.54	865.197
240.000	9115.83	2884.20	873.709
241.000	9122.32	2893.79	882.212
242.000	9128.73	2903.29	890.706
243.000	9135.08	2912.72	899.192

244.000	9141.35	2922.07	907.667
245.000	9147.55	2931.34	916.131
246.000	9153.68	2940.53	924.584
247.000	9159.75	2949.65	933.025
248.000	9165.74	2958.69	941.454
249.000	9171.67	2967.66	949.870
250.000	9177.54	2976.55	958.272
251.000	9183.34	2985.36	966.659
252.000	9189.08	2994.10	975.032
253.000	9194.75	3002.77	983.390
254.000	9200.36	3011.37	991.731
255.000	9205.91	3019.89	1000.06
256.000	9211.40	3028.34	1008.36
257.000	9216.83	3036.72	1016.66
258.000	9222.20	3045.03	1024.93
259.000	9227.50	3053.27	1033.18
260.000	9232.76	3061.44	1041.42
261.000	9237.95	3069.54	1049.64
262.000	9243.09	3077.57	1057.83
263.000	9248.17	3085.53	1066.01
264.000	9253.19	3093.42	1074.16
265.000	9258.16	3101.25	1082.30
266.000	9263.08	3109.01	1090.41
267.000	9267.94	3116.70	1098.50
268.000	9272.75	3124.32	1106.57
269.000	9277.50	3131.89	1114.62
270.000	9282.21	3139.38	1122.64
271.000	9286.86	3146.81	1130.64
272.000	9291.47	3154.18	1138.61
273.000	9296.02	3161.48	1146.56
274.000	9300.52	3168.72	1154.49
275.000	9304.98	3175.90	1162.39
276.000	9309.38	3183.01	1170.27
277.000	9313.74	3190.07	1178.12
278.000	9318.06	3197.06	1185.95
279.000	9322.32	3203.99	1193.74
280.000	9326.54	3210.86	1201.52
281.000	9330.71	3217.67	1209.26
282.000	9334.84	3224.42	1216.98
283.000	9338.92	3231.11	1224.67
284.000	9342.96	3237.75	1232.34
285.000	9346.96	3244.32	1239.97
286.000	9350.91	3250.84	1247.58
287.000	9354.82	3257.30	1255.16
288.000	9358.69	3263.71	1262.71
289.000	9362.52	3270.06	1270.24
290.000	9366.31	3276.35	1277.73
291.000	9370.05	3282.59	1285.20
292.000	9373.76	3288.77	1292.63
293.000	9377.42	3294.90	1300.04
294.000	9381.05	3300.97	1307.41
295.000	9384.64	3306.99	1314.76
296.000	9388.18	3312.96	1322.08
297.000	9391.70	3318.87	1329.36
298.000	9395.17	3324.73	1336.62
299.000	9398.61	3330.54	1343.84
300.000	9402.01	3336.30	1351.03
301.000	9405.37	3342.01	1358.20
302.000	9408.70	3347.66	1365.33
303.000	9411.99	3353.27	1372.43
304.000	9415.25	3358.83	1379.50
305.000	9418.47	3364.33	1386.54
306.000	9421.66	3369.79	1393.54
307.000	9424.81	3375.20	1400.52
308.000	9427.93	3380.56	1407.46
309.000	9431.02	3385.88	1414.37
310.000	9434.08	3391.14	1421.25
311.000	9437.10	3396.36	1428.10
312.000	9440.09	3401.53	1434.91

313.000	9443.05	3406.66	1441.70
314.000	9445.98	3411.74	1448.45
315.000	9448.87	3416.77	1455.16
316.000	9451.74	3421.76	1461.85
317.000	9454.58	3426.71	1468.50
318.000	9457.38	3431.61	1475.12
319.000	9460.16	3436.47	1481.71
320.000	9462.91	3441.28	1488.27
321.000	9465.62	3446.05	1494.79
322.000	9468.31	3450.78	1501.28
323.000	9470.97	3455.46	1507.74
324.000	9473.61	3460.10	1514.16
325.000	9476.21	3464.70	1520.55
326.000	9478.79	3469.26	1526.91
327.000	9481.34	3473.78	1533.24
328.000	9483.87	3478.26	1539.53
329.000	9486.36	3482.69	1545.79
330.000	9488.83	3487.09	1552.01
331.000	9491.28	3491.45	1558.21
332.000	9493.70	3495.76	1564.37
333.000	9496.09	3500.04	1570.50
334.000	9498.46	3504.28	1576.59
335.000	9500.81	3508.48	1582.66
336.000	9503.13	3512.65	1588.69
337.000	9505.42	3516.77	1594.68
338.000	9507.70	3520.86	1600.65
339.000	9509.94	3524.91	1606.58
340.000	9512.17	3528.93	1612.48
341.000	9514.37	3532.90	1618.34
342.000	9516.55	3536.85	1624.18
343.000	9518.71	3540.75	1629.98
344.000	9520.84	3544.62	1635.74
345.000	9522.95	3548.46	1641.48
346.000	9525.04	3552.26	1647.18
347.000	9527.11	3556.03	1652.85
348.000	9529.15	3559.76	1658.49
349.000	9531.18	3563.46	1664.09
350.000	9533.18	3567.12	1669.67
351.000	9535.16	3570.75	1675.21
352.000	9537.12	3574.35	1680.72
353.000	9539.07	3577.91	1686.19
354.000	9540.99	3581.45	1691.64
355.000	9542.89	3584.95	1697.05
356.000	9544.77	3588.41	1702.43
357.000	9546.63	3591.85	1707.78
358.000	9548.48	3595.26	1713.10
359.000	9550.30	3598.63	1718.38
360.000	9552.11	3601.97	1723.63
361.000	9553.89	3605.29	1728.86
362.000	9555.66	3608.57	1734.05
363.000	9557.41	3611.82	1739.20
364.000	9559.14	3615.04	1744.33
365.000	9560.86	3618.24	1749.43
366.000	9562.55	3621.40	1754.49
367.000	9564.23	3624.54	1759.53
368.000	9565.89	3627.64	1764.53
369.000	9567.54	3630.72	1769.50
370.000	9569.17	3633.77	1774.44
371.000	9570.78	3636.79	1779.35
372.000	9572.37	3639.79	1784.23
373.000	9573.95	3642.75	1789.08
374.000	9575.51	3645.69	1793.90
375.000	9577.05	3648.61	1798.69
376.000	9578.58	3651.49	1803.45
377.000	9580.10	3654.35	1808.18
378.000	9581.60	3657.18	1812.88
379.000	9583.08	3659.99	1817.55
380.000	9584.55	3662.77	1822.19
381.000	9586.00	3665.53	1826.80

382.000	9587.44	3668.26	1831.38
383.000	9588.86	3670.96	1835.93
384.000	9590.27	3673.64	1840.45
385.000	9591.66	3676.30	1844.94
386.000	9593.04	3678.93	1849.40
387.000	9594.41	3681.54	1853.84
388.000	9595.76	3684.12	1858.24
389.000	9597.10	3686.68	1862.62
390.000	9598.42	3689.22	1866.96
391.000	9599.73	3691.73	1871.28
392.000	9601.03	3694.22	1875.57
393.000	9602.31	3696.68	1879.84
394.000	9603.58	3699.13	1884.07
395.000	9604.84	3701.55	1888.28
396.000	9606.09	3703.95	1892.45
397.000	9607.32	3706.32	1896.60
398.000	9608.54	3708.68	1900.73
399.000	9609.75	3711.01	1904.82
400.000	9610.94	3713.32	1908.89
401.000	9612.12	3715.61	1912.93
402.000	9613.29	3717.88	1916.94
403.000	9614.45	3720.13	1920.93
404.000	9615.60	3722.36	1924.89
405.000	9616.74	3724.57	1928.82
406.000	9617.86	3726.75	1932.73
407.000	9618.97	3728.92	1936.60
408.000	9620.07	3731.06	1940.46
409.000	9621.16	3733.19	1944.28
410.000	9622.24	3735.30	1948.08
411.000	9623.31	3737.39	1951.86
412.000	9624.37	3739.45	1955.61
413.000	9625.41	3741.50	1959.33
414.000	9626.45	3743.53	1963.03
415.000	9627.47	3745.54	1966.70
416.000	9628.49	3747.54	1970.34
417.000	9629.50	3749.51	1973.96
418.000	9630.49	3751.47	1977.56
419.000	9631.47	3753.40	1981.13
420.000	9632.45	3755.32	1984.67
421.000	9633.41	3757.23	1988.19
422.000	9634.37	3759.11	1991.69
423.000	9635.31	3760.98	1995.16
424.000	9636.25	3762.83	1998.61
425.000	9637.17	3764.66	2002.03
426.000	9638.09	3766.48	2005.43
427.000	9639.00	3768.28	2008.81
428.000	9639.90	3770.06	2012.16
429.000	9640.79	3771.82	2015.48
430.000	9641.67	3773.57	2018.79
431.000	9642.54	3775.31	2022.07
432.000	9643.40	3777.02	2025.32
433.000	9644.26	3778.72	2028.56
434.000	9645.10	3780.41	2031.77
435.000	9645.94	3782.08	2034.96
436.000	9646.77	3783.73	2038.12
437.000	9647.59	3785.37	2041.26
438.000	9648.40	3787.00	2044.38
439.000	9649.20	3788.61	2047.48
440.000	9650.00	3790.20	2050.55
441.000	9650.79	3791.78	2053.60
442.000	9651.57	3793.34	2056.64
443.000	9652.34	3794.89	2059.64
444.000	9653.10	3796.43	2062.63
445.000	9653.86	3797.95	2065.60
446.000	9654.61	3799.46	2068.54
447.000	9655.35	3800.95	2071.46
448.000	9656.08	3802.43	2074.36
449.000	9656.81	3803.89	2077.24
450.000	9657.53	3805.35	2080.10

451.000	9658.24	3806.78	2082.94
452.000	9658.95	3808.21	2085.75
453.000	9659.64	3809.62	2088.55
454.000	9660.34	3811.02	2091.33
455.000	9661.02	3812.41	2094.08
456.000	9661.70	3813.78	2096.81
457.000	9662.37	3815.14	2099.53
458.000	9663.03	3816.49	2102.22
459.000	9663.69	3817.82	2104.90
460.000	9664.34	3819.14	2107.55
461.000	9664.98	3820.45	2110.19
462.000	9665.62	3821.75	2112.80
463.000	9666.25	3823.04	2115.40
464.000	9666.88	3824.31	2117.98
465.000	9667.49	3825.58	2120.54
466.000	9668.11	3826.83	2123.07
467.000	9668.71	3828.07	2125.59
468.000	9669.31	3829.29	2128.09
469.000	9669.91	3830.51	2130.58
470.000	9670.50	3831.71	2133.04
471.000	9671.08	3832.91	2135.48
472.000	9671.66	3834.09	2137.91
473.000	9672.23	3835.26	2140.32
474.000	9672.79	3836.42	2142.71
475.000	9673.35	3837.57	2145.08
476.000	9673.91	3838.71	2147.44
477.000	9674.45	3839.84	2149.77
478.000	9675.00	3840.96	2152.09
479.000	9675.54	3842.06	2154.39
480.000	9676.07	3843.16	2156.68
481.000	9676.59	3844.25	2158.94
482.000	9677.12	3845.33	2161.19
483.000	9677.63	3846.39	2163.43
484.000	9678.14	3847.45	2165.64
485.000	9678.65	3848.50	2167.84
486.000	9679.15	3849.53	2170.02
487.000	9679.65	3850.56	2172.19
488.000	9680.14	3851.58	2174.33
489.000	9680.63	3852.59	2176.47
490.000	9681.11	3853.59	2178.58
491.000	9681.59	3854.58	2180.68
492.000	9682.06	3855.56	2182.76
493.000	9682.53	3856.53	2184.83
494.000	9682.99	3857.49	2186.88
495.000	9683.45	3858.45	2188.92
496.000	9683.90	3859.39	2190.94
497.000	9684.35	3860.33	2192.94
498.000	9684.79	3861.26	2194.93
499.000	9685.24	3862.17	2196.91
500.000	9685.67	3863.08	2198.87
501.000	9686.10	3863.99	2200.81
502.000	9686.53	3864.88	2202.74
503.000	9686.95	3865.76	2204.65
504.000	9687.37	3866.64	2206.55
505.000	9687.79	3867.51	2208.43
506.000	9688.20	3868.37	2210.30
507.000	9688.61	3869.22	2212.16
508.000	9689.01	3870.07	2214.00
509.000	9689.41	3870.90	2215.82
510.000	9689.80	3871.73	2217.63
511.000	9690.19	3872.55	2219.43
512.000	9690.58	3873.37	2221.22
513.000	9690.96	3874.17	2222.99
514.000	9691.34	3874.97	2224.74
515.000	9691.72	3875.76	2226.48
516.000	9692.09	3876.55	2228.21
517.000	9692.46	3877.32	2229.93
518.000	9692.82	3878.09	2231.63
519.000	9693.19	3878.85	2233.32

520.000	9693.54	3879.61	2234.99
521.000	9693.90	3880.36	2236.65
522.000	9694.25	3881.10	2238.30
523.000	9694.59	3881.83	2239.94
524.000	9694.94	3882.56	2241.56
525.000	9695.28	3883.28	2243.17
526.000	9695.62	3883.99	2244.77
527.000	9695.95	3884.70	2246.35
528.000	9696.28	3885.40	2247.92
529.000	9696.61	3886.10	2249.48
530.000	9696.93	3886.78	2251.03
531.000	9697.25	3887.46	2252.56
532.000	9697.57	3888.14	2254.09
533.000	9697.88	3888.81	2255.60
534.000	9698.20	3889.47	2257.10
535.000	9698.50	3890.13	2258.58
536.000	9698.81	3890.78	2260.06
537.000	9699.11	3891.42	2261.52
538.000	9699.41	3892.06	2262.97
539.000	9699.71	3892.69	2264.41
540.000	9700.00	3893.31	2265.84
541.000	9700.29	3893.94	2267.26
542.000	9700.58	3894.55	2268.67
543.000	9700.86	3895.16	2270.06
544.000	9701.15	3895.76	2271.44
545.000	9701.42	3896.36	2272.82
546.000	9701.70	3896.95	2274.18
547.000	9701.98	3897.54	2275.53
548.000	9702.25	3898.12	2276.87
549.000	9702.52	3898.69	2278.20
550.000	9702.78	3899.26	2279.52
551.000	9703.04	3899.83	2280.82
552.000	9703.31	3900.39	2282.12
553.000	9703.56	3900.94	2283.41
554.000	9703.82	3901.49	2284.69
555.000	9704.07	3902.04	2285.95
556.000	9704.32	3902.57	2287.21
557.000	9704.57	3903.11	2288.45
558.000	9704.82	3903.64	2289.69
559.000	9705.06	3904.16	2290.92
560.000	9705.30	3904.68	2292.13
561.000	9705.54	3905.19	2293.34
562.000	9705.78	3905.70	2294.54
563.000	9706.01	3906.21	2295.72
564.000	9706.24	3906.71	2296.90
565.000	9706.47	3907.20	2298.07
566.000	9706.70	3907.70	2299.23
567.000	9706.92	3908.18	2300.38
568.000	9707.15	3908.66	2301.51
569.000	9707.37	3909.14	2302.65
570.000	9707.59	3909.61	2303.77
571.000	9707.80	3910.08	2304.88
572.000	9708.02	3910.55	2305.98
573.000	9708.23	3911.01	2307.08
574.000	9708.44	3911.46	2308.16
575.000	9708.65	3911.91	2309.24
576.000	9708.85	3912.36	2310.31
577.000	9709.06	3912.80	2311.36
578.000	9709.26	3913.24	2312.42
579.000	9709.46	3913.68	2313.46
580.000	9709.66	3914.11	2314.49
581.000	9709.85	3914.53	2315.51
582.000	9710.05	3914.96	2316.53
583.000	9710.24	3915.37	2317.54
584.000	9710.43	3915.79	2318.54
585.000	9710.62	3916.20	2319.53
586.000	9710.81	3916.61	2320.52
587.000	9710.99	3917.01	2321.49
588.000	9711.17	3917.41	2322.46

589.000	9711.36	3917.80	2323.42
590.000	9711.54	3918.20	2324.37
591.000	9711.71	3918.59	2325.31
592.000	9711.89	3918.97	2326.25
593.000	9712.06	3919.35	2327.18
594.000	9712.24	3919.73	2328.10
595.000	9712.41	3920.10	2329.01
596.000	9712.58	3920.47	2329.92
597.000	9712.74	3920.84	2330.82
598.000	9712.91	3921.21	2331.71
599.000	9713.07	3921.57	2332.59
600.000	9713.24	3921.92	2333.47
601.000	9713.40	3922.28	2334.34
602.000	9713.56	3922.63	2335.20
603.000	9713.72	3922.97	2336.06
604.000	9713.87	3923.32	2336.90
605.000	9714.03	3923.66	2337.75
606.000	9714.18	3924.00	2338.58
607.000	9714.33	3924.33	2339.41
608.000	9714.49	3924.66	2340.23
609.000	9714.63	3924.99	2341.04
610.000	9714.78	3925.32	2341.85
611.000	9714.93	3925.64	2342.65
612.000	9715.07	3925.96	2343.44
613.000	9715.22	3926.27	2344.23
614.000	9715.36	3926.59	2345.01
615.000	9715.50	3926.90	2345.78
616.000	9715.64	3927.20	2346.55
617.000	9715.78	3927.51	2347.31
618.000	9715.92	3927.81	2348.07
619.000	9716.05	3928.11	2348.81
620.000	9716.18	3928.41	2349.56
621.000	9716.32	3928.70	2350.29
622.000	9716.45	3928.99	2351.02
623.000	9716.58	3929.28	2351.75
624.000	9716.71	3929.56	2352.47
625.000	9716.83	3929.85	2353.18
626.000	9716.96	3930.13	2353.88
627.000	9717.09	3930.40	2354.58
628.000	9717.21	3930.68	2355.28
629.000	9717.33	3930.95	2355.97
630.000	9717.46	3931.22	2356.65
631.000	9717.58	3931.49	2357.33
632.000	9717.70	3931.75	2358.00
633.000	9717.81	3932.01	2358.67
634.000	9717.93	3932.27	2359.33
635.000	9718.05	3932.53	2359.98
636.000	9718.16	3932.79	2360.63
637.000	9718.27	3933.04	2361.27
638.000	9718.39	3933.29	2361.91
639.000	9718.50	3933.54	2362.55
640.000	9718.61	3933.78	2363.17
641.000	9718.72	3934.03	2363.80
642.000	9718.83	3934.27	2364.41
643.000	9718.93	3934.51	2365.03
644.000	9719.04	3934.74	2365.63
645.000	9719.15	3934.98	2366.24
646.000	9719.25	3935.21	2366.83
647.000	9719.35	3935.44	2367.43
648.000	9719.46	3935.67	2368.01
649.000	9719.56	3935.89	2368.60
650.000	9719.66	3936.12	2369.17
651.000	9719.75	3936.34	2369.75
652.000	9719.85	3936.56	2370.31
653.000	9719.95	3936.77	2370.88
654.000	9720.05	3936.99	2371.43
655.000	9720.14	3937.20	2371.99
656.000	9720.24	3937.42	2372.54
657.000	9720.33	3937.62	2373.08

658.000	9720.42	3937.83	2373.62
659.000	9720.52	3938.04	2374.16
660.000	9720.61	3938.24	2374.69
661.000	9720.70	3938.44	2375.21
662.000	9720.79	3938.64	2375.73
663.000	9720.87	3938.84	2376.25
664.000	9720.96	3939.04	2376.76
665.000	9721.05	3939.23	2377.27
666.000	9721.13	3939.43	2377.78
667.000	9721.22	3939.62	2378.28
668.000	9721.30	3939.80	2378.77
669.000	9721.39	3939.99	2379.27
670.000	9721.47	3940.18	2379.75
671.000	9721.55	3940.36	2380.24
672.000	9721.63	3940.54	2380.72
673.000	9721.71	3940.72	2381.19
674.000	9721.79	3940.90	2381.66
675.000	9721.87	3941.08	2382.13
676.000	9721.95	3941.26	2382.59
677.000	9722.03	3941.43	2383.05
678.000	9722.10	3941.60	2383.51
679.000	9722.18	3941.77	2383.96
680.000	9722.25	3941.94	2384.41
681.000	9722.33	3942.11	2384.85
682.000	9722.40	3942.27	2385.29
683.000	9722.47	3942.44	2385.73
684.000	9722.54	3942.60	2386.16
685.000	9722.62	3942.76	2386.59
686.000	9722.69	3942.92	2387.02
687.000	9722.76	3943.08	2387.44
688.000	9722.83	3943.24	2387.86
689.000	9722.90	3943.39	2388.27
690.000	9722.96	3943.55	2388.68
691.000	9723.03	3943.70	2389.09
692.000	9723.10	3943.85	2389.50
693.000	9723.17	3944.00	2389.90
694.000	9723.23	3944.15	2390.29
695.000	9723.29	3944.30	2390.69
696.000	9723.36	3944.44	2391.08
697.000	9723.42	3944.59	2391.47
698.000	9723.49	3944.73	2391.85
699.000	9723.55	3944.87	2392.23
700.000	9723.61	3945.01	2392.61
701.000	9723.67	3945.15	2392.98
702.000	9723.73	3945.29	2393.35
703.000	9723.79	3945.42	2393.72
704.000	9723.85	3945.56	2394.09
705.000	9723.91	3945.69	2394.45
706.000	9723.97	3945.82	2394.81
707.000	9724.03	3945.96	2395.16
708.000	9724.08	3946.09	2395.52
709.000	9724.14	3946.22	2395.87
710.000	9724.20	3946.34	2396.21
711.000	9724.25	3946.47	2396.56
712.000	9724.31	3946.59	2396.90
713.000	9724.36	3946.72	2397.24
714.000	9724.42	3946.84	2397.57
715.000	9724.47	3946.96	2397.90
716.000	9724.52	3947.08	2398.23
717.000	9724.58	3947.20	2398.56
718.000	9724.63	3947.32	2398.88
719.000	9724.68	3947.44	2399.20
720.000	9724.73	3947.56	2399.52
721.000	9724.78	3947.67	2399.84
722.000	9724.83	3947.79	2400.15
723.000	9724.88	3947.90	2400.46
724.000	9724.93	3948.01	2400.77
725.000	9724.98	3948.12	2401.07
726.000	9725.03	3948.23	2401.38

727.000	9725.07	3948.34	2401.67
728.000	9725.12	3948.45	2401.97
729.000	9725.17	3948.56	2402.27
730.000	9725.21	3948.66	2402.56
731.000	9725.26	3948.77	2402.85
732.000	9725.31	3948.87	2403.13
733.000	9725.35	3948.97	2403.42
734.000	9725.39	3949.08	2403.70
735.000	9725.44	3949.18	2403.98
736.000	9725.48	3949.28	2404.26
737.000	9725.53	3949.38	2404.53
738.000	9725.57	3949.48	2404.81
739.000	9725.61	3949.57	2405.08
740.000	9725.65	3949.67	2405.34
741.000	9725.70	3949.76	2405.61
742.000	9725.74	3949.86	2405.87
743.000	9725.78	3949.95	2406.13
744.000	9725.82	3950.05	2406.39
745.000	9725.86	3950.14	2406.65
746.000	9725.90	3950.23	2406.90
747.000	9725.94	3950.32	2407.16
748.000	9725.98	3950.41	2407.41
749.000	9726.02	3950.50	2407.65
750.000	9726.05	3950.59	2407.90
751.000	9726.09	3950.67	2408.14
752.000	9726.13	3950.76	2408.39
753.000	9726.17	3950.85	2408.62
754.000	9726.20	3950.93	2408.86
755.000	9726.24	3951.01	2409.10
756.000	9726.28	3951.10	2409.33
757.000	9726.31	3951.18	2409.56
758.000	9726.35	3951.26	2409.79
759.000	9726.38	3951.34	2410.02
760.000	9726.42	3951.42	2410.24
761.000	9726.45	3951.50	2410.47
762.000	9726.49	3951.58	2410.69
763.000	9726.52	3951.66	2410.91
764.000	9726.55	3951.74	2411.13
765.000	9726.59	3951.81	2411.34
766.000	9726.62	3951.89	2411.56
767.000	9726.65	3951.96	2411.77
768.000	9726.68	3952.04	2411.98
769.000	9726.71	3952.11	2412.19
770.000	9726.75	3952.18	2412.39
771.000	9726.78	3952.26	2412.60
772.000	9726.81	3952.33	2412.80
773.000	9726.84	3952.40	2413.00
774.000	9726.87	3952.47	2413.20
775.000	9726.90	3952.54	2413.40
776.000	9726.93	3952.61	2413.60
777.000	9726.96	3952.68	2413.79
778.000	9726.99	3952.74	2413.99
779.000	9727.02	3952.81	2414.18
780.000	9727.05	3952.88	2414.37
781.000	9727.08	3952.94	2414.55
782.000	9727.10	3953.01	2414.74
783.000	9727.13	3953.07	2414.92
784.000	9727.16	3953.14	2415.11
785.000	9727.19	3953.20	2415.29
786.000	9727.21	3953.26	2415.47
787.000	9727.24	3953.33	2415.65
788.000	9727.27	3953.39	2415.82
789.000	9727.29	3953.45	2416.00
790.000	9727.32	3953.51	2416.17
791.000	9727.35	3953.57	2416.35
792.000	9727.37	3953.63	2416.52
793.000	9727.40	3953.69	2416.69
794.000	9727.42	3953.75	2416.85
795.000	9727.45	3953.80	2417.02

796.000	9727.47	3953.86	2417.18
797.000	9727.50	3953.92	2417.35
798.000	9727.52	3953.97	2417.51
799.000	9727.54	3954.03	2417.67
800.000	9727.57	3954.09	2417.83
801.000	9727.59	3954.14	2417.99
802.000	9727.61	3954.19	2418.14
803.000	9727.64	3954.25	2418.30
804.000	9727.66	3954.30	2418.45
805.000	9727.68	3954.35	2418.61
806.000	9727.71	3954.41	2418.76
807.000	9727.73	3954.46	2418.91
808.000	9727.75	3954.51	2419.06
809.000	9727.77	3954.56	2419.20
810.000	9727.79	3954.61	2419.35
811.000	9727.81	3954.66	2419.49
812.000	9727.84	3954.71	2419.64
813.000	9727.86	3954.76	2419.78
814.000	9727.88	3954.81	2419.92
815.000	9727.90	3954.85	2420.06
816.000	9727.92	3954.90	2420.20
817.000	9727.94	3954.95	2420.34
818.000	9727.96	3955.00	2420.47
819.000	9727.98	3955.04	2420.61
820.000	9728.00	3955.09	2420.74
821.000	9728.02	3955.13	2420.87
822.000	9728.04	3955.18	2421.00
823.000	9728.06	3955.22	2421.14
824.000	9728.07	3955.27	2421.26
825.000	9728.09	3955.31	2421.39
826.000	9728.11	3955.35	2421.52
827.000	9728.13	3955.40	2421.65
828.000	9728.15	3955.44	2421.77
829.000	9728.17	3955.48	2421.89
830.000	9728.18	3955.52	2422.02
831.000	9728.20	3955.57	2422.14
832.000	9728.22	3955.61	2422.26
833.000	9728.24	3955.65	2422.38
834.000	9728.25	3955.69	2422.50
835.000	9728.27	3955.73	2422.61
836.000	9728.29	3955.77	2422.73
837.000	9728.30	3955.81	2422.84
838.000	9728.32	3955.84	2422.96
839.000	9728.34	3955.88	2423.07
840.000	9728.35	3955.92	2423.18
841.000	9728.37	3955.96	2423.30
842.000	9728.39	3956.00	2423.41
843.000	9728.40	3956.03	2423.52
844.000	9728.42	3956.07	2423.62
845.000	9728.43	3956.11	2423.73
846.000	9728.45	3956.14	2423.84
847.000	9728.46	3956.18	2423.94
848.000	9728.48	3956.21	2424.05
849.000	9728.49	3956.25	2424.15
850.000	9728.51	3956.28	2424.26
851.000	9728.52	3956.32	2424.36
852.000	9728.54	3956.35	2424.46
853.000	9728.55	3956.38	2424.56
854.000	9728.57	3956.42	2424.66
855.000	9728.58	3956.45	2424.76
856.000	9728.59	3956.48	2424.85
857.000	9728.61	3956.52	2424.95
858.000	9728.62	3956.55	2425.05
859.000	9728.63	3956.58	2425.14
860.000	9728.65	3956.61	2425.24
861.000	9728.66	3956.64	2425.33
862.000	9728.67	3956.67	2425.42
863.000	9728.69	3956.70	2425.51
864.000	9728.70	3956.74	2425.60

865.000	9728.71	3956.77	2425.70
866.000	9728.73	3956.80	2425.78
867.000	9728.74	3956.82	2425.87
868.000	9728.75	3956.85	2425.96
869.000	9728.76	3956.88	2426.05
870.000	9728.78	3956.91	2426.13
871.000	9728.79	3956.94	2426.22
872.000	9728.80	3956.97	2426.30
873.000	9728.81	3957.00	2426.39
874.000	9728.82	3957.02	2426.47
875.000	9728.83	3957.05	2426.56
876.000	9728.85	3957.08	2426.64
877.000	9728.86	3957.11	2426.72
878.000	9728.87	3957.13	2426.80
879.000	9728.88	3957.16	2426.88
880.000	9728.89	3957.19	2426.96
881.000	9728.90	3957.21	2427.04
882.000	9728.91	3957.24	2427.11
883.000	9728.92	3957.26	2427.19
884.000	9728.93	3957.29	2427.27
885.000	9728.95	3957.31	2427.34
886.000	9728.96	3957.34	2427.42
887.000	9728.97	3957.36	2427.49
888.000	9728.98	3957.39	2427.57
889.000	9728.99	3957.41	2427.64
890.000	9729.00	3957.43	2427.71
891.000	9729.01	3957.46	2427.78
892.000	9729.02	3957.48	2427.85
893.000	9729.03	3957.51	2427.92
894.000	9729.04	3957.53	2427.99
895.000	9729.05	3957.55	2428.06
896.000	9729.06	3957.57	2428.13
897.000	9729.07	3957.60	2428.20
898.000	9729.07	3957.62	2428.27
899.000	9729.08	3957.64	2428.33
900.000	9729.09	3957.66	2428.40
901.000	9729.10	3957.68	2428.47
902.000	9729.11	3957.71	2428.53
903.000	9729.12	3957.73	2428.60
904.000	9729.13	3957.75	2428.66
905.000	9729.14	3957.77	2428.72
906.000	9729.15	3957.79	2428.79
907.000	9729.16	3957.81	2428.85
908.000	9729.16	3957.83	2428.91
909.000	9729.17	3957.85	2428.97
910.000	9729.18	3957.87	2429.03
911.000	9729.19	3957.89	2429.09
912.000	9729.20	3957.91	2429.15
913.000	9729.21	3957.93	2429.21
914.000	9729.21	3957.95	2429.27
915.000	9729.22	3957.97	2429.33
916.000	9729.23	3957.98	2429.39
917.000	9729.24	3958.00	2429.44
918.000	9729.24	3958.02	2429.50
919.000	9729.25	3958.04	2429.56
920.000	9729.26	3958.06	2429.61
921.000	9729.27	3958.08	2429.67
922.000	9729.28	3958.09	2429.72
923.000	9729.28	3958.11	2429.78
924.000	9729.29	3958.13	2429.83
925.000	9729.30	3958.15	2429.88
926.000	9729.30	3958.16	2429.93
927.000	9729.31	3958.18	2429.99
928.000	9729.32	3958.20	2430.04
929.000	9729.33	3958.21	2430.09
930.000	9729.33	3958.23	2430.14
931.000	9729.34	3958.25	2430.19
932.000	9729.35	3958.26	2430.24
933.000	9729.35	3958.28	2430.29

934.000	9729.36	3958.29	2430.34
935.000	9729.37	3958.31	2430.39
936.000	9729.37	3958.33	2430.44
937.000	9729.38	3958.34	2430.48
938.000	9729.39	3958.36	2430.53
939.000	9729.39	3958.37	2430.58
940.000	9729.40	3958.39	2430.63
941.000	9729.40	3958.40	2430.67
942.000	9729.41	3958.42	2430.72
943.000	9729.42	3958.43	2430.76
944.000	9729.42	3958.45	2430.81
945.000	9729.43	3958.46	2430.85
946.000	9729.43	3958.47	2430.90
947.000	9729.44	3958.49	2430.94
948.000	9729.45	3958.50	2430.98
949.000	9729.45	3958.52	2431.03
950.000	9729.46	3958.53	2431.07
951.000	9729.46	3958.54	2431.11
952.000	9729.47	3958.56	2431.15
953.000	9729.47	3958.57	2431.20
954.000	9729.48	3958.58	2431.24
955.000	9729.49	3958.60	2431.28
956.000	9729.49	3958.61	2431.32
957.000	9729.50	3958.62	2431.36
958.000	9729.50	3958.64	2431.40
959.000	9729.51	3958.65	2431.44
960.000	9729.51	3958.66	2431.48
961.000	9729.52	3958.67	2431.51
962.000	9729.52	3958.68	2431.55
963.000	9729.53	3958.70	2431.59
964.000	9729.53	3958.71	2431.63
965.000	9729.54	3958.72	2431.67
966.000	9729.54	3958.73	2431.70
967.000	9729.55	3958.74	2431.74
968.000	9729.55	3958.76	2431.78
969.000	9729.56	3958.77	2431.81
970.000	9729.56	3958.78	2431.85
971.000	9729.57	3958.79	2431.88
972.000	9729.57	3958.80	2431.92
973.000	9729.58	3958.81	2431.95
974.000	9729.58	3958.82	2431.99
975.000	9729.58	3958.83	2432.02
976.000	9729.59	3958.84	2432.06
977.000	9729.59	3958.86	2432.09
978.000	9729.60	3958.87	2432.12
979.000	9729.60	3958.88	2432.16
980.000	9729.61	3958.89	2432.19
981.000	9729.61	3958.90	2432.22
982.000	9729.62	3958.91	2432.25
983.000	9729.62	3958.92	2432.28
984.000	9729.62	3958.93	2432.32
985.000	9729.63	3958.94	2432.35
986.000	9729.63	3958.95	2432.38
987.000	9729.64	3958.96	2432.41
988.000	9729.64	3958.97	2432.44
989.000	9729.64	3958.98	2432.47
990.000	9729.65	3958.99	2432.50
991.000	9729.65	3959.00	2432.53
992.000	9729.66	3959.00	2432.56
993.000	9729.66	3959.01	2432.59
994.000	9729.66	3959.02	2432.62
995.000	9729.67	3959.03	2432.65
996.000	9729.67	3959.04	2432.67
997.000	9729.68	3959.05	2432.70
998.000	9729.68	3959.06	2432.73
999.000	9729.68	3959.07	2432.76
1000.00	9729.69	3959.08	2432.78

TITLE : SMITHS GROCERY

CBM JOB # : 10629
SC ID # : 09322

Contaminant of Concern is TOLUENE

C(x,0,0,t)=(C0/2)erfc[(x-vt)/2(Ax*vt)1/2]
erf[Y/4(Ay*x)1/2]erf[Z/2(alphz*x)1/2]

INPUT PARAMETERS :
Concentration of Source (ppb) = 60000.00
Source Width (ft) = 150.00
Vertical Thickness of Source (ft) = 38.00
Distance of Recipient (ft) =1000.00
Groundwater Flow Velocity (ft/yr) = 3.65
Time of Simulation (years) = 1000.00
Longitudinal Dispersivity (ft) = 100.000000
Transverse Dispersivity (ft) = 33.333332
Vertical Dispersivity (ft) = 5.000000
Total Organic Carbon, TOC (mg/kg) = 60.00
Total Petroleum Hydrocarbons,TPH(mg/kg) = 0.00
Soil/Water Part. Coefficient,Koc(ml/g) = 133.00
Organic Carbon Fraction, foc (%) = 0.0000600
Porosity = .250
Bulk Density (g/cc) = 1.530
Retardation Factor, Rf = 1.04884
Contaminant Velocity (ft/yr) = 3.48004

CONCENTRATION COMPUTED FOR :
220.000 ft. 600.000 ft 1000.000 ft.

TIME (yrs)	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)
1.00000	0.000000	0.000000	0.000000
2.00000	0.000000	0.000000	0.000000
3.00000	0.000000	0.000000	0.000000
4.00000	0.763853	0.000000	0.000000
5.00000	4.81710	0.000000	0.000000
6.00000	16.7112	0.000000	0.000000
7.00000	41.0685	0.000000	0.000000
8.00000	81.2308	0.000000	0.000000
9.00000	138.880	0.000000	0.000000
10.0000	214.271	0.000000	0.000000
11.0000	306.648	0.000000	0.000000
12.0000	414.646	0.000000	0.000000
13.0000	536.588	0.000000	0.000000
14.0000	670.695	0.000000	0.000000
15.0000	815.211	0.000000	0.000000
16.0000	968.482	0.000000	0.000000
17.0000	1128.99	0.000000	0.000000
18.0000	1295.38	0.000000	0.000000
19.0000	1466.45	0.000000	0.000000
20.0000	1641.13	0.000000	0.000000
21.0000	1818.50	0.000000	0.000000
22.0000	1997.78	0.776783E-01	0.000000
23.0000	2178.27	0.131493	0.000000
24.0000	2359.38	0.213250	0.000000
25.0000	2540.61	0.332987	0.000000
26.0000	2721.53	0.502768	0.000000
27.0000	2901.78	0.736705	0.000000
28.0000	3081.05	1.05092	0.000000
29.0000	3259.08	1.46347	0.000000
30.0000	3435.65	1.99414	0.000000
31.0000	3610.58	2.66434	0.000000
32.0000	3783.72	3.49681	0.000000
33.0000	3954.95	4.51540	0.000000
34.0000	4124.17	5.74482	0.000000
35.0000	4291.29	7.21039	0.000000
36.0000	4456.26	8.93773	0.000000
37.0000	4619.02	10.9526	0.000000

38.0000	4779.54	13.2805	0.000000
39.0000	4937.80	15.9466	0.000000
40.0000	5093.78	18.9755	0.000000
41.0000	5247.47	22.3910	0.000000
42.0000	5398.87	26.2160	0.000000
43.0000	5547.98	30.4724	0.000000
44.0000	5694.83	35.1807	0.000000
45.0000	5839.41	40.3604	0.000000
46.0000	5981.76	46.0293	0.000000
47.0000	6121.88	52.2042	0.000000
48.0000	6259.81	58.9002	0.000000
49.0000	6395.57	66.1309	0.000000
50.0000	6529.18	73.9084	0.000000
51.0000	6660.68	82.2436	0.000000
52.0000	6790.09	91.1455	0.000000
53.0000	6917.44	100.622	0.000000
54.0000	7042.78	110.680	0.572971E-01
55.0000	7166.12	121.323	0.731586E-01
56.0000	7287.50	132.556	0.926064E-01
57.0000	7406.95	144.381	0.116266
58.0000	7524.51	156.799	0.144836
59.0000	7640.20	169.811	0.179093
60.0000	7754.06	183.414	0.219897
61.0000	7866.13	197.607	0.268190
62.0000	7976.42	212.387	0.325002
63.0000	8084.98	227.749	0.391452
64.0000	8191.84	243.688	0.468751
65.0000	8297.02	260.199	0.558202
66.0000	8400.56	277.276	0.661200
67.0000	8502.48	294.909	0.779233
68.0000	8602.82	313.093	0.913885
69.0000	8701.61	331.818	1.06683
70.0000	8798.87	351.075	1.23983
71.0000	8894.63	370.855	1.43475
72.0000	8988.92	391.147	1.65352
73.0000	9081.77	411.942	1.89818
74.0000	9173.20	433.228	2.17083
75.0000	9263.24	454.995	2.47366
76.0000	9351.91	477.230	2.80893
77.0000	9439.24	499.923	3.17899
78.0000	9525.26	523.062	3.58622
79.0000	9609.98	546.635	4.03308
80.0000	9693.44	570.629	4.52211
81.0000	9775.65	595.033	5.05587
82.0000	9856.63	619.834	5.63698
83.0000	9936.42	645.020	6.26809
84.0000	10015.0	670.578	6.95192
85.0000	10092.5	696.497	7.69118
86.0000	10168.8	722.764	8.48864
87.0000	10244.0	749.366	9.34707
88.0000	10318.1	776.292	10.2693
89.0000	10391.1	803.529	11.2580
90.0000	10463.1	831.064	12.3161
91.0000	10534.0	858.888	13.4463
92.0000	10603.9	886.986	14.6516
93.0000	10672.8	915.348	15.9345
94.0000	10740.7	943.962	17.2980
95.0000	10807.7	972.816	18.7447
96.0000	10873.7	1001.90	20.2773
97.0000	10938.7	1031.20	21.8987
98.0000	11002.9	1060.71	23.6113
99.0000	11066.1	1090.41	25.4178
100.000	11128.5	1120.30	27.3209
101.000	11189.9	1150.37	29.3229
102.000	11250.6	1180.59	31.4264
103.000	11310.3	1210.98	33.6338
104.000	11369.3	1241.50	35.9475
105.000	11427.4	1272.17	38.3697
106.000	11484.7	1302.95	40.9027

107.000	11541.3	1333.86	43.5486
108.000	11597.0	1364.87	46.3096
109.000	11652.0	1395.98	49.1876
110.000	11706.3	1427.17	52.1847
111.000	11759.8	1458.45	55.3027
112.000	11812.6	1489.80	58.5433
113.000	11864.7	1521.22	61.9084
114.000	11916.1	1552.69	65.3996
115.000	11966.7	1584.20	69.0184
116.000	12016.7	1615.76	72.7664
117.000	12066.1	1647.36	76.6449
118.000	12114.8	1678.97	80.6552
119.000	12162.8	1710.61	84.7986
120.000	12210.2	1742.26	89.0763
121.000	12256.9	1773.92	93.4892
122.000	12303.1	1805.57	98.0385
123.000	12348.6	1837.22	102.725
124.000	12393.6	1868.86	107.549
125.000	12437.9	1900.47	112.513
126.000	12481.7	1932.06	117.615
127.000	12524.9	1963.62	122.858
128.000	12567.5	1995.15	128.241
129.000	12609.6	2026.63	133.765
130.000	12651.1	2058.07	139.430
131.000	12692.1	2089.46	145.237
132.000	12732.6	2120.79	151.185
133.000	12772.6	2152.06	157.275
134.000	12812.0	2183.26	163.507
135.000	12850.9	2214.40	169.880
136.000	12889.4	2245.46	176.395
137.000	12927.3	2276.44	183.052
138.000	12964.8	2307.34	189.850
139.000	13001.8	2338.16	196.788
140.000	13038.3	2368.89	203.867
141.000	13074.4	2399.52	211.086
142.000	13110.0	2430.06	218.444
143.000	13145.1	2460.50	225.941
144.000	13179.8	2490.84	233.577
145.000	13214.1	2521.07	241.350
146.000	13248.0	2551.20	249.259
147.000	13281.4	2581.21	257.305
148.000	13314.4	2611.11	265.485
149.000	13347.0	2640.89	273.800
150.000	13379.2	2670.55	282.247
151.000	13411.0	2700.09	290.827
152.000	13442.4	2729.51	299.538
153.000	13473.4	2758.80	308.378
154.000	13504.1	2787.96	317.348
155.000	13534.3	2817.00	326.445
156.000	13564.2	2845.90	335.668
157.000	13593.7	2874.66	345.016
158.000	13622.9	2903.30	354.488
159.000	13651.7	2931.79	364.082
160.000	13680.2	2960.15	373.797
161.000	13708.3	2988.36	383.632
162.000	13736.0	3016.43	393.584
163.000	13763.5	3044.36	403.653
164.000	13790.6	3072.15	413.837
165.000	13817.3	3099.79	424.135
166.000	13843.8	3127.28	434.544
167.000	13869.9	3154.63	445.064
168.000	13895.7	3181.82	455.692
169.000	13921.2	3208.87	466.428
170.000	13946.4	3235.76	477.268
171.000	13971.3	3262.50	488.213
172.000	13995.9	3289.10	499.259
173.000	14020.2	3315.53	510.406
174.000	14044.3	3341.82	521.651
175.000	14068.0	3367.95	532.994

176.000	14091.4	3393.92	544.431
177.000	14114.6	3419.74	555.962
178.000	14137.5	3445.40	567.584
179.000	14160.1	3470.91	579.296
180.000	14182.5	3496.26	591.096
181.000	14204.6	3521.45	602.982
182.000	14226.4	3546.49	614.953
183.000	14248.0	3571.37	627.006
184.000	14269.3	3596.09	639.140
185.000	14290.4	3620.65	651.353
186.000	14311.3	3645.06	663.643
187.000	14331.9	3669.30	676.008
188.000	14352.2	3693.39	688.447
189.000	14372.3	3717.32	700.958
190.000	14392.2	3741.09	713.539
191.000	14411.8	3764.71	726.188
192.000	14431.3	3788.16	738.903
193.000	14450.5	3811.46	751.682
194.000	14469.4	3834.60	764.525
195.000	14488.2	3857.59	777.428
196.000	14506.7	3880.41	790.390
197.000	14525.0	3903.08	803.410
198.000	14543.2	3925.59	816.486
199.000	14561.1	3947.95	829.615
200.000	14578.8	3970.15	842.796
201.000	14596.3	3992.19	856.028
202.000	14613.5	4014.08	869.308
203.000	14630.6	4035.81	882.635
204.000	14647.5	4057.39	896.007
205.000	14664.3	4078.81	909.423
206.000	14680.8	4100.08	922.881
207.000	14697.1	4121.19	936.378
208.000	14713.3	4142.16	949.914
209.000	14729.2	4162.97	963.487
210.000	14745.0	4183.62	977.095
211.000	14760.6	4204.13	990.736
212.000	14776.0	4224.48	1004.41
213.000	14791.3	4244.69	1018.11
214.000	14806.4	4264.74	1031.84
215.000	14821.3	4284.65	1045.60
216.000	14836.0	4304.41	1059.39
217.000	14850.6	4324.01	1073.20
218.000	14865.0	4343.48	1087.03
219.000	14879.2	4362.79	1100.88
220.000	14893.3	4381.96	1114.75
221.000	14907.3	4400.98	1128.64
222.000	14921.0	4419.86	1142.55
223.000	14934.7	4438.59	1156.47
224.000	14948.1	4457.18	1170.40
225.000	14961.4	4475.62	1184.35
226.000	14974.6	4493.93	1198.31
227.000	14987.6	4512.09	1212.28
228.000	15000.5	4530.11	1226.25
229.000	15013.3	4547.99	1240.23
230.000	15025.8	4565.74	1254.22
231.000	15038.3	4583.34	1268.21
232.000	15050.6	4600.80	1282.21
233.000	15062.8	4618.13	1296.20
234.000	15074.8	4635.32	1310.20
235.000	15086.8	4652.38	1324.20
236.000	15098.5	4669.30	1338.19
237.000	15110.2	4686.09	1352.18
238.000	15121.7	4702.74	1366.16
239.000	15133.1	4719.26	1380.14
240.000	15144.4	4735.65	1394.11
241.000	15155.5	4751.91	1408.08
242.000	15166.6	4768.03	1422.03
243.000	15177.5	4784.03	1435.98
244.000	15188.2	4799.90	1449.91

245.000	15198.9	4815.64	1463.83
246.000	15209.5	4831.25	1477.74
247.000	15219.9	4846.74	1491.63
248.000	15230.2	4862.10	1505.50
249.000	15240.4	4877.34	1519.36
250.000	15250.5	4892.45	1533.21
251.000	15260.5	4907.44	1547.03
252.000	15270.4	4922.31	1560.83
253.000	15280.1	4937.05	1574.62
254.000	15289.8	4951.67	1588.38
255.000	15299.4	4966.18	1602.12
256.000	15308.8	4980.56	1615.84
257.000	15318.2	4994.83	1629.53
258.000	15327.4	5008.97	1643.20
259.000	15336.6	5023.00	1656.84
260.000	15345.6	5036.92	1670.45
261.000	15354.6	5050.72	1684.04
262.000	15363.4	5064.40	1697.60
263.000	15372.2	5077.97	1711.13
264.000	15380.9	5091.43	1724.63
265.000	15389.5	5104.77	1738.10
266.000	15397.9	5118.01	1751.54
267.000	15406.3	5131.13	1764.95
268.000	15414.6	5144.14	1778.32
269.000	15422.8	5157.05	1791.66
270.000	15431.0	5169.84	1804.97
271.000	15439.0	5182.53	1818.24
272.000	15447.0	5195.11	1831.48
273.000	15454.8	5207.58	1844.68
274.000	15462.6	5219.95	1857.85
275.000	15470.3	5232.22	1870.98
276.000	15477.9	5244.38	1884.07
277.000	15485.4	5256.44	1897.12
278.000	15492.9	5268.39	1910.13
279.000	15500.3	5280.25	1923.10
280.000	15507.6	5292.00	1936.04
281.000	15514.8	5303.65	1948.93
282.000	15521.9	5315.21	1961.78
283.000	15529.0	5326.66	1974.59
284.000	15536.0	5338.02	1987.36
285.000	15542.9	5349.28	2000.09
286.000	15549.8	5360.44	2012.77
287.000	15556.5	5371.51	2025.41
288.000	15563.2	5382.49	2038.01
289.000	15569.9	5393.37	2050.56
290.000	15576.4	5404.15	2063.07
291.000	15582.9	5414.85	2075.53
292.000	15589.3	5425.45	2087.95
293.000	15595.7	5435.96	2100.32
294.000	15602.0	5446.38	2112.65
295.000	15608.2	5456.71	2124.93
296.000	15614.3	5466.94	2137.16
297.000	15620.4	5477.10	2149.35
298.000	15626.4	5487.16	2161.48
299.000	15632.4	5497.14	2173.57
300.000	15638.3	5507.03	2185.62
301.000	15644.1	5516.83	2197.61
302.000	15649.9	5526.55	2209.56
303.000	15655.6	5536.19	2221.46
304.000	15661.3	5545.74	2233.30
305.000	15666.9	5555.21	2245.10
306.000	15672.4	5564.59	2256.85
307.000	15677.9	5573.90	2268.55
308.000	15683.3	5583.12	2280.20
309.000	15688.7	5592.26	2291.80
310.000	15694.0	5601.32	2303.35
311.000	15699.3	5610.31	2314.85
312.000	15704.5	5619.21	2326.30
313.000	15709.6	5628.04	2337.69

314.000	15714.7	5636.79	2349.04
315.000	15719.7	5645.46	2360.33
316.000	15724.7	5654.06	2371.58
317.000	15729.6	5662.58	2382.77
318.000	15734.5	5671.03	2393.91
319.000	15739.4	5679.40	2404.99
320.000	15744.1	5687.70	2416.03
321.000	15748.9	5695.93	2427.01
322.000	15753.6	5704.08	2437.95
323.000	15758.2	5712.16	2448.83
324.000	15762.8	5720.17	2459.65
325.000	15767.3	5728.11	2470.43
326.000	15771.8	5735.98	2481.15
327.000	15776.2	5743.78	2491.82
328.000	15780.6	5751.52	2502.44
329.000	15785.0	5759.18	2513.00
330.000	15789.3	5766.77	2523.51
331.000	15793.6	5774.30	2533.97
332.000	15797.8	5781.77	2544.38
333.000	15802.0	5789.16	2554.73
334.000	15806.1	5796.49	2565.03
335.000	15810.2	5803.76	2575.28
336.000	15814.2	5810.96	2585.48
337.000	15818.3	5818.10	2595.62
338.000	15822.2	5825.17	2605.71
339.000	15826.1	5832.18	2615.75
340.000	15830.0	5839.13	2625.73
341.000	15833.9	5846.02	2635.66
342.000	15837.7	5852.84	2645.54
343.000	15841.4	5859.61	2655.36
344.000	15845.2	5866.32	2665.14
345.000	15848.9	5872.96	2674.86
346.000	15852.5	5879.55	2684.53
347.000	15856.1	5886.08	2694.14
348.000	15859.7	5892.54	2703.70
349.000	15863.2	5898.96	2713.21
350.000	15866.7	5905.31	2722.67
351.000	15870.2	5911.61	2732.07
352.000	15873.6	5917.85	2741.43
353.000	15877.0	5924.04	2750.73
354.000	15880.4	5930.17	2759.98
355.000	15883.7	5936.24	2769.17
356.000	15887.0	5942.27	2778.32
357.000	15890.3	5948.23	2787.41
358.000	15893.5	5954.15	2796.45
359.000	15896.7	5960.01	2805.44
360.000	15899.9	5965.82	2814.38
361.000	15903.0	5971.58	2823.26
362.000	15906.1	5977.28	2832.10
363.000	15909.2	5982.94	2840.88
364.000	15912.2	5988.54	2849.61
365.000	15915.2	5994.10	2858.29
366.000	15918.2	5999.60	2866.92
367.000	15921.1	6005.05	2875.50
368.000	15924.0	6010.46	2884.03
369.000	15926.9	6015.82	2892.51
370.000	15929.8	6021.13	2900.93
371.000	15932.6	6026.39	2909.31
372.000	15935.4	6031.60	2917.64
373.000	15938.2	6036.77	2925.92
374.000	15940.9	6041.89	2934.14
375.000	15943.6	6046.96	2942.32
376.000	15946.3	6051.99	2950.45
377.000	15949.0	6056.98	2958.53
378.000	15951.6	6061.91	2966.56
379.000	15954.2	6066.81	2974.54
380.000	15956.8	6071.66	2982.47
381.000	15959.3	6076.47	2990.35
382.000	15961.9	6081.23	2998.18

383.000	15964.4	6085.95	3005.97
384.000	15966.9	6090.63	3013.70
385.000	15969.3	6095.26	3021.39
386.000	15971.7	6099.86	3029.03
387.000	15974.1	6104.41	3036.63
388.000	15976.5	6108.92	3044.17
389.000	15978.9	6113.39	3051.67
390.000	15981.2	6117.82	3059.12
391.000	15983.5	6122.21	3066.52
392.000	15985.8	6126.56	3073.88
393.000	15988.0	6130.88	3081.19
394.000	15990.3	6135.15	3088.45
395.000	15992.5	6139.38	3095.67
396.000	15994.7	6143.58	3102.84
397.000	15996.9	6147.74	3109.96
398.000	15999.0	6151.86	3117.04
399.000	16001.1	6155.94	3124.07
400.000	16003.3	6159.98	3131.06
401.000	16005.3	6163.99	3138.00
402.000	16007.4	6167.97	3144.90
403.000	16009.4	6171.90	3151.75
404.000	16011.5	6175.81	3158.55
405.000	16013.5	6179.67	3165.32
406.000	16015.5	6183.50	3172.04
407.000	16017.4	6187.30	3178.71
408.000	16019.4	6191.06	3185.34
409.000	16021.3	6194.79	3191.93
410.000	16023.2	6198.48	3198.47
411.000	16025.1	6202.14	3204.97
412.000	16026.9	6205.77	3211.42
413.000	16028.8	6209.37	3217.84
414.000	16030.6	6212.93	3224.21
415.000	16032.4	6216.46	3230.53
416.000	16034.2	6219.96	3236.82
417.000	16036.0	6223.42	3243.06
418.000	16037.8	6226.86	3249.26
419.000	16039.5	6230.26	3255.42
420.000	16041.2	6233.63	3261.54
421.000	16042.9	6236.98	3267.62
422.000	16044.6	6240.29	3273.65
423.000	16046.3	6243.57	3279.65
424.000	16048.0	6246.82	3285.60
425.000	16049.6	6250.04	3291.51
426.000	16051.2	6253.24	3297.39
427.000	16052.8	6256.40	3303.22
428.000	16054.4	6259.54	3309.01
429.000	16056.0	6262.64	3314.77
430.000	16057.6	6265.72	3320.48
431.000	16059.1	6268.77	3326.15
432.000	16060.6	6271.79	3331.79
433.000	16062.1	6274.79	3337.38
434.000	16063.6	6277.76	3342.94
435.000	16065.1	6280.70	3348.46
436.000	16066.6	6283.61	3353.94
437.000	16068.0	6286.50	3359.38
438.000	16069.5	6289.36	3364.79
439.000	16070.9	6292.20	3370.15
440.000	16072.3	6295.01	3375.48
441.000	16073.7	6297.79	3380.77
442.000	16075.1	6300.55	3386.03
443.000	16076.5	6303.28	3391.25
444.000	16077.8	6305.99	3396.43
445.000	16079.2	6308.68	3401.57
446.000	16080.5	6311.34	3406.68
447.000	16081.8	6313.97	3411.75
448.000	16083.1	6316.58	3416.79
449.000	16084.4	6319.17	3421.79
450.000	16085.7	6321.74	3426.76
451.000	16087.0	6324.28	3431.69

452.000	16088.2	6326.79	3436.58
453.000	16089.5	6329.29	3441.44
454.000	16090.7	6331.76	3446.27
455.000	16091.9	6334.21	3451.06
456.000	16093.1	6336.64	3455.81
457.000	16094.3	6339.04	3460.54
458.000	16095.5	6341.43	3465.22
459.000	16096.6	6343.79	3469.88
460.000	16097.8	6346.13	3474.50
461.000	16099.0	6348.45	3479.09
462.000	16100.1	6350.74	3483.64
463.000	16101.2	6353.02	3488.17
464.000	16102.3	6355.28	3492.66
465.000	16103.4	6357.51	3497.11
466.000	16104.5	6359.73	3501.54
467.000	16105.6	6361.92	3505.93
468.000	16106.7	6364.10	3510.29
469.000	16107.7	6366.25	3514.62
470.000	16108.8	6368.39	3518.92
471.000	16109.8	6370.50	3523.18
472.000	16110.8	6372.60	3527.42
473.000	16111.9	6374.68	3531.62
474.000	16112.9	6376.73	3535.80
475.000	16113.9	6378.77	3539.94
476.000	16114.9	6380.79	3544.05
477.000	16115.8	6382.80	3548.13
478.000	16116.8	6384.78	3552.19
479.000	16117.8	6386.75	3556.21
480.000	16118.7	6388.69	3560.20
481.000	16119.7	6390.63	3564.16
482.000	16120.6	6392.54	3568.10
483.000	16121.5	6394.43	3572.00
484.000	16122.4	6396.31	3575.88
485.000	16123.3	6398.17	3579.72
486.000	16124.2	6400.02	3583.54
487.000	16125.1	6401.84	3587.33
488.000	16126.0	6403.65	3591.10
489.000	16126.9	6405.45	3594.83
490.000	16127.7	6407.22	3598.54
491.000	16128.6	6408.98	3602.22
492.000	16129.4	6410.73	3605.87
493.000	16130.3	6412.46	3609.49
494.000	16131.1	6414.17	3613.09
495.000	16131.9	6415.87	3616.66
496.000	16132.7	6417.55	3620.20
497.000	16133.5	6419.22	3623.72
498.000	16134.3	6420.87	3627.21
499.000.	16135.1	6422.51	3630.67
500.000	16135.9	6424.13	3634.11
501.000	16136.7	6425.74	3637.52
502.000	16137.4	6427.33	3640.91
503.000	16138.2	6428.90	3644.27
504.000	16138.9	6430.47	3647.60
505.000	16139.7	6432.02	3650.91
506.000	16140.4	6433.55	3654.20
507.000	16141.2	6435.07	3657.46
508.000	16141.9	6436.58	3660.70
509.000	16142.6	6438.07	3663.91
510.000	16143.3	6439.55	3667.09
511.000	16144.0	6441.02	3670.26
512.000	16144.7	6442.47	3673.40
513.000	16145.4	6443.91	3676.51
514.000	16146.1	6445.33	3679.60
515.000	16146.7	6446.75	3682.67
516.000	16147.4	6448.15	3685.71
517.000	16148.1	6449.53	3688.73
518.000	16148.7	6450.91	3691.73
519.000	16149.4	6452.27	3694.70
520.000	16150.0	6453.62	3697.66

521.000	16150.7	6454.96	3700.59
522.000	16151.3	6456.28	3703.49
523.000	16151.9	6457.60	3706.38
524.000	16152.5	6458.90	3709.24
525.000	16153.1	6460.19	3712.08
526.000	16153.7	6461.46	3714.90
527.000	16154.3	6462.73	3717.70
528.000	16154.9	6463.98	3720.47
529.000	16155.5	6465.22	3723.23
530.000	16156.1	6466.46	3725.96
531.000	16156.7	6467.67	3728.67
532.000	16157.3	6468.88	3731.36
533.000	16157.8	6470.08	3734.03
534.000	16158.4	6471.27	3736.68
535.000	16158.9	6472.44	3739.31
536.000	16159.5	6473.61	3741.92
537.000	16160.0	6474.76	3744.50
538.000	16160.6	6475.91	3747.07
539.000	16161.1	6477.04	3749.62
540.000	16161.6	6478.16	3752.15
541.000	16162.2	6479.28	3754.66
542.000	16162.7	6480.38	3757.15
543.000	16163.2	6481.47	3759.62
544.000	16163.7	6482.55	3762.07
545.000	16164.2	6483.63	3764.50
546.000	16164.7	6484.69	3766.91
547.000	16165.2	6485.74	3769.30
548.000	16165.7	6486.79	3771.68
549.000	16166.2	6487.82	3774.04
550.000	16166.7	6488.84	3776.37
551.000	16167.1	6489.86	3778.69
552.000	16167.6	6490.87	3780.99
553.000	16168.1	6491.86	3783.28
554.000	16168.5	6492.85	3785.54
555.000	16169.0	6493.83	3787.79
556.000	16169.4	6494.80	3790.02
557.000	16169.9	6495.76	3792.23
558.000	16170.3	6496.71	3794.43
559.000	16170.8	6497.65	3796.61
560.000	16171.2	6498.59	3798.77
561.000	16171.6	6499.51	3800.91
562.000	16172.1	6500.43	3803.04
563.000	16172.5	6501.34	3805.15
564.000	16172.9	6502.24	3807.24
565.000	16173.3	6503.13	3809.32
566.000	16173.7	6504.02	3811.38
567.000	16174.2	6504.89	3813.42
568.000	16174.6	6505.76	3815.45
569.000	16175.0	6506.62	3817.46
570.000	16175.4	6507.48	3819.46
571.000	16175.7	6508.32	3821.44
572.000	16176.1	6509.16	3823.40
573.000	16176.5	6509.99	3825.35
574.000	16176.9	6510.81	3827.29
575.000	16177.3	6511.62	3829.20
576.000	16177.6	6512.43	3831.11
577.000	16178.0	6513.23	3832.99
578.000	16178.4	6514.02	3834.87
579.000	16178.7	6514.81	3836.72
580.000	16179.1	6515.58	3838.57
581.000	16179.5	6516.35	3840.40
582.000	16179.8	6517.12	3842.21
583.000	16180.2	6517.87	3844.01
584.000	16180.5	6518.62	3845.79
585.000	16180.9	6519.37	3847.56
586.000	16181.2	6520.10	3849.32
587.000	16181.5	6520.83	3851.06
588.000	16181.9	6521.55	3852.79
589.000	16182.2	6522.27	3854.51

590.000	16182.5	6522.98	3856.21
591.000	16182.8	6523.68	3857.90
592.000	16183.2	6524.38	3859.57
593.000	16183.5	6525.07	3861.23
594.000	16183.8	6525.75	3862.88
595.000	16184.1	6526.43	3864.51
596.000	16184.4	6527.10	3866.13
597.000	16184.7	6527.77	3867.74
598.000	16185.0	6528.42	3869.33
599.000	16185.3	6529.08	3870.92
600.000	16185.6	6529.73	3872.49
601.000	16185.9	6530.37	3874.04
602.000	16186.2	6531.00	3875.59
603.000	16186.5	6531.63	3877.12
604.000	16186.8	6532.25	3878.64
605.000	16187.1	6532.87	3880.15
606.000	16187.3	6533.49	3881.64
607.000	16187.6	6534.09	3883.12
608.000	16187.9	6534.69	3884.59
609.000	16188.2	6535.29	3886.05
610.000	16188.4	6535.88	3887.50
611.000	16188.7	6536.46	3888.94
612.000	16189.0	6537.04	3890.36
613.000	16189.2	6537.62	3891.77
614.000	16189.5	6538.19	3893.17
615.000	16189.7	6538.75	3894.56
616.000	16190.0	6539.31	3895.94
617.000	16190.2	6539.86	3897.31
618.000	16190.5	6540.41	3898.67
619.000	16190.7	6540.96	3900.01
620.000	16191.0	6541.49	3901.35
621.000	16191.2	6542.03	3902.67
622.000	16191.5	6542.56	3903.98
623.000	16191.7	6543.08	3905.28
624.000	16191.9	6543.60	3906.58
625.000	16192.2	6544.11	3907.86
626.000	16192.4	6544.62	3909.13
627.000	16192.6	6545.13	3910.39
628.000	16192.9	6545.63	3911.64
629.000	16193.1	6546.12	3912.88
630.000	16193.3	6546.62	3914.11
631.000	16193.5	6547.10	3915.33
632.000	16193.7	6547.58	3916.54
633.000	16194.0	6548.06	3917.74
634.000	16194.2	6548.54	3918.93
635.000	16194.4	6549.00	3920.11
636.000	16194.6	6549.47	3921.28
637.000	16194.8	6549.93	3922.44
638.000	16195.0	6550.39	3923.59
639.000	16195.2	6550.84	3924.73
640.000	16195.4	6551.29	3925.87
641.000	16195.6	6551.73	3926.99
642.000	16195.8	6552.17	3928.10
643.000	16196.0	6552.61	3929.21
644.000	16196.2	6553.04	3930.31
645.000	16196.4	6553.47	3931.39
646.000	16196.6	6553.89	3932.47
647.000	16196.8	6554.31	3933.54
648.000	16197.0	6554.73	3934.60
649.000	16197.2	6555.14	3935.65
650.000	16197.3	6555.55	3936.70
651.000	16197.5	6555.96	3937.73
652.000	16197.7	6556.36	3938.76
653.000	16197.9	6556.75	3939.78
654.000	16198.1	6557.15	3940.79
655.000	16198.2	6557.54	3941.79
656.000	16198.4	6557.93	3942.78
657.000	16198.6	6558.31	3943.77
658.000	16198.8	6558.69	3944.74

659.000	16198.9	6559.06	3945.71
660.000	16199.1	6559.44	3946.67
661.000	16199.3	6559.81	3947.63
662.000	16199.4	6560.17	3948.57
663.000	16199.6	6560.54	3949.51
664.000	16199.7	6560.90	3950.44
665.000	16199.9	6561.25	3951.36
666.000	16200.1	6561.61	3952.27
667.000	16200.2	6561.96	3953.18
668.000	16200.4	6562.30	3954.08
669.000	16200.5	6562.65	3954.97
670.000	16200.7	6562.99	3955.86
671.000	16200.8	6563.32	3956.73
672.000	16201.0	6563.66	3957.60
673.000	16201.1	6563.99	3958.47
674.000	16201.3	6564.32	3959.32
675.000	16201.4	6564.64	3960.17
676.000	16201.6	6564.96	3961.01
677.000	16201.7	6565.28	3961.85
678.000	16201.8	6565.60	3962.67
679.000	16202.0	6565.91	3963.50
680.000	16202.1	6566.22	3964.31
681.000	16202.3	6566.53	3965.12
682.000	16202.4	6566.83	3965.92
683.000	16202.5	6567.14	3966.71
684.000	16202.7	6567.44	3967.50
685.000	16202.8	6567.73	3968.28
686.000	16202.9	6568.03	3969.05
687.000	16203.1	6568.32	3969.82
688.000	16203.2	6568.61	3970.58
689.000	16203.3	6568.89	3971.34
690.000	16203.4	6569.17	3972.09
691.000	16203.6	6569.46	3972.83
692.000	16203.7	6569.73	3973.57
693.000	16203.8	6570.01	3974.30
694.000	16203.9	6570.28	3975.02
695.000	16204.0	6570.55	3975.74
696.000	16204.2	6570.82	3976.45
697.000	16204.3	6571.09	3977.16
698.000	16204.4	6571.35	3977.86
699.000	16204.5	6571.61	3978.55
700.000	16204.6	6571.87	3979.24
701.000	16204.7	6572.13	3979.93
702.000	16204.9	6572.38	3980.60
703.000	16205.0	6572.63	3981.28
704.000	16205.1	6572.88	3981.94
705.000	16205.2	6573.13	3982.60
706.000	16205.3	6573.37	3983.26
707.000	16205.4	6573.61	3983.91
708.000	16205.5	6573.85	3984.55
709.000	16205.6	6574.09	3985.19
710.000	16205.7	6574.33	3985.82
711.000	16205.8	6574.56	3986.45
712.000	16205.9	6574.79	3987.08
713.000	16206.0	6575.02	3987.69
714.000	16206.1	6575.25	3988.31
715.000	16206.2	6575.47	3988.91
716.000	16206.3	6575.70	3989.52
717.000	16206.4	6575.92	3990.11
718.000	16206.5	6576.14	3990.71
719.000	16206.6	6576.35	3991.29
720.000	16206.7	6576.57	3991.88
721.000	16206.8	6576.78	3992.45
722.000	16206.9	6576.99	3993.03
723.000	16207.0	6577.20	3993.60
724.000	16207.1	6577.41	3994.16
725.000	16207.2	6577.62	3994.72
726.000	16207.3	6577.82	3995.27
727.000	16207.3	6578.02	3995.82

728.000	16207.4	6578.22	3996.37
729.000	16207.5	6578.42	3996.91
730.000	16207.6	6578.62	3997.44
731.000	16207.7	6578.81	3997.97
732.000	16207.8	6579.00	3998.50
733.000	16207.9	6579.19	3999.02
734.000	16207.9	6579.38	3999.54
735.000	16208.0	6579.57	4000.05
736.000	16208.1	6579.76	4000.56
737.000	16208.2	6579.94	4001.07
738.000	16208.3	6580.12	4001.57
739.000	16208.3	6580.30	4002.06
740.000	16208.4	6580.48	4002.56
741.000	16208.5	6580.66	4003.04
742.000	16208.6	6580.84	4003.53
743.000	16208.6	6581.01	4004.01
744.000	16208.7	6581.18	4004.48
745.000	16208.8	6581.35	4004.96
746.000	16208.9	6581.52	4005.42
747.000	16208.9	6581.69	4005.89
748.000	16209.0	6581.86	4006.35
749.000	16209.1	6582.02	4006.80
750.000	16209.2	6582.19	4007.26
751.000	16209.2	6582.35	4007.70
752.000	16209.3	6582.51	4008.15
753.000	16209.4	6582.67	4008.59
754.000	16209.4	6582.83	4009.03
755.000	16209.5	6582.98	4009.46
756.000	16209.6	6583.14	4009.89
757.000	16209.6	6583.29	4010.32
758.000	16209.7	6583.44	4010.74
759.000	16209.8	6583.59	4011.16
760.000	16209.8	6583.74	4011.58
761.000	16209.9	6583.89	4011.99
762.000	16210.0	6584.04	4012.40
763.000	16210.0	6584.18	4012.80
764.000	16210.1	6584.32	4013.20
765.000	16210.2	6584.47	4013.60
766.000	16210.2	6584.61	4014.00
767.000	16210.3	6584.75	4014.39
768.000	16210.3	6584.89	4014.78
769.000	16210.4	6585.02	4015.16
770.000	16210.5	6585.16	4015.54
771.000	16210.5	6585.29	4015.92
772.000	16210.6	6585.43	4016.30
773.000	16210.6	6585.56	4016.67
774.000	16210.7	6585.69	4017.04
775.000	16210.7	6585.82	4017.41
776.000	16210.8	6585.95	4017.77
777.000	16210.9	6586.08	4018.13
778.000	16210.9	6586.21	4018.49
779.000	16211.0	6586.33	4018.84
780.000	16211.0	6586.45	4019.19
781.000	16211.1	6586.58	4019.54
782.000	16211.1	6586.70	4019.88
783.000	16211.2	6586.82	4020.22
784.000	16211.2	6586.94	4020.56
785.000	16211.3	6587.06	4020.90
786.000	16211.3	6587.18	4021.23
787.000	16211.4	6587.29	4021.56
788.000	16211.4	6587.41	4021.89
789.000	16211.5	6587.52	4022.22
790.000	16211.5	6587.64	4022.54
791.000	16211.6	6587.75	4022.86
792.000	16211.6	6587.86	4023.17
793.000	16211.7	6587.97	4023.49
794.000	16211.7	6588.08	4023.80
795.000	16211.8	6588.19	4024.11
796.000	16211.8	6588.29	4024.41

797.000	16211.9	6588.40	4024.72
798.000	16211.9	6588.51	4025.02
799.000	16212.0	6588.61	4025.32
800.000	16212.0	6588.71	4025.61
801.000	16212.0	6588.82	4025.91
802.000	16212.1	6588.92	4026.20
803.000	16212.1	6589.02	4026.49
804.000	16212.2	6589.12	4026.77
805.000	16212.2	6589.22	4027.05
806.000	16212.3	6589.32	4027.34
807.000	16212.3	6589.41	4027.61
808.000	16212.3	6589.51	4027.89
809.000	16212.4	6589.60	4028.16
810.000	16212.4	6589.70	4028.44
811.000	16212.5	6589.79	4028.71
812.000	16212.5	6589.88	4028.97
813.000	16212.5	6589.98	4029.24
814.000	16212.6	6590.07	4029.50
815.000	16212.6	6590.16	4029.76
816.000	16212.7	6590.25	4030.02
817.000	16212.7	6590.34	4030.27
818.000	16212.7	6590.42	4030.53
819.000	16212.8	6590.51	4030.78
820.000	16212.8	6590.60	4031.03
821.000	16212.8	6590.68	4031.28
822.000	16212.9	6590.77	4031.52
823.000	16212.9	6590.85	4031.76
824.000	16213.0	6590.93	4032.00
825.000	16213.0	6591.02	4032.24
826.000	16213.0	6591.10	4032.48
827.000	16213.1	6591.18	4032.72
828.000	16213.1	6591.26	4032.95
829.000	16213.1	6591.34	4033.18
830.000	16213.2	6591.42	4033.41
831.000	16213.2	6591.49	4033.63
832.000	16213.2	6591.57	4033.86
833.000	16213.3	6591.65	4034.08
834.000	16213.3	6591.72	4034.30
835.000	16213.3	6591.80	4034.52
836.000	16213.4	6591.87	4034.74
837.000	16213.4	6591.95	4034.96
838.000	16213.4	6592.02	4035.17
839.000	16213.4	6592.09	4035.38
840.000	16213.5	6592.16	4035.59
841.000	16213.5	6592.23	4035.80
842.000	16213.5	6592.31	4036.01
843.000	16213.6	6592.38	4036.21
844.000	16213.6	6592.44	4036.41
845.000	16213.6	6592.51	4036.62
846.000	16213.7	6592.58	4036.81
847.000	16213.7	6592.65	4037.01
848.000	16213.7	6592.71	4037.21
849.000	16213.7	6592.78	4037.40
850.000	16213.8	6592.85	4037.60
851.000	16213.8	6592.91	4037.79
852.000	16213.8	6592.98	4037.98
853.000	16213.9	6593.04	4038.16
854.000	16213.9	6593.10	4038.35
855.000	16213.9	6593.17	4038.54
856.000	16213.9	6593.23	4038.72
857.000	16214.0	6593.29	4038.90
858.000	16214.0	6593.35	4039.08
859.000	16214.0	6593.41	4039.26
860.000	16214.0	6593.47	4039.44
861.000	16214.1	6593.53	4039.61
862.000	16214.1	6593.59	4039.78
863.000	16214.1	6593.65	4039.96
864.000	16214.1	6593.70	4040.13
865.000	16214.2	6593.76	4040.30

866.000	16214.2	6593.82	4040.47
867.000	16214.2	6593.87	4040.63
868.000	16214.2	6593.93	4040.80
869.000	16214.3	6593.98	4040.96
870.000	16214.3	6594.04	4041.12
871.000	16214.3	6594.09	4041.28
872.000	16214.3	6594.15	4041.44
873.000	16214.3	6594.20	4041.60
874.000	16214.4	6594.25	4041.76
875.000	16214.4	6594.30	4041.91
876.000	16214.4	6594.36	4042.07
877.000	16214.4	6594.41	4042.22
878.000	16214.5	6594.46	4042.37
879.000	16214.5	6594.51	4042.52
880.000	16214.5	6594.56	4042.67
881.000	16214.5	6594.61	4042.82
882.000	16214.5	6594.66	4042.97
883.000	16214.6	6594.70	4043.11
884.000	16214.6	6594.75	4043.25
885.000	16214.6	6594.80	4043.40
886.000	16214.6	6594.85	4043.54
887.000	16214.6	6594.89	4043.68
888.000	16214.7	6594.94	4043.82
889.000	16214.7	6594.99	4043.96
890.000	16214.7	6595.03	4044.09
891.000	16214.7	6595.08	4044.23
892.000	16214.7	6595.12	4044.36
893.000	16214.8	6595.17	4044.50
894.000	16214.8	6595.21	4044.63
895.000	16214.8	6595.25	4044.76
896.000	16214.8	6595.30	4044.89
897.000	16214.8	6595.34	4045.02
898.000	16214.8	6595.38	4045.14
899.000	16214.9	6595.42	4045.27
900.000	16214.9	6595.46	4045.40
901.000	16214.9	6595.50	4045.52
902.000	16214.9	6595.55	4045.64
903.000	16214.9	6595.59	4045.77
904.000	16215.0	6595.63	4045.89
905.000	16215.0	6595.67	4046.01
906.000	16215.0	6595.71	4046.13
907.000	16215.0	6595.74	4046.24
908.000	16215.0	6595.78	4046.36
909.000	16215.0	6595.82	4046.48
910.000	16215.1	6595.86	4046.59
911.000	16215.1	6595.90	4046.71
912.000	16215.1	6595.93	4046.82
913.000.	16215.1	6595.97	4046.93
914.000	16215.1	6596.01	4047.04
915.000	16215.1	6596.04	4047.15
916.000	16215.1	6596.08	4047.26
917.000	16215.2	6596.11	4047.37
918.000	16215.2	6596.15	4047.48
919.000	16215.2	6596.18	4047.58
920.000	16215.2	6596.22	4047.69
921.000	16215.2	6596.25	4047.79
922.000	16215.2	6596.29	4047.90
923.000	16215.2	6596.32	4048.00
924.000	16215.3	6596.35	4048.10
925.000	16215.3	6596.39	4048.20
926.000	16215.3	6596.42	4048.30
927.000	16215.3	6596.45	4048.40
928.000	16215.3	6596.48	4048.50
929.000	16215.3	6596.52	4048.60
930.000	16215.3	6596.55	4048.69
931.000	16215.4	6596.58	4048.79
932.000	16215.4	6596.61	4048.88
933.000	16215.4	6596.64	4048.98
934.000	16215.4	6596.67	4049.07

935.000	16215.4	6596.70	4049.16
936.000	16215.4	6596.73	4049.26
937.000	16215.4	6596.76	4049.35
938.000	16215.4	6596.79	4049.44
939.000	16215.5	6596.82	4049.53
940.000	16215.5	6596.85	4049.62
941.000	16215.5	6596.88	4049.70
942.000	16215.5	6596.91	4049.79
943.000	16215.5	6596.93	4049.88
944.000	16215.5	6596.96	4049.96
945.000	16215.5	6596.99	4050.05
946.000	16215.5	6597.02	4050.13
947.000	16215.6	6597.04	4050.21
948.000	16215.6	6597.07	4050.30
949.000	16215.6	6597.10	4050.38
950.000	16215.6	6597.12	4050.46
951.000	16215.6	6597.15	4050.54
952.000	16215.6	6597.18	4050.62
953.000	16215.6	6597.20	4050.70
954.000	16215.6	6597.23	4050.78
955.000	16215.6	6597.25	4050.86
956.000	16215.6	6597.28	4050.93
957.000	16215.7	6597.30	4051.01
958.000	16215.7	6597.33	4051.09
959.000	16215.7	6597.35	4051.16
960.000	16215.7	6597.37	4051.24
961.000	16215.7	6597.40	4051.31
962.000	16215.7	6597.42	4051.38
963.000	16215.7	6597.44	4051.46
964.000	16215.7	6597.47	4051.53
965.000	16215.7	6597.49	4051.60
966.000	16215.7	6597.51	4051.67
967.000	16215.8	6597.54	4051.74
968.000	16215.8	6597.56	4051.81
969.000	16215.8	6597.58	4051.88
970.000	16215.8	6597.60	4051.95
971.000	16215.8	6597.62	4052.01
972.000	16215.8	6597.65	4052.08
973.000	16215.8	6597.67	4052.15
974.000	16215.8	6597.69	4052.21
975.000	16215.8	6597.71	4052.28
976.000	16215.8	6597.73	4052.34
977.000	16215.8	6597.75	4052.41
978.000	16215.9	6597.77	4052.47
979.000	16215.9	6597.79	4052.54
980.000	16215.9	6597.81	4052.60
981.000	16215.9	6597.83	4052.66
982.000	16215.9	6597.85	4052.72
983.000	16215.9	6597.87	4052.78
984.000	16215.9	6597.89	4052.84
985.000	16215.9	6597.91	4052.90
986.000	16215.9	6597.93	4052.96
987.000	16215.9	6597.95	4053.02
988.000	16215.9	6597.97	4053.08
989.000	16215.9	6597.98	4053.14
990.000	16216.0	6598.00	4053.20
991.000	16216.0	6598.02	4053.25
992.000	16216.0	6598.04	4053.31
993.000	16216.0	6598.06	4053.36
994.000	16216.0	6598.07	4053.42
995.000	16216.0	6598.09	4053.48
996.000	16216.0	6598.11	4053.53
997.000	16216.0	6598.13	4053.58
998.000	16216.0	6598.14	4053.64
999.000	16216.0	6598.16	4053.69
1000.00	16216.0	6598.18	4053.74

TITLE : SMITHS GROCERY
CBM JOB # : 10629

SC ID # : 09322

Contaminant of Concern is ETHYLBENZENE

C(x,0,0,t)=(C0/2)erfc[(x-vt)/2(Ax*vt)1/2]
erf[Y/4(Ay*x)1/2]erf[Z/2(alphz*x)1/2]

INPUT PARAMETERS :
Concentration of Source (ppb) = 4900.00
Source Width (ft) = 150.00
Vertical Thickness of Source (ft) = 38.00
Distance of Recipient (ft) =1000.00
Groundwater Flow Velocity (ft/yr) = 3.65
Time of Simulation (years) = 1000.00
Longitudinal Dispersivity (ft) = 100.000000
Transverse Dispersivity (ft) = 33.333332
Vertical Dispersivity (ft) = 5.000000
Total Organic Carbon, TOC (mg/kg) = 60.00
Total Petroleum Hydrocarbons,TPH(mg/kg) = 0.00
Soil/Water Part. Coefficient,Koc(ml/g) = 176.00
Organic Carbon Fraction, foc (%) = 0.0000600
Porosity = .250
Bulk Density (g/cc) = 1.530
Retardation Factor, Rf = 1.06463
Contaminant Velocity (ft/yr) = 3.42842

CONCENTRATION COMPUTED FOR :
220.000 ft. 600.000 ft 1000.000 ft.

TIME (yrs)	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)
1.00000	0.000000	0.000000	0.000000
2.00000	0.000000	0.000000	0.000000
3.00000	0.000000	0.000000	0.000000
4.00000	0.543604E-01	0.000000	0.000000
5.00000	0.351835	0.000000	0.000000
6.00000	1.24208	0.000000	0.000000
7.00000	3.09092	0.000000	0.000000
8.00000	6.17148	0.000000	0.000000
9.00000	10.6291	0.000000	0.000000
10.0000	16.4958	0.000000	0.000000
11.0000	23.7216	0.000000	0.000000
12.0000	32.2056	0.000000	0.000000
13.0000	41.8194	0.000000	0.000000
14.0000	52.4247	0.000000	0.000000
15.0000	63.8834	0.000000	0.000000
16.0000	76.0644	0.000000	0.000000
17.0000	88.8466	0.000000	0.000000
18.0000	102.121	0.000000	0.000000
19.0000	115.790	0.000000	0.000000
20.0000	129.768	0.000000	0.000000
21.0000	143.980	0.000000	0.000000
22.0000	158.361	0.000000	0.000000
23.0000	172.856	0.901940E-02	0.000000
24.0000	187.414	0.147292E-01	0.000000
25.0000	201.996	0.231476E-01	0.000000
26.0000	216.566	0.351586E-01	0.000000
27.0000	231.092	0.518039E-01	0.000000
28.0000	245.550	0.742816E-01	0.000000
29.0000	259.918	0.103941	0.000000
30.0000	274.177	0.142271	0.000000
31.0000	288.313	0.190892	0.000000
32.0000	302.312	0.251532	0.000000
33.0000	316.164	0.326018	0.000000
34.0000	329.859	0.416249	0.000000
35.0000	343.392	0.524181	0.000000
36.0000	356.757	0.651806	0.000000
37.0000	369.948	0.801130	0.000000
38.0000	382.964	0.974157	0.000000

39.0000	395.801	1.17287	0.000000
40.0000	408.457	1.39923	0.000000
41.0000	420.933	1.65511	0.000000
42.0000	433.227	1.94236	0.000000
43.0000	445.340	2.26273	0.000000
44.0000	457.273	2.61789	0.000000
45.0000	469.025	3.00943	0.000000
46.0000	480.599	3.43880	0.000000
47.0000	491.996	3.90739	0.000000
48.0000	503.217	4.41646	0.000000
49.0000	514.265	4.96716	0.000000
50.0000	525.141	5.56051	0.000000
51.0000	535.848	6.19743	0.000000
52.0000	546.388	6.87875	0.000000
53.0000	556.763	7.60514	0.000000
54.0000	566.976	8.37720	0.382234E-02
55.0000	577.028	9.19539	0.489807E-02
56.0000	586.924	10.0601	0.622177E-02
57.0000	596.664	10.9715	0.783773E-02
58.0000	606.252	11.9300	0.979565E-02
59.0000	615.690	12.9354	0.121510E-01
60.0000	624.981	13.9878	0.149653E-01
61.0000	634.127	15.0872	0.183064E-01
62.0000	643.130	16.2332	0.222485E-01
63.0000	651.994	17.4258	0.268727E-01
64.0000	660.720	18.6644	0.322669E-01
65.0000	669.311	19.9489	0.385261E-01
66.0000	677.770	21.2786	0.457522E-01
67.0000	686.098	22.6531	0.540545E-01
68.0000	694.299	24.0718	0.635494E-01
69.0000	702.374	25.5340	0.743603E-01
70.0000	710.325	27.0392	0.866180E-01
71.0000	718.156	28.5866	0.100460
72.0000	725.868	30.1755	0.116031
73.0000	733.463	31.8051	0.133482
74.0000	740.943	33.4745	0.152971
75.0000	748.311	35.1830	0.174663
76.0000	755.568	36.9296	0.198727
77.0000	762.717	38.7136	0.225339
78.0000	769.760	40.5339	0.254681
79.0000	776.697	42.3897	0.286940
80.0000	783.532	44.2801	0.322306
81.0000	790.267	46.2041	0.360977
82.0000	796.901	48.1607	0.403152
83.0000	803.439	50.1490	0.449034
84.0000	809.881	52.1680	0.498832
85.0000	816.230	54.2169	0.552754
86.0000	822.486	56.2945	0.611014
87.0000	828.651	58.4000	0.673826
88.0000	834.728	60.5323	0.741407
89.0000	840.717	62.6906	0.813974
90.0000	846.620	64.8739	0.891745
91.0000	852.439	67.0812	0.974939
92.0000	858.175	69.3116	1.06378
93.0000	863.830	71.5641	1.15847
94.0000	869.404	73.8379	1.25925
95.0000	874.900	76.1320	1.36632
96.0000	880.319	78.4455	1.47989
97.0000	885.661	80.7776	1.60020
98.0000	890.929	83.1273	1.72743
99.0000	896.124	85.4938	1.86181
100.000	901.246	87.8763	2.00354
101.000	906.297	90.2738	2.15281
102.000	911.279	92.6856	2.30983
103.000	916.192	95.1109	2.47480
104.000	921.037	97.5489	2.64790
105.000	925.816	99.9987	2.82932
106.000	930.530	102.460	3.01925
107.000	935.180	104.931	3.21785

108.000	939.766	107.412	3.42531
109.000	944.291	109.902	3.64179
110.000	948.754	112.400	3.86744
111.000	953.158	114.905	4.10244
112.000	957.502	117.417	4.34692
113.000	961.788	119.936	4.60103
114.000	966.017	122.460	4.86492
115.000	970.190	124.989	5.13871
116.000	974.307	127.522	5.42252
117.000	978.370	130.059	5.71649
118.000	982.379	132.598	6.02073
119.000	986.335	135.141	6.33534
120.000	990.240	137.685	6.66042
121.000	994.093	140.231	6.99607
122.000	997.896	142.777	7.34237
123.000	1001.65	145.324	7.69942
124.000	1005.35	147.871	8.06729
125.000	1009.01	150.417	8.44604
126.000	1012.62	152.962	8.83574
127.000	1016.18	155.506	9.23644
128.000	1019.70	158.047	9.64819
129.000	1023.17	160.586	10.0711
130.000	1026.60	163.122	10.5050
131.000	1029.98	165.655	10.9502
132.000	1033.32	168.184	11.4066
133.000	1036.62	170.709	11.8741
134.000	1039.87	173.230	12.3529
135.000	1043.09	175.745	12.8430
136.000	1046.26	178.256	13.3442
137.000	1049.39	180.761	13.8567
138.000	1052.49	183.260	14.3805
139.000	1055.54	185.754	14.9154
140.000	1058.56	188.240	15.4615
141.000	1061.54	190.720	16.0188
142.000	1064.48	193.193	16.5873
143.000	1067.39	195.659	17.1668
144.000	1070.26	198.117	17.7574
145.000	1073.09	200.567	18.3589
146.000	1075.89	203.009	18.9715
147.000	1078.65	205.443	19.5950
148.000	1081.38	207.868	20.2293
149.000	1084.08	210.285	20.8744
150.000	1086.74	212.692	21.5302
151.000	1089.37	215.091	22.1966
152.000	1091.97	217.480	22.8736
153.000	1094.54	219.859	23.5612
154.000	1097.07	222.228	24.2591
155.000	1099.58	224.588	24.9673
156.000	1102.05	226.938	25.6858
157.000	1104.50	229.277	26.4144
158.000	1106.91	231.606	27.1531
159.000	1109.30	233.924	27.9017
160.000	1111.65	236.232	28.6601
161.000	1113.98	238.528	29.4283
162.000	1116.28	240.814	30.2061
163.000	1118.55	243.089	30.9934
164.000	1120.80	245.352	31.7901
165.000	1123.02	247.604	32.5961
166.000	1125.21	249.845	33.4113
167.000	1127.38	252.074	34.2355
168.000	1129.52	254.292	35.0686
169.000	1131.63	256.498	35.9106
170.000	1133.72	258.692	36.7612
171.000	1135.79	260.875	37.6204
172.000	1137.83	263.045	38.4880
173.000	1139.84	265.204	39.3639
174.000	1141.84	267.350	40.2480
175.000	1143.81	269.484	41.1400
176.000	1145.75	271.606	42.0400

177.000	1147.68	273.716	42.9478
178.000	1149.58	275.814	43.8632
179.000	1151.46	277.899	44.7860
180.000	1153.31	279.972	45.7162
181.000	1155.15	282.033	46.6536
182.000	1156.96	284.081	47.5981
183.000	1158.76	286.117	48.5495
184.000	1160.53	288.141	49.5078
185.000	1162.28	290.152	50.4726
186.000	1164.01	292.150	51.4440
187.000	1165.72	294.136	52.4217
188.000	1167.41	296.109	53.4057
189.000	1169.09	298.070	54.3958
190.000	1170.74	300.019	55.3918
191.000	1172.37	301.954	56.3936
192.000	1173.99	303.878	57.4010
193.000	1175.58	305.789	58.4140
194.000	1177.16	307.687	59.4324
195.000	1178.72	309.573	60.4560
196.000	1180.27	311.446	61.4847
197.000	1181.79	313.306	62.5184
198.000	1183.30	315.155	63.5569
199.000	1184.79	316.990	64.6000
200.000	1186.26	318.814	65.6477
201.000	1187.72	320.624	66.6998
202.000	1189.16	322.423	67.7562
203.000	1190.58	324.209	68.8167
204.000	1191.99	325.983	69.8812
205.000	1193.38	327.744	70.9495
206.000	1194.76	329.493	72.0216
207.000	1196.12	331.230	73.0972
208.000	1197.47	332.955	74.1763
209.000	1198.80	334.667	75.2587
210.000	1200.11	336.367	76.3443
211.000	1201.41	338.055	77.4330
212.000	1202.70	339.731	78.5246
213.000	1203.97	341.395	79.6190
214.000	1205.23	343.047	80.7161
215.000	1206.47	344.687	81.8157
216.000	1207.70	346.315	82.9178
217.000	1208.92	347.931	84.0221
218.000	1210.12	349.535	85.1286
219.000	1211.31	351.127	86.2372
220.000	1212.49	352.708	87.3477
221.000	1213.65	354.277	88.4601
222.000	1214.80	355.834	89.5741
223.000	1215.94	357.380	90.6897
224.000	1217.06	358.914	91.8067
225.000	1218.17	360.437	92.9251
226.000	1219.27	361.948	94.0448
227.000	1220.36	363.447	95.1655
228.000	1221.44	364.936	96.2873
229.000	1222.50	366.413	97.4099
230.000	1223.55	367.879	98.5334
231.000	1224.60	369.333	99.6575
232.000	1225.63	370.777	100.782
233.000	1226.64	372.209	101.907
234.000	1227.65	373.631	103.033
235.000	1228.65	375.041	104.159
236.000	1229.63	376.441	105.285
237.000	1230.61	377.830	106.411
238.000	1231.57	379.208	107.537
239.000	1232.52	380.575	108.663
240.000	1233.47	381.931	109.789
241.000	1234.40	383.277	110.914
242.000	1235.32	384.613	112.039
243.000	1236.24	385.938	113.163
244.000	1237.14	387.252	114.287
245.000	1238.03	388.556	115.410

246.000	1238.92	389.850	116.533
247.000	1239.79	391.133	117.654
248.000	1240.65	392.407	118.775
249.000	1241.51	393.670	119.895
250.000	1242.36	394.923	121.013
251.000	1243.19	396.166	122.131
252.000	1244.02	397.399	123.247
253.000	1244.84	398.623	124.361
254.000	1245.65	399.836	125.475
255.000	1246.45	401.040	126.587
256.000	1247.24	402.234	127.697
257.000	1248.03	403.418	128.805
258.000	1248.80	404.593	129.912
259.000	1249.57	405.758	131.018
260.000	1250.33	406.914	132.121
261.000	1251.08	408.060	133.222
262.000	1251.83	409.197	134.322
263.000	1252.56	410.325	135.419
264.000	1253.29	411.444	136.514
265.000	1254.01	412.553	137.607
266.000	1254.72	413.654	138.698
267.000	1255.43	414.745	139.786
268.000	1256.12	415.828	140.873
269.000	1256.81	416.901	141.956
270.000	1257.49	417.966	143.038
271.000	1258.17	419.022	144.116
272.000	1258.84	420.069	145.192
273.000	1259.50	421.107	146.266
274.000	1260.15	422.137	147.337
275.000	1260.80	423.159	148.405
276.000	1261.44	424.172	149.470
277.000	1262.07	425.176	150.532
278.000	1262.70	426.172	151.592
279.000	1263.32	427.160	152.649
280.000	1263.94	428.140	153.702
281.000	1264.54	429.111	154.753
282.000	1265.14	430.074	155.800
283.000	1265.74	431.030	156.845
284.000	1266.33	431.977	157.886
285.000	1266.91	432.916	158.924
286.000	1267.48	433.848	159.959
287.000	1268.05	434.771	160.990
288.000	1268.62	435.687	162.018
289.000	1269.18	436.595	163.043
290.000	1269.73	437.496	164.065
291.000	1270.28	438.389	165.083
292.000	1270.82	439.274	166.097
293.000	1271.35	440.152	167.109
294.000	1271.88	441.022	168.116
295.000	1272.41	441.885	169.120
296.000	1272.92	442.741	170.121
297.000	1273.44	443.590	171.118
298.000	1273.95	444.431	172.111
299.000	1274.45	445.265	173.100
300.000	1274.95	446.092	174.086
301.000	1275.44	446.912	175.068
302.000	1275.92	447.725	176.047
303.000	1276.41	448.531	177.021
304.000	1276.88	449.331	177.992
305.000	1277.36	450.123	178.959
306.000	1277.82	450.908	179.922
307.000	1278.29	451.687	180.882
308.000	1278.74	452.460	181.837
309.000	1279.20	453.225	182.789
310.000	1279.64	453.984	183.736
311.000	1280.09	454.737	184.680
312.000	1280.53	455.483	185.620
313.000	1280.96	456.223	186.556
314.000	1281.39	456.956	187.488

315.000	1281.82	457.683	188.415
316.000	1282.24	458.404	189.339
317.000	1282.66	459.118	190.259
318.000	1283.07	459.826	191.175
319.000	1283.48	460.529	192.086
320.000	1283.88	461.225	192.994
321.000	1284.28	461.915	193.897
322.000	1284.68	462.599	194.797
323.000	1285.07	463.278	195.692
324.000	1285.46	463.950	196.584
325.000	1285.84	464.617	197.471
326.000	1286.22	465.277	198.354
327.000	1286.60	465.933	199.233
328.000	1286.97	466.582	200.107
329.000	1287.34	467.226	200.978
330.000	1287.70	467.864	201.844
331.000	1288.06	468.497	202.706
332.000	1288.42	469.124	203.565
333.000	1288.77	469.745	204.419
334.000	1289.12	470.362	205.268
335.000	1289.47	470.973	206.114
336.000	1289.81	471.578	206.955
337.000	1290.15	472.179	207.793
338.000	1290.49	472.774	208.626
339.000	1290.82	473.364	209.454
340.000	1291.15	473.948	210.279
341.000	1291.48	474.528	211.100
342.000	1291.80	475.103	211.916
343.000	1292.12	475.672	212.728
344.000	1292.44	476.237	213.536
345.000	1292.75	476.796	214.340
346.000	1293.06	477.351	215.139
347.000	1293.36	477.901	215.934
348.000	1293.67	478.446	216.726
349.000	1293.97	478.986	217.513
350.000	1294.27	479.522	218.295
351.000	1294.56	480.053	219.074
352.000	1294.85	480.579	219.848
353.000	1295.14	481.100	220.619
354.000	1295.43	481.617	221.385
355.000	1295.71	482.130	222.147
356.000	1295.99	482.638	222.905
357.000	1296.27	483.141	223.658
358.000	1296.54	483.640	224.408
359.000	1296.81	484.135	225.153
360.000	1297.08	484.625	225.895
361.000	1297.35	485.111	226.632
362.000	1297.61	485.593	227.365
363.000	1297.87	486.071	228.094
364.000	1298.13	486.544	228.819
365.000	1298.38	487.013	229.539
366.000	1298.64	487.478	230.256
367.000	1298.89	487.939	230.969
368.000	1299.13	488.396	231.677
369.000	1299.38	488.848	232.382
370.000	1299.62	489.297	233.082
371.000	1299.86	489.742	233.778
372.000	1300.10	490.183	234.471
373.000	1300.34	490.620	235.159
374.000	1300.57	491.053	235.843
375.000	1300.80	491.482	236.523
376.000	1301.03	491.908	237.200
377.000	1301.26	492.329	237.872
378.000	1301.48	492.747	238.540
379.000	1301.70	493.161	239.205
380.000	1301.92	493.572	239.865
381.000	1302.14	493.979	240.522
382.000	1302.36	494.382	241.174
383.000	1302.57	494.782	241.823

384.000	1302.78	495.178	242.468
385.000	1302.99	495.571	243.108
386.000	1303.20	495.960	243.745
387.000	1303.40	496.346	244.379
388.000	1303.60	496.729	245.008
389.000	1303.80	497.108	245.633
390.000	1304.00	497.483	246.255
391.000	1304.20	497.855	246.873
392.000	1304.39	498.224	247.487
393.000	1304.59	498.590	248.097
394.000	1304.78	498.953	248.703
395.000	1304.97	499.312	249.306
396.000	1305.15	499.668	249.905
397.000	1305.34	500.021	250.500
398.000	1305.52	500.370	251.091
399.000	1305.71	500.717	251.679
400.000	1305.89	501.060	252.263
401.000	1306.06	501.401	252.844
402.000	1306.24	501.738	253.420
403.000	1306.41	502.073	253.993
404.000	1306.59	502.404	254.563
405.000	1306.76	502.733	255.129
406.000	1306.93	503.058	255.691
407.000	1307.10	503.381	256.249
408.000	1307.26	503.701	256.804
409.000	1307.43	504.018	257.356
410.000	1307.59	504.332	257.904
411.000	1307.75	504.643	258.448
412.000	1307.91	504.952	258.989
413.000	1308.07	505.257	259.526
414.000	1308.23	505.560	260.060
415.000	1308.38	505.861	260.591
416.000	1308.53	506.158	261.118
417.000	1308.69	506.453	261.641
418.000	1308.84	506.746	262.161
419.000	1308.99	507.036	262.678
420.000	1309.13	507.323	263.191
421.000	1309.28	507.607	263.701
422.000	1309.42	507.889	264.208
423.000	1309.57	508.169	264.711
424.000	1309.71	508.446	265.211
425.000	1309.85	508.721	265.707
426.000	1309.99	508.993	266.201
427.000	1310.13	509.262	266.691
428.000	1310.26	509.530	267.177
429.000	1310.40	509.795	267.661
430.000	1310.53	510.057	268.141
431.000	1310.66	510.317	268.618
432.000	1310.80	510.575	269.092
433.000	1310.93	510.831	269.562
434.000	1311.05	511.084	270.030
435.000	1311.18	511.335	270.494
436.000	1311.31	511.583	270.955
437.000	1311.43	511.830	271.413
438.000	1311.56	512.074	271.868
439.000	1311.68	512.316	272.320
440.000	1311.80	512.556	272.769
441.000	1311.92	512.794	273.214
442.000	1312.04	513.030	273.657
443.000	1312.16	513.263	274.096
444.000	1312.27	513.495	274.533
445.000	1312.39	513.724	274.966
446.000	1312.50	513.951	275.397
447.000	1312.62	514.177	275.825
448.000	1312.73	514.400	276.249
449.000	1312.84	514.621	276.671
450.000	1312.95	514.841	277.090
451.000	1313.06	515.058	277.506
452.000	1313.16	515.273	277.919

453.000	1313.27	515.487	278.329
454.000	1313.38	515.698	278.736
455.000	1313.48	515.908	279.141
456.000	1313.59	516.115	279.542
457.000	1313.69	516.321	279.941
458.000	1313.79	516.525	280.337
459.000	1313.89	516.728	280.731
460.000	1313.99	516.928	281.121
461.000	1314.09	517.127	281.509
462.000	1314.19	517.323	281.894
463.000	1314.28	517.518	282.276
464.000	1314.38	517.712	282.656
465.000	1314.47	517.903	283.033
466.000	1314.57	518.093	283.407
467.000	1314.66	518.281	283.779
468.000	1314.75	518.468	284.148
469.000	1314.84	518.652	284.514
470.000	1314.93	518.835	284.878
471.000	1315.02	519.017	285.239
472.000	1315.11	519.197	285.597
473.000	1315.20	519.375	285.953
474.000	1315.29	519.552	286.307
475.000	1315.37	519.727	286.658
476.000	1315.46	519.900	287.006
477.000	1315.54	520.072	287.352
478.000	1315.63	520.242	287.696
479.000	1315.71	520.411	288.037
480.000	1315.79	520.578	288.375
481.000	1315.87	520.744	288.711
482.000	1315.95	520.908	289.045
483.000	1316.03	521.071	289.376
484.000	1316.11	521.233	289.705
485.000	1316.19	521.393	290.031
486.000	1316.27	521.551	290.355
487.000	1316.34	521.708	290.677
488.000	1316.42	521.864	290.997
489.000	1316.50	522.018	291.314
490.000	1316.57	522.171	291.628
491.000	1316.64	522.322	291.941
492.000	1316.72	522.472	292.251
493.000	1316.79	522.621	292.559
494.000	1316.86	522.768	292.865
495.000	1316.93	522.915	293.168
496.000	1317.00	523.059	293.469
497.000	1317.07	523.203	293.768
498.000	1317.14	523.345	294.065
499.000	1317.21	523.486	294.360
500.000	1317.28	523.626	294.652
501.000	1317.34	523.764	294.943
502.000	1317.41	523.901	295.231
503.000	1317.48	524.037	295.517
504.000	1317.54	524.172	295.801
505.000	1317.60	524.305	296.083
506.000	1317.67	524.437	296.362
507.000	1317.73	524.568	296.640
508.000	1317.79	524.698	296.916
509.000	1317.86	524.827	297.189
510.000	1317.92	524.955	297.461
511.000	1317.98	525.081	297.730
512.000	1318.04	525.206	297.998
513.000	1318.10	525.331	298.263
514.000	1318.16	525.454	298.527
515.000	1318.22	525.576	298.788
516.000	1318.27	525.696	299.048
517.000	1318.33	525.816	299.306
518.000	1318.39	525.935	299.561
519.000	1318.44	526.052	299.815
520.000	1318.50	526.169	300.067
521.000	1318.56	526.284	300.317

522.000	1318.61	526.399	300.565
523.000	1318.66	526.512	300.812
524.000	1318.72	526.625	301.056
525.000	1318.77	526.736	301.299
526.000	1318.82	526.846	301.540
527.000	1318.88	526.956	301.779
528.000	1318.93	527.064	302.016
529.000	1318.98	527.172	302.251
530.000	1319.03	527.278	302.485
531.000	1319.08	527.384	302.717
532.000	1319.13	527.488	302.947
533.000	1319.18	527.592	303.175
534.000	1319.23	527.694	303.402
535.000	1319.27	527.796	303.627
536.000	1319.32	527.897	303.850
537.000	1319.37	527.997	304.071
538.000	1319.42	528.096	304.291
539.000	1319.46	528.194	304.509
540.000	1319.51	528.291	304.726
541.000	1319.55	528.388	304.941
542.000	1319.60	528.483	305.154
543.000	1319.64	528.578	305.365
544.000	1319.69	528.672	305.575
545.000	1319.73	528.765	305.784
546.000	1319.78	528.857	305.990
547.000	1319.82	528.948	306.196
548.000	1319.86	529.038	306.399
549.000	1319.90	529.128	306.601
550.000	1319.95	529.217	306.802
551.000	1319.99	529.305	307.001
552.000	1320.03	529.392	307.198
553.000	1320.07	529.479	307.394
554.000	1320.11	529.564	307.588
555.000	1320.15	529.649	307.781
556.000	1320.19	529.733	307.973
557.000	1320.23	529.817	308.163
558.000	1320.27	529.899	308.351
559.000	1320.30	529.981	308.538
560.000	1320.34	530.062	308.724
561.000	1320.38	530.143	308.908
562.000	1320.42	530.222	309.091
563.000	1320.45	530.301	309.272
564.000	1320.49	530.380	309.452
565.000	1320.53	530.457	309.631
566.000	1320.56	530.534	309.808
567.000	1320.60	530.610	309.983
568.000	1320.63	530.686	310.158
569.000	1320.67	530.760	310.331
570.000	1320.70	530.835	310.503
571.000	1320.74	530.908	310.673
572.000	1320.77	530.981	310.842
573.000	1320.81	531.053	311.010
574.000	1320.84	531.124	311.176
575.000	1320.87	531.195	311.341
576.000	1320.90	531.266	311.505
577.000	1320.94	531.335	311.668
578.000	1320.97	531.404	311.829
579.000	1321.00	531.472	311.989
580.000	1321.03	531.540	312.148
581.000	1321.06	531.607	312.306
582.000	1321.09	531.674	312.462
583.000	1321.12	531.740	312.617
584.000	1321.15	531.805	312.771
585.000	1321.18	531.870	312.924
586.000	1321.21	531.934	313.075
587.000	1321.24	531.997	313.225
588.000	1321.27	532.060	313.375
589.000	1321.30	532.123	313.523
590.000	1321.33	532.184	313.669

591.000	1321.36	532.246	313.815
592.000	1321.39	532.306	313.960
593.000	1321.41	532.367	314.103
594.000	1321.44	532.426	314.245
595.000	1321.47	532.485	314.386
596.000	1321.50	532.544	314.526
597.000	1321.52	532.602	314.665
598.000	1321.55	532.660	314.803
599.000	1321.58	532.717	314.940
600.000	1321.60	532.773	315.075
601.000	1321.63	532.829	315.210
602.000	1321.65	532.885	315.343
603.000	1321.68	532.940	315.476
604.000	1321.70	532.994	315.607
605.000	1321.73	533.048	315.738
606.000	1321.75	533.102	315.867
607.000	1321.78	533.155	315.995
608.000	1321.80	533.207	316.123
609.000	1321.82	533.259	316.249
610.000	1321.85	533.311	316.374
611.000	1321.87	533.362	316.498
612.000	1321.89	533.413	316.622
613.000	1321.92	533.463	316.744
614.000	1321.94	533.513	316.865
615.000	1321.96	533.562	316.986
616.000	1321.99	533.611	317.105
617.000	1322.01	533.659	317.224
618.000	1322.03	533.707	317.341
619.000	1322.05	533.755	317.458
620.000	1322.07	533.802	317.574
621.000	1322.09	533.849	317.688
622.000	1322.11	533.895	317.802
623.000	1322.14	533.941	317.915
624.000	1322.16	533.986	318.027
625.000	1322.18	534.031	318.138
626.000	1322.20	534.076	318.249
627.000	1322.22	534.120	318.358
628.000	1322.24	534.164	318.466
629.000	1322.26	534.208	318.574
630.000	1322.28	534.251	318.681
631.000	1322.30	534.293	318.787
632.000	1322.32	534.336	318.892
633.000	1322.33	534.378	318.996
634.000	1322.35	534.419	319.100
635.000	1322.37	534.460	319.202
636.000	1322.39	534.501	319.304
637.000	1322.41	534.541	319.405
638.000	1322.43	534.581	319.505
639.000	1322.45	534.621	319.604
640.000	1322.46	534.660	319.703
641.000	1322.48	534.699	319.800
642.000	1322.50	534.738	319.897
643.000	1322.52	534.776	319.994
644.000	1322.53	534.814	320.089
645.000	1322.55	534.852	320.184
646.000	1322.57	534.889	320.277
647.000	1322.58	534.926	320.371
648.000	1322.60	534.963	320.463
649.000	1322.62	534.999	320.555
650.000	1322.63	535.035	320.645
651.000	1322.65	535.070	320.736
652.000	1322.66	535.106	320.825
653.000	1322.68	535.141	320.914
654.000	1322.70	535.175	321.002
655.000	1322.71	535.210	321.089
656.000	1322.73	535.244	321.176
657.000	1322.74	535.278	321.261
658.000	1322.76	535.311	321.347
659.000	1322.77	535.344	321.431

660.000	1322.79	535.377	321.515
661.000	1322.80	535.409	321.598
662.000	1322.82	535.442	321.680
663.000	1322.83	535.474	321.762
664.000	1322.84	535.505	321.843
665.000	1322.86	535.537	321.924
666.000	1322.87	535.568	322.004
667.000	1322.89	535.599	322.083
668.000	1322.90	535.629	322.161
669.000	1322.91	535.659	322.239
670.000	1322.93	535.689	322.317
671.000	1322.94	535.719	322.393
672.000	1322.95	535.749	322.469
673.000	1322.97	535.778	322.545
674.000	1322.98	535.807	322.619
675.000	1322.99	535.835	322.694
676.000	1323.00	535.864	322.767
677.000	1323.02	535.892	322.840
678.000	1323.03	535.920	322.912
679.000	1323.04	535.947	322.984
680.000	1323.05	535.975	323.055
681.000	1323.07	536.002	323.126
682.000	1323.08	536.029	323.196
683.000	1323.09	536.056	323.266
684.000	1323.10	536.082	323.335
685.000	1323.11	536.108	323.403
686.000	1323.13	536.134	323.471
687.000	1323.14	536.160	323.538
688.000	1323.15	536.185	323.605
689.000	1323.16	536.211	323.671
690.000	1323.17	536.236	323.736
691.000	1323.18	536.260	323.802
692.000	1323.19	536.285	323.866
693.000	1323.20	536.309	323.930
694.000	1323.21	536.333	323.994
695.000	1323.22	536.357	324.057
696.000	1323.24	536.381	324.119
697.000	1323.25	536.405	324.181
698.000	1323.26	536.428	324.242
699.000	1323.27	536.451	324.303
700.000	1323.28	536.474	324.364
701.000	1323.29	536.496	324.424
702.000	1323.30	536.519	324.483
703.000	1323.31	536.541	324.542
704.000	1323.32	536.563	324.601
705.000	1323.33	536.585	324.659
706.000	1323.34	536.607	324.716
707.000	1323.34	536.628	324.773
708.000	1323.35	536.649	324.830
709.000	1323.36	536.671	324.886
710.000	1323.37	536.691	324.942
711.000	1323.38	536.712	324.997
712.000	1323.39	536.733	325.052
713.000	1323.40	536.753	325.106
714.000	1323.41	536.773	325.160
715.000	1323.42	536.793	325.213
716.000	1323.43	536.813	325.266
717.000	1323.44	536.833	325.319
718.000	1323.44	536.852	325.371
719.000	1323.45	536.871	325.423
720.000	1323.46	536.890	325.474
721.000	1323.47	536.909	325.525
722.000	1323.48	536.928	325.575
723.000	1323.49	536.947	325.625
724.000	1323.49	536.965	325.675
725.000	1323.50	536.983	325.724
726.000	1323.51	537.001	325.773
727.000	1323.52	537.019	325.821
728.000	1323.53	537.037	325.869

729.000	1323.53	537.055	325.917
730.000	1323.54	537.072	325.964
731.000	1323.55	537.089	326.011
732.000	1323.56	537.106	326.057
733.000	1323.56	537.123	326.103
734.000	1323.57	537.140	326.149
735.000	1323.58	537.157	326.194
736.000	1323.59	537.173	326.239
737.000	1323.59	537.190	326.284
738.000	1323.60	537.206	326.328
739.000	1323.61	537.222	326.372
740.000	1323.61	537.238	326.415
741.000	1323.62	537.254	326.458
742.000	1323.63	537.269	326.501
743.000	1323.63	537.285	326.543
744.000	1323.64	537.300	326.585
745.000	1323.65	537.316	326.627
746.000	1323.65	537.331	326.668
747.000	1323.66	537.346	326.709
748.000	1323.67	537.360	326.750
749.000	1323.67	537.375	326.790
750.000	1323.68	537.390	326.830
751.000	1323.69	537.404	326.870
752.000	1323.69	537.418	326.909
753.000	1323.70	537.433	326.948
754.000	1323.71	537.447	326.987
755.000	1323.71	537.461	327.025
756.000	1323.72	537.474	327.063
757.000	1323.72	537.488	327.101
758.000	1323.73	537.502	327.138
759.000	1323.74	537.515	327.175
760.000	1323.74	537.528	327.212
761.000	1323.75	537.541	327.249
762.000	1323.75	537.555	327.285
763.000	1323.76	537.567	327.321
764.000	1323.76	537.580	327.356
765.000	1323.77	537.593	327.392
766.000	1323.77	537.606	327.427
767.000	1323.78	537.618	327.461
768.000	1323.79	537.630	327.496
769.000	1323.79	537.643	327.530
770.000	1323.80	537.655	327.564
771.000	1323.80	537.667	327.597
772.000	1323.81	537.679	327.631
773.000	1323.81	537.691	327.664
774.000	1323.82	537.702	327.696
775.000	1323.82	537.714	327.729
776.000	1323.83	537.726	327.761
777.000	1323.83	537.737	327.793
778.000	1323.84	537.748	327.825
779.000	1323.84	537.760	327.856
780.000	1323.85	537.771	327.887
781.000	1323.85	537.782	327.918
782.000	1323.86	537.792	327.949
783.000	1323.86	537.803	327.979
784.000	1323.87	537.814	328.009
785.000	1323.87	537.825	328.039
786.000	1323.87	537.835	328.068
787.000	1323.88	537.846	328.098
788.000	1323.88	537.856	328.127
789.000	1323.89	537.866	328.156
790.000	1323.89	537.876	328.185
791.000	1323.90	537.886	328.213
792.000	1323.90	537.896	328.241
793.000	1323.91	537.906	328.269
794.000	1323.91	537.916	328.297
795.000	1323.91	537.926	328.324
796.000	1323.92	537.935	328.351
797.000	1323.92	537.945	328.378

798.000	1323.93	537.954	328.405
799.000	1323.93	537.964	328.432
800.000	1323.93	537.973	328.458
801.000	1323.94	537.982	328.484
802.000	1323.94	537.991	328.510
803.000	1323.95	538.000	328.536
804.000	1323.95	538.009	328.561
805.000	1323.95	538.018	328.586
806.000	1323.96	538.027	328.611
807.000	1323.96	538.036	328.636
808.000	1323.96	538.044	328.661
809.000	1323.97	538.053	328.685
810.000	1323.97	538.061	328.710
811.000	1323.98	538.070	328.734
812.000	1323.98	538.078	328.757
813.000	1323.98	538.086	328.781
814.000	1323.99	538.094	328.804
815.000	1323.99	538.102	328.828
816.000	1323.99	538.111	328.851
817.000	1324.00	538.118	328.873
818.000	1324.00	538.126	328.896
819.000	1324.00	538.134	328.918
820.000	1324.01	538.142	328.941
821.000	1324.01	538.150	328.963
822.000	1324.01	538.157	328.985
823.000	1324.02	538.165	329.006
824.000	1324.02	538.172	329.028
825.000	1324.02	538.180	329.049
826.000	1324.03	538.187	329.070
827.000	1324.03	538.194	329.091
828.000	1324.03	538.201	329.112
829.000	1324.04	538.209	329.133
830.000	1324.04	538.216	329.153
831.000	1324.04	538.223	329.174
832.000	1324.04	538.230	329.194
833.000	1324.05	538.237	329.214
834.000	1324.05	538.243	329.233
835.000	1324.05	538.250	329.253
836.000	1324.06	538.257	329.273
837.000	1324.06	538.263	329.292
838.000	1324.06	538.270	329.311
839.000	1324.07	538.277	329.330
840.000	1324.07	538.283	329.349
841.000	1324.07	538.289	329.367
842.000	1324.07	538.296	329.386
843.000	1324.08	538.302	329.404
844.000	1324.08	538.308	329.422
845.000	1324.08	538.315	329.440
846.000	1324.08	538.321	329.458
847.000	1324.09	538.327	329.476
848.000	1324.09	538.333	329.494
849.000	1324.09	538.339	329.511
850.000	1324.09	538.345	329.528
851.000	1324.10	538.351	329.545
852.000	1324.10	538.356	329.562
853.000	1324.10	538.362	329.579
854.000	1324.10	538.368	329.596
855.000	1324.11	538.373	329.613
856.000	1324.11	538.379	329.629
857.000	1324.11	538.385	329.645
858.000	1324.11	538.390	329.661
859.000	1324.12	538.396	329.677
860.000	1324.12	538.401	329.693
861.000	1324.12	538.406	329.709
862.000	1324.12	538.412	329.725
863.000	1324.13	538.417	329.740
864.000	1324.13	538.422	329.755
865.000	1324.13	538.427	329.771
866.000	1324.13	538.432	329.786

867.000	1324.13	538.437	329.801
868.000	1324.14	538.442	329.816
869.000	1324.14	538.447	329.830
870.000	1324.14	538.452	329.845
871.000	1324.14	538.457	329.859
872.000	1324.14	538.462	329.874
873.000	1324.15	538.467	329.888
874.000	1324.15	538.472	329.902
875.000	1324.15	538.476	329.916
876.000	1324.15	538.481	329.930
877.000	1324.15	538.486	329.944
878.000	1324.16	538.490	329.957
879.000	1324.16	538.495	329.971
880.000	1324.16	538.499	329.984
881.000	1324.16	538.504	329.998
882.000	1324.16	538.508	330.011
883.000	1324.17	538.513	330.024
884.000	1324.17	538.517	330.037
885.000	1324.17	538.521	330.050
886.000	1324.17	538.526	330.062
887.000	1324.17	538.530	330.075
888.000	1324.18	538.534	330.087
889.000	1324.18	538.538	330.100
890.000	1324.18	538.542	330.112
891.000	1324.18	538.546	330.124
892.000	1324.18	538.550	330.137
893.000	1324.18	538.555	330.149
894.000	1324.19	538.558	330.160
895.000	1324.19	538.562	330.172
896.000	1324.19	538.566	330.184
897.000	1324.19	538.570	330.196
898.000	1324.19	538.574	330.207
899.000	1324.19	538.578	330.219
900.000	1324.20	538.582	330.230
901.000	1324.20	538.585	330.241
902.000	1324.20	538.589	330.252
903.000	1324.20	538.593	330.263
904.000	1324.20	538.596	330.274
905.000	1324.20	538.600	330.285
906.000	1324.20	538.604	330.296
907.000	1324.21	538.607	330.306
908.000	1324.21	538.611	330.317
909.000	1324.21	538.614	330.327
910.000	1324.21	538.618	330.338
911.000	1324.21	538.621	330.348
912.000	1324.21	538.624	330.358
913.000	1324.21	538.628	330.368
914.000	1324.22	538.631	330.379
915.000	1324.22	538.634	330.388
916.000	1324.22	538.638	330.398
917.000	1324.22	538.641	330.408
918.000	1324.22	538.644	330.418
919.000	1324.22	538.647	330.427
920.000	1324.22	538.650	330.437
921.000	1324.23	538.654	330.446
922.000	1324.23	538.657	330.456
923.000	1324.23	538.660	330.465
924.000	1324.23	538.663	330.474
925.000	1324.23	538.666	330.484
926.000	1324.23	538.669	330.493
927.000	1324.23	538.672	330.502
928.000	1324.23	538.675	330.510
929.000	1324.24	538.678	330.519
930.000	1324.24	538.680	330.528
931.000	1324.24	538.683	330.537
932.000	1324.24	538.686	330.545
933.000	1324.24	538.689	330.554
934.000	1324.24	538.692	330.562
935.000	1324.24	538.694	330.571

936.000	1324.24	538.697	330.579
937.000	1324.25	538.700	330.587
938.000	1324.25	538.703	330.596
939.000	1324.25	538.705	330.604
940.000	1324.25	538.708	330.612
941.000	1324.25	538.710	330.620
942.000	1324.25	538.713	330.628
943.000	1324.25	538.716	330.635
944.000	1324.25	538.718	330.643
945.000	1324.25	538.721	330.651
946.000	1324.26	538.723	330.659
947.000	1324.26	538.726	330.666
948.000	1324.26	538.728	330.674
949.000	1324.26	538.731	330.681
950.000	1324.26	538.733	330.689
951.000	1324.26	538.735	330.696
952.000	1324.26	538.738	330.703
953.000	1324.26	538.740	330.710
954.000	1324.26	538.742	330.717
955.000	1324.26	538.745	330.725
956.000	1324.27	538.747	330.732
957.000	1324.27	538.749	330.739
958.000	1324.27	538.751	330.745
959.000	1324.27	538.754	330.752
960.000	1324.27	538.756	330.759
961.000	1324.27	538.758	330.766
962.000	1324.27	538.760	330.772
963.000	1324.27	538.762	330.779
964.000	1324.27	538.764	330.786
965.000	1324.27	538.767	330.792
966.000	1324.27	538.769	330.799
967.000	1324.28	538.771	330.805
968.000	1324.28	538.773	330.811
969.000	1324.28	538.775	330.818
970.000	1324.28	538.777	330.824
971.000	1324.28	538.779	330.830
972.000	1324.28	538.781	330.836
973.000	1324.28	538.783	330.842
974.000	1324.28	538.785	330.848
975.000	1324.28	538.787	330.854
976.000	1324.28	538.789	330.860
977.000	1324.28	538.790	330.866
978.000	1324.28	538.792	330.872
979.000	1324.28	538.794	330.878
980.000	1324.29	538.796	330.883
981.000	1324.29	538.798	330.889
982.000	1324.29	538.800	330.895
983.000	1324.29	538.801	330.900
984.000	1324.29	538.803	330.906
985.000	1324.29	538.805	330.911
986.000	1324.29	538.807	330.917
987.000	1324.29	538.808	330.922
988.000	1324.29	538.810	330.927
989.000	1324.29	538.812	330.933
990.000	1324.29	538.813	330.938
991.000	1324.29	538.815	330.943
992.000	1324.29	538.817	330.948
993.000	1324.30	538.818	330.953
994.000	1324.30	538.820	330.958
995.000	1324.30	538.822	330.963
996.000	1324.30	538.823	330.968
997.000	1324.30	538.825	330.973
998.000	1324.30	538.826	330.978
999.000	1324.30	538.828	330.983
1000.00	1324.30	538.829	330.988

TITLE : SMITHS GROCERY
CBM JOB # : 10629
SC ID # : 09322

Contaminant of Concern is XYLENES

C(x,0,0,t)=(C0/2)erfc[(x-vt)/2(Ax*vt)1/2]
erf[Y/4(Ay*x)1/2]erf[Z/2(alphz*x)1/2]

INPUT PARAMETERS :
Concentration of Source (ppb) = 24900.00
Source Width (ft) = 150.00
Vertical Thickness of Source (ft) = 38.00
Distance of Recipient (ft) =1000.00
Groundwater Flow Velocity (ft/yr) = 3.65
Time of Simulation (years) = 1000.00
Longitudinal Dispersivity (ft) = 100.000000
Transverse Dispersivity (ft) = 33.333332
Vertical Dispersivity (ft) = 5.000000
Total Organic Carbon, TOC (mg/kg) = 60.00
Total Petroleum Hydrocarbons,TPH(mg/kg) = 0.00
Soil/Water Part. Coefficient,Koc(ml/g) = 639.00
Organic Carbon Fraction, foc (%) = 0.0000600
Porosity = .250
Bulk Density (g/cc) = 1.530
Retardation Factor, Rf = 1.23465
Contaminant Velocity (ft/yr) = 2.95630

CONCENTRATION COMPUTED FOR :
220.000 ft. 600.000 ft 1000.000 ft.

TIME (yrs)	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)
1.00000	0.000000	0.000000	0.000000
2.00000	0.000000	0.000000	0.000000
3.00000	0.000000	0.000000	0.000000
4.00000	0.000000	0.000000	0.000000
5.00000	0.540702	0.000000	0.000000
6.00000	2.30256	0.000000	0.000000
7.00000	6.55569	0.000000	0.000000
8.00000	14.4842	0.000000	0.000000
9.00000	26.9943	0.000000	0.000000
10.0000	44.6287	0.000000	0.000000
11.0000	67.5924	0.000000	0.000000
12.0000	95.8249	0.000000	0.000000
13.0000	129.080	0.000000	0.000000
14.0000	166.995	0.000000	0.000000
15.0000	209.144	0.000000	0.000000
16.0000	255.072	0.000000	0.000000
17.0000	304.330	0.000000	0.000000
18.0000	356.481	0.000000	0.000000
19.0000	411.116	0.000000	0.000000
20.0000	467.858	0.000000	0.000000
21.0000	526.364	0.000000	0.000000
22.0000	586.323	0.000000	0.000000
23.0000	647.458	0.000000	0.000000
24.0000	709.522	0.000000	0.000000
25.0000	772.296	0.000000	0.000000
26.0000	835.585	0.338111E-01	0.000000
27.0000	899.221	0.528488E-01	0.000000
28.0000	963.054	0.800707E-01	0.000000
29.0000	1026.95	0.117960	0.000000
30.0000	1090.80	0.169434	0.000000
31.0000	1154.50	0.237855	0.000000
32.0000	1217.97	0.327027	0.000000
33.0000	1281.13	0.441182	0.000000
34.0000	1343.91	0.584963	0.000000
35.0000	1406.27	0.763394	0.000000
36.0000	1468.14	0.981842	0.000000
37.0000	1529.50	1.24599	0.000000
38.0000	1590.30	1.56177	0.000000
39.0000	1650.53	1.93535	0.000000

40.0000	1710.14	2.37305	0.000000
41.0000	1769.13	2.88132	0.000000
42.0000	1827.48	3.46667	0.000000
43.0000	1885.17	4.13565	0.000000
44.0000	1942.20	4.89480	0.000000
45.0000	1998.55	5.75057	0.000000
46.0000	2054.22	6.70932	0.000000
47.0000	2109.20	7.77731	0.000000
48.0000	2163.51	8.96056	0.000000
49.0000	2217.12	10.2650	0.000000
50.0000	2270.05	11.6961	0.000000
51.0000	2322.30	13.2595	0.000000
52.0000	2373.87	14.9601	0.000000
53.0000	2424.77	16.8029	0.000000
54.0000	2474.99	18.7924	0.000000
55.0000	2524.55	20.9327	0.000000
56.0000	2573.44	23.2280	0.000000
57.0000	2621.69	25.6816	0.000000
58.0000	2669.29	28.2970	0.000000
59.0000	2716.24	31.0772	0.000000
60.0000	2762.57	34.0247	0.000000
61.0000	2808.27	37.1418	0.000000
62.0000	2853.35	40.4307	0.000000
63.0000	2897.82	43.8930	0.210719E-01
64.0000	2941.70	47.5301	0.260442E-01
65.0000	2984.98	51.3432	0.319828E-01
66.0000	3027.67	55.3330	0.390340E-01
67.0000	3069.79	59.5002	0.473592E-01
68.0000	3111.34	63.8450	0.571363E-01
69.0000	3152.32	68.3675	0.685596E-01
70.0000	3192.76	73.0674	0.818411E-01
71.0000	3232.65	77.9444	0.972108E-01
72.0000	3272.01	82.9977	0.114917
73.0000	3310.84	88.2265	0.135227
74.0000	3349.15	93.6298	0.158428
75.0000	3386.95	99.2062	0.184826
76.0000	3424.24	104.954	0.214748
77.0000	3461.04	110.873	0.248540
78.0000	3497.35	116.959	0.286568
79.0000	3533.18	123.212	0.329220
80.0000	3568.53	129.630	0.376903
81.0000	3603.42	136.209	0.430043
82.0000	3637.85	142.949	0.489087
83.0000	3671.83	149.846	0.554501
84.0000	3705.36	156.898	0.626771
85.0000	3738.46	164.102	0.706399
86.0000	3771.12	171.457	0.793907
87.0000	3803.37	178.958	0.889836
88.0000	3835.19	186.603	0.994740
89.0000	3866.60	194.390	1.10919
90.0000	3897.61	202.315	1.23378
91.0000	3928.22	210.376	1.36911
92.0000	3958.44	218.569	1.51580
93.0000	3988.28	226.891	1.67447
94.0000	4017.73	235.340	1.84578
95.0000	4046.81	243.912	2.03036
96.0000	4075.52	252.603	2.22889
97.0000	4103.87	261.412	2.44204
98.0000	4131.86	270.335	2.67049
99.0000	4159.50	279.368	2.91493
100.000	4186.79	288.509	3.17605
101.000	4213.75	297.754	3.45457
102.000	4240.37	307.100	3.75117
103.000	4266.65	316.545	4.06657
104.000	4292.61	326.084	4.40149
105.000	4318.26	335.716	4.75663
106.000	4343.58	345.436	5.13271
107.000	4368.60	355.242	5.53045
108.000	4393.30	365.131	5.95054

109.000	4417.71	375.100	6.39370
110.000	4441.82	385.146	6.86064
111.000	4465.63	395.265	7.35206
112.000	4489.16	405.456	7.86865
113.000	4512.41	415.714	8.41111
114.000	4535.37	426.038	8.98011
115.000	4558.06	436.424	9.57633
116.000	4580.47	446.870	10.2004
117.000	4602.62	457.373	10.8531
118.000	4624.50	467.931	11.5349
119.000	4646.12	478.539	12.2466
120.000	4667.49	489.197	12.9888
121.000	4688.60	499.902	13.7620
122.000	4709.47	510.650	14.5669
123.000	4730.09	521.439	15.4040
124.000	4750.46	532.268	16.2740
125.000	4770.60	543.133	17.1774
126.000	4790.50	554.032	18.1147
127.000	4810.17	564.964	19.0865
128.000	4829.61	575.924	20.0933
129.000	4848.83	586.913	21.1356
130.000	4867.82	597.926	22.2139
131.000	4886.60	608.962	23.3286
132.000	4905.15	620.019	24.4802
133.000	4923.50	631.096	25.6692
134.000	4941.63	642.189	26.8959
135.000	4959.56	653.296	28.1608
136.000	4977.28	664.417	29.4642
137.000	4994.80	675.549	30.8065
138.000	5012.12	686.690	32.1880
139.000	5029.25	697.838	33.6091
140.000	5046.18	708.992	35.0701
141.000	5062.92	720.149	36.5713
142.000	5079.47	731.309	38.1129
143.000	5095.83	742.469	39.6953
144.000	5112.01	753.628	41.3186
145.000	5128.02	764.785	42.9830
146.000	5143.84	775.937	44.6889
147.000	5159.48	787.083	46.4363
148.000	5174.95	798.222	48.2254
149.000	5190.25	809.353	50.0565
150.000	5205.38	820.473	51.9295
151.000	5220.35	831.582	53.8446
152.000	5235.14	842.678	55.8020
153.000	5249.78	853.760	57.8017
154.000	5264.25	864.827	59.8437
155.000	5278.57	875.878	61.9282
156.000	5292.73	886.911	64.0551
157.000	5306.73	897.924	66.2244
158.000	5320.58	908.918	68.4363
159.000	5334.28	919.891	70.6905
160.000	5347.84	930.842	72.9872
161.000	5361.24	941.769	75.3262
162.000	5374.50	952.673	77.7075
163.000	5387.62	963.551	80.1310
164.000	5400.59	974.403	82.5967
165.000	5413.43	985.228	85.1043
166.000	5426.13	996.025	87.6538
167.000	5438.69	1006.79	90.2451
168.000	5451.11	1017.53	92.8781
169.000	5463.41	1028.24	95.5524
170.000	5475.57	1038.92	98.2680
171.000	5487.60	1049.56	101.025
172.000	5499.51	1060.18	103.822
173.000	5511.29	1070.76	106.661
174.000	5522.94	1081.30	109.539
175.000	5534.47	1091.81	112.458
176.000	5545.88	1102.29	115.417
177.000	5557.17	1112.72	118.416

178.000	5568.34	1123.13	121.454
179.000	5579.40	1133.49	124.531
180.000	5590.33	1143.82	127.647
181.000	5601.16	1154.11	130.802
182.000	5611.86	1164.36	133.995
183.000	5622.46	1174.57	137.226
184.000	5632.95	1184.74	140.494
185.000	5643.33	1194.87	143.800
186.000	5653.60	1204.96	147.143
187.000	5663.76	1215.01	150.522
188.000	5673.82	1225.01	153.938
189.000	5683.77	1234.98	157.390
190.000	5693.62	1244.90	160.877
191.000	5703.37	1254.78	164.399
192.000	5713.02	1264.62	167.956
193.000	5722.57	1274.41	171.548
194.000	5732.02	1284.17	175.173
195.000	5741.38	1293.87	178.832
196.000	5750.64	1303.53	182.525
197.000	5759.80	1313.15	186.250
198.000	5768.87	1322.72	190.007
199.000	5777.85	1332.25	193.797
200.000	5786.73	1341.74	197.618
201.000	5795.53	1351.17	201.470
202.000	5804.24	1360.57	205.353
203.000	5812.86	1369.91	209.266
204.000	5821.39	1379.21	213.208
205.000	5829.83	1388.47	217.181
206.000	5838.19	1397.67	221.182
207.000	5846.47	1406.83	225.211
208.000	5854.66	1415.95	229.269
209.000	5862.77	1425.02	233.354
210.000	5870.80	1434.04	237.466
211.000	5878.74	1443.01	241.605
212.000	5886.61	1451.94	245.771
213.000	5894.40	1460.82	249.962
214.000	5902.11	1469.66	254.178
215.000	5909.75	1478.44	258.419
216.000	5917.30	1487.18	262.685
217.000	5924.79	1495.87	266.974
218.000	5932.19	1504.52	271.287
219.000	5939.53	1513.11	275.623
220.000	5946.79	1521.66	279.982
221.000	5953.98	1530.17	284.362
222.000	5961.10	1538.62	288.764
223.000	5968.15	1547.03	293.188
224.000	5975.12	1555.39	297.632
225.000	5982.03	1563.70	302.096
226.000	5988.87	1571.97	306.580
227.000	5995.65	1580.19	311.084
228.000	6002.35	1588.36	315.606
229.000	6009.00	1596.48	320.147
230.000	6015.57	1604.56	324.705
231.000	6022.08	1612.59	329.281
232.000	6028.53	1620.57	333.875
233.000	6034.92	1628.51	338.484
234.000	6041.24	1636.40	343.111
235.000	6047.50	1644.24	347.752
236.000	6053.70	1652.04	352.409
237.000	6059.84	1659.78	357.081
238.000	6065.92	1667.49	361.767
239.000	6071.94	1675.14	366.467
240.000	6077.90	1682.75	371.181
241.000	6083.80	1690.31	375.908
242.000	6089.65	1697.83	380.647
243.000	6095.44	1705.30	385.399
244.000	6101.17	1712.73	390.162
245.000	6106.85	1720.11	394.937
246.000	6112.48	1727.44	399.722

247.000	6118.05	1734.73	404.518
248.000	6123.56	1741.97	409.325
249.000	6129.03	1749.17	414.141
250.000	6134.44	1756.32	418.966
251.000	6139.79	1763.43	423.800
252.000	6145.10	1770.49	428.643
253.000	6150.36	1777.51	433.494
254.000	6155.56	1784.48	438.352
255.000	6160.72	1791.41	443.218
256.000	6165.83	1798.29	448.090
257.000	6170.88	1805.13	452.970
258.000	6175.89	1811.93	457.855
259.000	6180.85	1818.68	462.746
260.000	6185.77	1825.39	467.642
261.000	6190.64	1832.06	472.544
262.000	6195.46	1838.68	477.450
263.000	6200.23	1845.26	482.360
264.000	6204.96	1851.79	487.274
265.000	6209.65	1858.29	492.192
266.000	6214.29	1864.74	497.113
267.000	6218.89	1871.15	502.037
268.000	6223.44	1877.51	506.963
269.000	6227.95	1883.84	511.891
270.000	6232.42	1890.12	516.821
271.000	6236.85	1896.36	521.753
272.000	6241.23	1902.56	526.686
273.000	6245.57	1908.72	531.620
274.000	6249.87	1914.83	536.554
275.000	6254.14	1920.91	541.488
276.000	6258.36	1926.94	546.422
277.000	6262.54	1932.94	551.356
278.000	6266.68	1938.89	556.289
279.000	6270.78	1944.81	561.220
280.000	6274.85	1950.68	566.151
281.000	6278.88	1956.51	571.079
282.000	6282.87	1962.31	576.006
283.000	6286.82	1968.06	580.931
284.000	6290.73	1973.78	585.852
285.000	6294.61	1979.46	590.771
286.000	6298.45	1985.10	595.687
287.000	6302.26	1990.70	600.600
288.000	6306.03	1996.26	605.508
289.000	6309.77	2001.78	610.413
290.000	6313.47	2007.26	615.314
291.000	6317.14	2012.71	620.210
292.000	6320.77	2018.12	625.101
293.000	6324.37	2023.49	629.987
294.000	6327.94	2028.83	634.868
295.000	6331.47	2034.13	639.744
296.000	6334.97	2039.39	644.614
297.000	6338.44	2044.61	649.478
298.000	6341.87	2049.80	654.335
299.000	6345.28	2054.95	659.186
300.000	6348.65	2060.07	664.031
301.000	6351.99	2065.15	668.869
302.000	6355.30	2070.20	673.699
303.000	6358.58	2075.20	678.522
304.000	6361.83	2080.18	683.338
305.000	6365.05	2085.12	688.145
306.000	6368.24	2090.02	692.945
307.000	6371.41	2094.89	697.737
308.000	6374.54	2099.73	702.520
309.000	6377.64	2104.53	707.294
310.000	6380.72	2109.30	712.060
311.000	6383.76	2114.03	716.817
312.000	6386.78	2118.73	721.564
313.000	6389.77	2123.40	726.303
314.000	6392.74	2128.03	731.031
315.000	6395.68	2132.63	735.750

316.000	6398.59	2137.20	740.459
317.000	6401.47	2141.73	745.158
318.000	6404.33	2146.24	749.847
319.000	6407.16	2150.71	754.525
320.000	6409.96	2155.14	759.193
321.000	6412.74	2159.55	763.850
322.000	6415.50	2163.93	768.496
323.000	6418.23	2168.27	773.132
324.000	6420.93	2172.58	777.755
325.000	6423.61	2176.86	782.368
326.000	6426.27	2181.11	786.969
327.000	6428.90	2185.33	791.559
328.000	6431.51	2189.52	796.136
329.000	6434.09	2193.68	800.702
330.000	6436.65	2197.81	805.256
331.000	6439.19	2201.91	809.798
332.000	6441.71	2205.98	814.327
333.000	6444.20	2210.02	818.844
334.000	6446.67	2214.03	823.348
335.000	6449.12	2218.01	827.840
336.000	6451.54	2221.96	832.319
337.000	6453.95	2225.89	836.785
338.000	6456.33	2229.78	841.238
339.000	6458.69	2233.65	845.678
340.000	6461.03	2237.49	850.105
341.000	6463.35	2241.30	854.518
342.000	6465.64	2245.08	858.918
343.000	6467.92	2248.84	863.305
344.000	6470.18	2252.56	867.678
345.000	6472.41	2256.26	872.037
346.000	6474.63	2259.94	876.382
347.000	6476.82	2263.58	880.714
348.000	6479.00	2267.20	885.031
349.000	6481.16	2270.80	889.335
350.000	6483.29	2274.36	893.624
351.000	6485.41	2277.90	897.899
352.000	6487.51	2281.42	902.160
353.000	6489.59	2284.90	906.406
354.000	6491.65	2288.37	910.639
355.000	6493.70	2291.80	914.856
356.000	6495.72	2295.22	919.059
357.000	6497.73	2298.60	923.247
358.000	6499.72	2301.96	927.421
359.000	6501.69	2305.30	931.580
360.000	6503.65	2308.61	935.724
361.000	6505.58	2311.90	939.853
362.000	6507.50	2315.16	943.967
363.000	6509.41	2318.40	948.066
364.000	6511.29	2321.62	952.150
365.000	6513.16	2324.81	956.219
366.000	6515.01	2327.97	960.273
367.000	6516.85	2331.12	964.311
368.000	6518.67	2334.24	968.335
369.000	6520.47	2337.34	972.343
370.000	6522.26	2340.41	976.336
371.000	6524.03	2343.46	980.313
372.000	6525.79	2346.49	984.275
373.000	6527.53	2349.49	988.222
374.000	6529.25	2352.48	992.153
375.000	6530.96	2355.44	996.068
376.000	6532.66	2358.38	999.968
377.000	6534.34	2361.30	1003.85
378.000	6536.00	2364.19	1007.72
379.000	6537.65	2367.06	1011.57
380.000	6539.29	2369.92	1015.41
381.000	6540.91	2372.75	1019.23
382.000	6542.51	2375.56	1023.04
383.000	6544.11	2378.35	1026.83
384.000	6545.69	2381.11	1030.61

385.000	6547.25	2383.86	1034.37
386.000	6548.80	2386.59	1038.11
387.000	6550.34	2389.29	1041.84
388.000	6551.86	2391.98	1045.55
389.000	6553.37	2394.64	1049.24
390.000	6554.87	2397.29	1052.92
391.000	6556.36	2399.91	1056.59
392.000	6557.83	2402.52	1060.24
393.000	6559.29	2405.10	1063.87
394.000	6560.73	2407.67	1067.49
395.000	6562.16	2410.22	1071.09
396.000	6563.58	2412.75	1074.67
397.000	6564.99	2415.26	1078.24
398.000	6566.39	2417.75	1081.80
399.000	6567.77	2420.22	1085.33
400.000	6569.14	2422.67	1088.86
401.000	6570.50	2425.10	1092.36
402.000	6571.85	2427.52	1095.85
403.000	6573.18	2429.92	1099.33
404.000	6574.51	2432.30	1102.79
405.000	6575.82	2434.66	1106.23
406.000	6577.12	2437.00	1109.66
407.000	6578.41	2439.33	1113.07
408.000	6579.69	2441.63	1116.46
409.000	6580.96	2443.92	1119.84
410.000	6582.21	2446.20	1123.21
411.000	6583.46	2448.45	1126.56
412.000	6584.69	2450.69	1129.89
413.000	6585.92	2452.91	1133.21
414.000	6587.13	2455.12	1136.51
415.000	6588.33	2457.31	1139.79
416.000	6589.52	2459.48	1143.06
417.000	6590.71	2461.63	1146.32
418.000	6591.88	2463.77	1149.56
419.000	6593.04	2465.90	1152.78
420.000	6594.19	2468.00	1155.99
421.000	6595.33	2470.09	1159.18
422.000	6596.46	2472.17	1162.36
423.000	6597.58	2474.23	1165.52
424.000	6598.70	2476.27	1168.67
425.000	6599.80	2478.30	1171.80
426.000	6600.89	2480.31	1174.91
427.000	6601.97	2482.31	1178.01
428.000	6603.05	2484.29	1181.10
429.000	6604.11	2486.25	1184.17
430.000	6605.17	2488.21	1187.22
431.000	6606.21	2490.14	1190.26
432.000	6607.25	2492.06	1193.28
433.000	6608.28	2493.97	1196.29
434.000	6609.30	2495.86	1199.28
435.000	6610.31	2497.74	1202.26
436.000	6611.31	2499.61	1205.22
437.000	6612.30	2501.46	1208.17
438.000	6613.29	2503.29	1211.10
439.000	6614.27	2505.11	1214.02
440.000	6615.23	2506.92	1216.93
441.000	6616.19	2508.71	1219.81
442.000	6617.14	2510.49	1222.69
443.000	6618.09	2512.26	1225.54
444.000	6619.02	2514.01	1228.39
445.000	6619.95	2515.75	1231.22
446.000	6620.87	2517.48	1234.03
447.000	6621.78	2519.19	1236.83
448.000	6622.68	2520.89	1239.62
449.000	6623.58	2522.58	1242.39
450.000	6624.47	2524.25	1245.14
451.000	6625.35	2525.91	1247.88
452.000	6626.22	2527.56	1250.61
453.000	6627.08	2529.20	1253.32

454.000	6627.94	2530.82	1256.02
455.000	6628.79	2532.43	1258.70
456.000	6629.63	2534.03	1261.37
457.000	6630.47	2535.62	1264.03
458.000	6631.30	2537.19	1266.67
459.000	6632.12	2538.75	1269.29
460.000	6632.94	2540.30	1271.91
461.000	6633.74	2541.84	1274.50
462.000	6634.54	2543.37	1277.09
463.000	6635.34	2544.88	1279.66
464.000	6636.13	2546.39	1282.22
465.000	6636.91	2547.88	1284.76
466.000	6637.68	2549.36	1287.29
467.000	6638.45	2550.83	1289.80
468.000	6639.21	2552.28	1292.30
469.000	6639.96	2553.73	1294.79
470.000	6640.71	2555.16	1297.26
471.000	6641.45	2556.59	1299.72
472.000	6642.19	2558.00	1302.17
473.000	6642.91	2559.40	1304.60
474.000	6643.64	2560.79	1307.02
475.000	6644.35	2562.17	1309.43
476.000	6645.06	2563.54	1311.82
477.000	6645.77	2564.90	1314.20
478.000	6646.47	2566.25	1316.57
479.000	6647.16	2567.59	1318.92
480.000	6647.84	2568.92	1321.26
481.000	6648.53	2570.24	1323.59
482.000	6649.20	2571.55	1325.90
483.000	6649.87	2572.84	1328.20
484.000	6650.53	2574.13	1330.49
485.000	6651.19	2575.41	1332.77
486.000	6651.84	2576.68	1335.03
487.000	6652.49	2577.94	1337.28
488.000	6653.13	2579.18	1339.51
489.000	6653.77	2580.42	1341.74
490.000	6654.40	2581.65	1343.95
491.000	6655.02	2582.87	1346.15
492.000	6655.64	2584.08	1348.33
493.000	6656.26	2585.28	1350.50
494.000	6656.86	2586.48	1352.67
495.000	6657.47	2587.66	1354.81
496.000	6658.07	2588.83	1356.95
497.000	6658.66	2590.00	1359.07
498.000	6659.25	2591.15	1361.18
499.000	6659.83	2592.30	1363.28
500.000	6660.41	2593.44	1365.37
501.000	6660.99	2594.57	1367.45
502.000	6661.56	2595.69	1369.51
503.000	6662.12	2596.80	1371.56
504.000	6662.68	2597.90	1373.60
505.000	6663.24	2599.00	1375.63
506.000	6663.79	2600.08	1377.64
507.000	6664.33	2601.16	1379.64
508.000	6664.87	2602.23	1381.64
509.000	6665.41	2603.29	1383.62
510.000	6665.94	2604.34	1385.58
511.000	6666.47	2605.39	1387.54
512.000	6666.99	2606.42	1389.49
513.000	6667.51	2607.45	1391.42
514.000	6668.02	2608.47	1393.34
515.000	6668.53	2609.49	1395.25
516.000	6669.04	2610.49	1397.15
517.000	6669.54	2611.49	1399.04
518.000	6670.04	2612.48	1400.92
519.000	6670.53	2613.46	1402.79
520.000	6671.02	2614.43	1404.64
521.000	6671.50	2615.40	1406.48
522.000	6671.99	2616.36	1408.32

523.000	6672.46	2617.31	1410.14
524.000	6672.93	2618.26	1411.95
525.000	6673.40	2619.19	1413.75
526.000	6673.87	2620.12	1415.54
527.000	6674.33	2621.05	1417.32
528.000	6674.79	2621.96	1419.09
529.000	6675.24	2622.87	1420.84
530.000	6675.69	2623.77	1422.59
531.000	6676.13	2624.67	1424.33
532.000	6676.58	2625.55	1426.05
533.000	6677.01	2626.43	1427.77
534.000	6677.45	2627.31	1429.47
535.000	6677.88	2628.18	1431.17
536.000	6678.31	2629.04	1432.85
537.000	6678.73	2629.89	1434.52
538.000	6679.15	2630.74	1436.19
539.000	6679.57	2631.58	1437.84
540.000	6679.98	2632.41	1439.48
541.000	6680.39	2633.24	1441.12
542.000	6680.79	2634.06	1442.74
543.000	6681.20	2634.87	1444.35
544.000	6681.60	2635.68	1445.96
545.000	6681.99	2636.48	1447.55
546.000	6682.39	2637.28	1449.13
547.000	6682.77	2638.07	1450.71
548.000	6683.16	2638.85	1452.27
549.000	6683.54	2639.63	1453.83
550.000	6683.92	2640.40	1455.37
551.000	6684.30	2641.17	1456.91
552.000	6684.67	2641.93	1458.43
553.000	6685.04	2642.68	1459.95
554.000	6685.41	2643.43	1461.46
555.000	6685.78	2644.17	1462.96
556.000	6686.14	2644.91	1464.45
557.000	6686.50	2645.64	1465.92
558.000	6686.85	2646.36	1467.39
559.000	6687.20	2647.08	1468.86
560.000	6687.55	2647.80	1470.31
561.000	6687.90	2648.51	1471.75
562.000	6688.24	2649.21	1473.18
563.000	6688.58	2649.91	1474.61
564.000	6688.92	2650.60	1476.03
565.000	6689.26	2651.28	1477.43
566.000	6689.59	2651.96	1478.83
567.000	6689.92	2652.64	1480.22
568.000	6690.24	2653.31	1481.60
569.000	6690.57	2653.98	1482.97
570.000	6690.89	2654.64	1484.34
571.000	6691.21	2655.29	1485.69
572.000	6691.52	2655.94	1487.04
573.000	6691.84	2656.59	1488.38
574.000	6692.15	2657.23	1489.71
575.000	6692.46	2657.86	1491.03
576.000	6692.76	2658.49	1492.34
577.000	6693.06	2659.12	1493.64
578.000	6693.37	2659.74	1494.94
579.000	6693.66	2660.35	1496.23
580.000	6693.96	2660.96	1497.51
581.000	6694.25	2661.57	1498.78
582.000	6694.54	2662.17	1500.04
583.000	6694.83	2662.77	1501.30
584.000	6695.12	2663.36	1502.54
585.000	6695.40	2663.95	1503.78
586.000	6695.68	2664.53	1505.02
587.000	6695.96	2665.11	1506.24
588.000	6696.24	2665.68	1507.45
589.000	6696.51	2666.25	1508.66
590.000	6696.78	2666.82	1509.86
591.000	6697.05	2667.38	1511.06

592.000	6697.32	2667.93	1512.24
593.000	6697.59	2668.49	1513.42
594.000	6697.85	2669.03	1514.59
595.000	6698.11	2669.58	1515.75
596.000	6698.37	2670.12	1516.91
597.000	6698.63	2670.65	1518.05
598.000	6698.88	2671.18	1519.19
599.000	6699.13	2671.71	1520.33
600.000	6699.38	2672.23	1521.45
601.000	6699.63	2672.75	1522.57
602.000	6699.88	2673.26	1523.68
603.000	6700.12	2673.77	1524.78
604.000	6700.36	2674.28	1525.88
605.000	6700.60	2674.78	1526.97
606.000	6700.84	2675.28	1528.05
607.000	6701.08	2675.78	1529.13
608.000	6701.31	2676.27	1530.20
609.000	6701.54	2676.76	1531.26
610.000	6701.77	2677.24	1532.31
611.000	6702.00	2677.72	1533.36
612.000	6702.23	2678.19	1534.40
613.000	6702.46	2678.67	1535.43
614.000	6702.68	2679.14	1536.46
615.000	6702.90	2679.60	1537.48
616.000	6703.12	2680.06	1538.50
617.000	6703.34	2680.52	1539.50
618.000	6703.55	2680.97	1540.51
619.000	6703.77	2681.42	1541.50
620.000	6703.98	2681.87	1542.49
621.000	6704.19	2682.31	1543.47
622.000	6704.40	2682.75	1544.44
623.000	6704.60	2683.19	1545.41
624.000	6704.81	2683.62	1546.37
625.000	6705.01	2684.05	1547.33
626.000	6705.21	2684.48	1548.28
627.000	6705.41	2684.90	1549.22
628.000	6705.61	2685.32	1550.16
629.000	6705.81	2685.74	1551.09
630.000	6706.00	2686.16	1552.02
631.000	6706.20	2686.57	1552.93
632.000	6706.39	2686.97	1553.85
633.000	6706.58	2687.38	1554.75
634.000	6706.77	2687.78	1555.65
635.000	6706.96	2688.18	1556.55
636.000	6707.14	2688.57	1557.44
637.000	6707.33	2688.96	1558.32
638.000	6707.51	2689.35	1559.20
639.000	6707.69	2689.74	1560.07
640.000	6707.87	2690.12	1560.94
641.000	6708.05	2690.50	1561.80
642.000	6708.23	2690.87	1562.65
643.000	6708.40	2691.25	1563.50
644.000	6708.58	2691.62	1564.34
645.000	6708.75	2691.99	1565.18
646.000	6708.92	2692.35	1566.01
647.000	6709.09	2692.71	1566.84
648.000	6709.26	2693.07	1567.66
649.000	6709.43	2693.43	1568.47
650.000	6709.59	2693.78	1569.28
651.000	6709.76	2694.13	1570.09
652.000	6709.92	2694.48	1570.88
653.000	6710.08	2694.83	1571.68
654.000	6710.24	2695.17	1572.47
655.000	6710.40	2695.51	1573.25
656.000	6710.56	2695.85	1574.03
657.000	6710.71	2696.18	1574.80
658.000	6710.87	2696.52	1575.57
659.000	6711.02	2696.85	1576.33
660.000	6711.18	2697.17	1577.09

661.000	6711.33	2697.50	1577.84
662.000	6711.48	2697.82	1578.59
663.000	6711.63	2698.14	1579.33
664.000	6711.77	2698.46	1580.07
665.000	6711.92	2698.77	1580.80
666.000	6712.06	2699.08	1581.53
667.000	6712.21	2699.39	1582.25
668.000	6712.35	2699.70	1582.97
669.000	6712.49	2700.01	1583.68
670.000	6712.63	2700.31	1584.39
671.000	6712.77	2700.61	1585.09
672.000	6712.91	2700.91	1585.79
673.000	6713.05	2701.20	1586.48
674.000	6713.19	2701.49	1587.17
675.000	6713.32	2701.79	1587.85
676.000	6713.45	2702.07	1588.53
677.000	6713.59	2702.36	1589.21
678.000	6713.72	2702.65	1589.88
679.000	6713.85	2702.93	1590.55
680.000	6713.98	2703.21	1591.21
681.000	6714.11	2703.49	1591.86
682.000	6714.23	2703.76	1592.52
683.000	6714.36	2704.03	1593.17
684.000	6714.49	2704.31	1593.81
685.000	6714.61	2704.57	1594.45
686.000	6714.73	2704.84	1595.08
687.000	6714.86	2705.11	1595.72
688.000	6714.98	2705.37	1596.34
689.000	6715.10	2705.63	1596.96
690.000	6715.22	2705.89	1597.58
691.000	6715.33	2706.15	1598.20
692.000	6715.45	2706.40	1598.81
693.000	6715.57	2706.65	1599.41
694.000	6715.68	2706.91	1600.01
695.000	6715.80	2707.15	1600.61
696.000	6715.91	2707.40	1601.20
697.000	6716.03	2707.65	1601.79
698.000	6716.14	2707.89	1602.38
699.000	6716.25	2708.13	1602.96
700.000	6716.36	2708.37	1603.54
701.000	6716.47	2708.61	1604.11
702.000	6716.58	2708.84	1604.68
703.000	6716.68	2709.08	1605.25
704.000	6716.79	2709.31	1605.81
705.000	6716.89	2709.54	1606.36
706.000	6717.00	2709.77	1606.92
707.000	6717.10	2710.00	1607.47
708.000	6717.21	2710.22	1608.02
709.000	6717.31	2710.44	1608.56
710.000	6717.41	2710.67	1609.10
711.000	6717.51	2710.89	1609.63
712.000	6717.61	2711.10	1610.16
713.000	6717.71	2711.32	1610.69
714.000	6717.81	2711.53	1611.22
715.000	6717.90	2711.75	1611.74
716.000	6718.00	2711.96	1612.26
717.000	6718.10	2712.17	1612.77
718.000	6718.19	2712.38	1613.28
719.000	6718.29	2712.58	1613.79
720.000	6718.38	2712.79	1614.29
721.000	6718.47	2712.99	1614.79
722.000	6718.56	2713.19	1615.28
723.000	6718.66	2713.39	1615.78
724.000	6718.75	2713.59	1616.27
725.000	6718.84	2713.79	1616.75
726.000	6718.92	2713.98	1617.24
727.000	6719.01	2714.18	1617.72
728.000	6719.10	2714.37	1618.19
729.000	6719.19	2714.56	1618.66

730.000	6719.27	2714.75	1619.13
731.000	6719.36	2714.94	1619.60
732.000	6719.44	2715.13	1620.06
733.000	6719.53	2715.31	1620.52
734.000	6719.61	2715.49	1620.98
735.000	6719.69	2715.68	1621.43
736.000	6719.78	2715.86	1621.88
737.000	6719.86	2716.04	1622.33
738.000	6719.94	2716.21	1622.78
739.000	6720.02	2716.39	1623.22
740.000	6720.10	2716.57	1623.66
741.000	6720.18	2716.74	1624.09
742.000	6720.25	2716.91	1624.52
743.000	6720.33	2717.08	1624.95
744.000	6720.41	2717.25	1625.38
745.000	6720.49	2717.42	1625.80
746.000	6720.56	2717.59	1626.22
747.000	6720.64	2717.76	1626.64
748.000	6720.71	2717.92	1627.05
749.000	6720.78	2718.08	1627.46
750.000	6720.86	2718.25	1627.87
751.000	6720.93	2718.41	1628.28
752.000	6721.00	2718.57	1628.68
753.000	6721.07	2718.72	1629.08
754.000	6721.14	2718.88	1629.48
755.000	6721.21	2719.04	1629.87
756.000	6721.28	2719.19	1630.27
757.000	6721.35	2719.35	1630.66
758.000	6721.42	2719.50	1631.04
759.000	6721.49	2719.65	1631.43
760.000	6721.56	2719.80	1631.81
761.000	6721.63	2719.95	1632.19
762.000	6721.69	2720.10	1632.56
763.000	6721.76	2720.24	1632.93
764.000	6721.82	2720.39	1633.31
765.000	6721.89	2720.53	1633.67
766.000	6721.95	2720.67	1634.04
767.000	6722.02	2720.82	1634.40
768.000	6722.08	2720.96	1634.76
769.000	6722.14	2721.10	1635.12
770.000	6722.20	2721.24	1635.48
771.000	6722.27	2721.37	1635.83
772.000	6722.33	2721.51	1636.18
773.000	6722.39	2721.65	1636.53
774.000	6722.45	2721.78	1636.87
775.000	6722.51	2721.91	1637.22
776.000	6722.57	2722.05	1637.56
777.000	6722.63	2722.18	1637.89
778.000	6722.68	2722.31	1638.23
779.000	6722.74	2722.44	1638.56
780.000	6722.80	2722.56	1638.90
781.000	6722.86	2722.69	1639.22
782.000	6722.91	2722.82	1639.55
783.000	6722.97	2722.94	1639.88
784.000	6723.03	2723.07	1640.20
785.000	6723.08	2723.19	1640.52
786.000	6723.14	2723.31	1640.84
787.000	6723.19	2723.44	1641.15
788.000	6723.24	2723.56	1641.46
789.000	6723.30	2723.68	1641.77
790.000	6723.35	2723.79	1642.08
791.000	6723.40	2723.91	1642.39
792.000	6723.45	2724.03	1642.69
793.000	6723.51	2724.14	1643.00
794.000	6723.56	2724.26	1643.30
795.000	6723.61	2724.37	1643.60
796.000	6723.66	2724.49	1643.89
797.000	6723.71	2724.60	1644.19
798.000	6723.76	2724.71	1644.48

799.000	6723.81	2724.82	1644.77
800.000	6723.86	2724.93	1645.05
801.000	6723.91	2725.04	1645.34
802.000	6723.95	2725.15	1645.62
803.000	6724.00	2725.26	1645.91
804.000	6724.05	2725.36	1646.19
805.000	6724.10	2725.47	1646.46
806.000	6724.14	2725.57	1646.74
807.000	6724.19	2725.68	1647.01
808.000	6724.23	2725.78	1647.28
809.000	6724.28	2725.88	1647.55
810.000	6724.32	2725.98	1647.82
811.000	6724.37	2726.08	1648.09
812.000	6724.41	2726.18	1648.35
813.000	6724.46	2726.28	1648.62
814.000	6724.50	2726.38	1648.88
815.000	6724.54	2726.48	1649.14
816.000	6724.59	2726.58	1649.39
817.000	6724.63	2726.67	1649.65
818.000	6724.67	2726.77	1649.90
819.000	6724.71	2726.86	1650.15
820.000	6724.76	2726.96	1650.40
821.000	6724.80	2727.05	1650.65
822.000	6724.84	2727.14	1650.90
823.000	6724.88	2727.23	1651.14
824.000	6724.92	2727.32	1651.38
825.000	6724.96	2727.42	1651.62
826.000	6725.00	2727.50	1651.86
827.000	6725.04	2727.59	1652.10
828.000	6725.08	2727.68	1652.34
829.000	6725.12	2727.77	1652.57
830.000	6725.15	2727.86	1652.80
831.000	6725.19	2727.94	1653.04
832.000	6725.23	2728.03	1653.26
833.000	6725.27	2728.11	1653.49
834.000	6725.31	2728.20	1653.72
835.000	6725.34	2728.28	1653.94
836.000	6725.38	2728.36	1654.17
837.000	6725.41	2728.45	1654.39
838.000	6725.45	2728.53	1654.61
839.000	6725.49	2728.61	1654.82
840.000	6725.52	2728.69	1655.04
841.000	6725.56	2728.77	1655.26
842.000	6725.59	2728.85	1655.47
843.000	6725.63	2728.93	1655.68
844.000	6725.66	2729.00	1655.89
845.000	6725.70	2729.08	1656.10
846.000	6725.73	2729.16	1656.31
847.000	6725.76	2729.23	1656.52
848.000	6725.80	2729.31	1656.72
849.000	6725.83	2729.39	1656.92
850.000	6725.86	2729.46	1657.12
851.000	6725.89	2729.53	1657.32
852.000	6725.93	2729.61	1657.52
853.000	6725.96	2729.68	1657.72
854.000	6725.99	2729.75	1657.92
855.000	6726.02	2729.82	1658.11
856.000	6726.05	2729.89	1658.31
857.000	6726.08	2729.96	1658.50
858.000	6726.11	2730.03	1658.69
859.000	6726.14	2730.10	1658.88
860.000	6726.17	2730.17	1659.06
861.000	6726.20	2730.24	1659.25
862.000	6726.23	2730.31	1659.44
863.000	6726.26	2730.38	1659.62
864.000	6726.29	2730.44	1659.80
865.000	6726.32	2730.51	1659.98
866.000	6726.35	2730.57	1660.16
867.000	6726.38	2730.64	1660.34

868.000	6726.41	2730.70	1660.52
869.000	6726.44	2730.77	1660.70
870.000	6726.46	2730.83	1660.87
871.000	6726.49	2730.89	1661.04
872.000	6726.52	2730.96	1661.22
873.000	6726.55	2731.02	1661.39
874.000	6726.57	2731.08	1661.56
875.000	6726.60	2731.14	1661.73
876.000	6726.63	2731.20	1661.89
877.000	6726.65	2731.26	1662.06
878.000	6726.68	2731.32	1662.22
879.000	6726.70	2731.38	1662.39
880.000	6726.73	2731.44	1662.55
881.000	6726.76	2731.50	1662.71
882.000	6726.78	2731.56	1662.87
883.000	6726.81	2731.61	1663.03
884.000	6726.83	2731.67	1663.19
885.000	6726.86	2731.73	1663.35
886.000	6726.88	2731.78	1663.50
887.000	6726.90	2731.84	1663.66
888.000	6726.93	2731.90	1663.81
889.000	6726.95	2731.95	1663.96
890.000	6726.98	2732.01	1664.12
891.000	6727.00	2732.06	1664.27
892.000	6727.02	2732.11	1664.42
893.000	6727.05	2732.17	1664.56
894.000	6727.07	2732.22	1664.71
895.000	6727.09	2732.27	1664.86
896.000	6727.11	2732.32	1665.00
897.000	6727.14	2732.38	1665.15
898.000	6727.16	2732.43	1665.29
899.000	6727.18	2732.48	1665.43
900.000	6727.20	2732.53	1665.57
901.000	6727.23	2732.58	1665.71
902.000	6727.25	2732.63	1665.85
903.000	6727.27	2732.68	1665.99
904.000	6727.29	2732.73	1666.12
905.000	6727.31	2732.77	1666.26
906.000	6727.33	2732.82	1666.40
907.000	6727.35	2732.87	1666.53
908.000	6727.37	2732.92	1666.66
909.000	6727.39	2732.96	1666.79
910.000	6727.41	2733.01	1666.93
911.000	6727.43	2733.06	1667.06
912.000	6727.45	2733.10	1667.19
913.000	6727.47	2733.15	1667.31
914.000	6727.49	2733.19	1667.44
915.000	6727.51	2733.24	1667.57
916.000	6727.53	2733.28	1667.69
917.000	6727.55	2733.33	1667.82
918.000	6727.57	2733.37	1667.94
919.000	6727.59	2733.41	1668.06
920.000	6727.61	2733.46	1668.19
921.000	6727.63	2733.50	1668.31
922.000	6727.64	2733.54	1668.43
923.000	6727.66	2733.58	1668.55
924.000	6727.68	2733.63	1668.67
925.000	6727.70	2733.67	1668.78
926.000	6727.72	2733.71	1668.90
927.000	6727.73	2733.75	1669.02
928.000	6727.75	2733.79	1669.13
929.000	6727.77	2733.83	1669.24
930.000	6727.79	2733.87	1669.36
931.000	6727.80	2733.91	1669.47
932.000	6727.82	2733.95	1669.58
933.000	6727.84	2733.99	1669.69
934.000	6727.85	2734.03	1669.80
935.000	6727.87	2734.07	1669.91
936.000	6727.89	2734.10	1670.02

937.000	6727.90	2734.14	1670.13
938.000	6727.92	2734.18	1670.24
939.000	6727.94	2734.22	1670.34
940.000	6727.95	2734.25	1670.45
941.000	6727.97	2734.29	1670.55
942.000	6727.98	2734.33	1670.66
943.000	6728.00	2734.36	1670.76
944.000	6728.01	2734.40	1670.86
945.000	6728.03	2734.43	1670.97
946.000	6728.04	2734.47	1671.07
947.000	6728.06	2734.50	1671.17
948.000	6728.07	2734.54	1671.27
949.000	6728.09	2734.57	1671.36
950.000	6728.10	2734.61	1671.46
951.000	6728.12	2734.64	1671.56
952.000	6728.13	2734.67	1671.66
953.000	6728.15	2734.71	1671.75
954.000	6728.16	2734.74	1671.85
955.000	6728.18	2734.77	1671.94
956.000	6728.19	2734.81	1672.04
957.000	6728.20	2734.84	1672.13
958.000	6728.22	2734.87	1672.22
959.000	6728.23	2734.90	1672.32
960.000	6728.25	2734.93	1672.41
961.000	6728.26	2734.97	1672.50
962.000	6728.27	2735.00	1672.59
963.000	6728.29	2735.03	1672.68
964.000	6728.30	2735.06	1672.77
965.000	6728.31	2735.09	1672.85
966.000	6728.32	2735.12	1672.94
967.000	6728.34	2735.15	1673.03
968.000	6728.35	2735.18	1673.11
969.000	6728.36	2735.21	1673.20
970.000	6728.38	2735.24	1673.28
971.000	6728.39	2735.27	1673.37
972.000	6728.40	2735.30	1673.45
973.000	6728.41	2735.32	1673.53
974.000	6728.42	2735.35	1673.62
975.000	6728.44	2735.38	1673.70
976.000	6728.45	2735.41	1673.78
977.000	6728.46	2735.44	1673.86
978.000	6728.47	2735.46	1673.94
979.000	6728.48	2735.49	1674.02
980.000	6728.50	2735.52	1674.10
981.000	6728.51	2735.55	1674.18
982.000	6728.52	2735.57	1674.26
983.000	6728.53	2735.60	1674.33
984.000	6728.54	2735.62	1674.41
985.000	6728.55	2735.65	1674.49
986.000	6728.56	2735.68	1674.56
987.000	6728.57	2735.70	1674.64
988.000	6728.59	2735.73	1674.71
989.000	6728.60	2735.75	1674.78
990.000	6728.61	2735.78	1674.86
991.000	6728.62	2735.80	1674.93
992.000	6728.63	2735.83	1675.00
993.000	6728.64	2735.85	1675.07
994.000	6728.65	2735.88	1675.15
995.000	6728.66	2735.90	1675.22
996.000	6728.67	2735.92	1675.29
997.000	6728.68	2735.95	1675.36
998.000	6728.69	2735.97	1675.43
999.000	6728.70	2735.99	1675.49
1000.00	6728.71	2736.02	1675.56

TITLE : SMITHS GROCERY
CBM JOB # : 10629
SC ID # : 09322

Contaminant of Concern is NAPHTHALENE

C(x,0,0,t)=(C0/2)erfc[(x-vt)/2(Ax*vt)1/2]
erf[Y/4(Ay*x)1/2]erf[Z/2(alphz*x)1/2]

INPUT PARAMETERS :
Concentration of Source (ppb) = 900.00
Source Width (ft) = 150.00
Vertical Thickness of Source (ft) = 38.00
Distance of Recipient (ft) =1000.00
Groundwater Flow Velocity (ft/yr) = 3.65
Time of Simulation (years) = 1000.00
Longitudinal Dispersivity (ft) = 100.000000
Transverse Dispersivity (ft) = 33.333332
Vertical Dispersivity (ft) = 5.000000
Total Organic Carbon, TOC (mg/kg) = 60.00
Total Petroleum Hydrocarbons,TPH(mg/kg) = 0.00
Soil/Water Part. Coefficient,Koc(ml/g) = 1543.00
Organic Carbon Fraction, foc (%) = 0.0000600
Porosity = .250
Bulk Density (g/cc) = 1.530
Retardation Factor, Rf = 1.56661
Contaminant Velocity (ft/yr) = 2.32987

CONCENTRATION COMPUTED FOR :
220.000 ft. 600.000 ft 1000.000 ft.

TIME (yrs)	CONC. (ppb)	CONC. (ppb)	CONC. (ppb)
1.00000	0.000000	0.000000	0.000000
2.00000	0.000000	0.000000	0.000000
3.00000	0.000000	0.000000	0.000000
4.00000	0.000000	0.000000	0.000000
5.00000	0.000000	0.000000	0.000000
6.00000	0.119093E-01	0.000000	0.000000
7.00000	0.440291E-01	0.000000	0.000000
8.00000	0.118445	0.000000	0.000000
9.00000	0.257388	0.000000	0.000000
10.0000	0.481272	0.000000	0.000000
11.0000	0.806275	0.000000	0.000000
12.0000	1.24344	0.000000	0.000000
13.0000	1.79882	0.000000	0.000000
14.0000	2.47417	0.000000	0.000000
15.0000	3.26780	0.000000	0.000000
16.0000	4.17550	0.000000	0.000000
17.0000	5.19127	0.000000	0.000000
18.0000	6.30800	0.000000	0.000000
19.0000	7.51790	0.000000	0.000000
20.0000	8.81294	0.000000	0.000000
21.0000	10.1851	0.000000	0.000000
22.0000	11.6265	0.000000	0.000000
23.0000	13.1297	0.000000	0.000000
24.0000	14.6875	0.000000	0.000000
25.0000	16.2933	0.000000	0.000000
26.0000	17.9409	0.000000	0.000000
27.0000	19.6245	0.000000	0.000000
28.0000	21.3389	0.000000	0.000000
29.0000	23.0793	0.000000	0.000000
30.0000	24.8413	0.000000	0.000000
31.0000	26.6210	0.000000	0.000000
32.0000	28.4145	0.000000	0.000000
33.0000	30.2188	0.122627E-02	0.000000
34.0000	32.0308	0.174805E-02	0.000000
35.0000	33.8479	0.244305E-02	0.000000
36.0000	35.6675	0.335282E-02	0.000000
37.0000	37.4877	0.452495E-02	0.000000
38.0000	39.3064	0.601314E-02	0.000000
39.0000	41.1218	0.787730E-02	0.000000
40.0000	42.9325	0.101835E-01	0.000000

41.0000	44.7370	0.130038E-01	0.000000
42.0000	46.5341	0.164164E-01	0.000000
43.0000	48.3226	0.205046E-01	0.000000
44.0000	50.1016	0.253575E-01	0.000000
45.0000	51.8702	0.310687E-01	0.000000
46.0000	53.6276	0.377367E-01	0.000000
47.0000	55.3732	0.454634E-01	0.000000
48.0000	57.1063	0.543548E-01	0.000000
49.0000	58.8265	0.645197E-01	0.000000
50.0000	60.5332	0.760691E-01	0.000000
51.0000	62.2262	0.891163E-01	0.000000
52.0000	63.9049	0.103776	0.000000
53.0000	65.5693	0.120163	0.000000
54.0000	67.2190	0.138394	0.000000
55.0000	68.8538	0.158584	0.000000
56.0000	70.4736	0.180849	0.000000
57.0000	72.0782	0.205302	0.000000
58.0000	73.6676	0.232057	0.000000
59.0000	75.2417	0.261223	0.000000
60.0000	76.8004	0.292910	0.000000
61.0000	78.3437	0.327223	0.000000
62.0000	79.8716	0.364265	0.000000
63.0000	81.3842	0.404136	0.000000
64.0000	82.8814	0.446933	0.000000
65.0000	84.3633	0.492749	0.000000
66.0000	85.8299	0.541672	0.000000
67.0000	87.2814	0.593788	0.000000
68.0000	88.7178	0.649177	0.000000
69.0000	90.1393	0.707916	0.000000
70.0000	91.5458	0.770078	0.000000
71.0000	92.9375	0.835731	0.000000
72.0000	94.3146	0.904937	0.000000
73.0000	95.6770	0.977757	0.000000
74.0000	97.0251	1.05424	0.000000
75.0000	98.3588	1.13445	0.000000
76.0000	99.6784	1.21842	0.000000
77.0000	100.984	1.30619	0.000000
78.0000	102.275	1.39780	0.000000
79.0000	103.553	1.49329	0.000000
80.0000	104.818	1.59268	0.769565E-03
81.0000	106.068	1.69600	0.909674E-03
82.0000	107.306	1.80326	0.107096E-02
83.0000	108.530	1.91449	0.125594E-02
84.0000	109.741	2.02969	0.146733E-02
85.0000	110.939	2.14887	0.170809E-02
86.0000	112.124	2.27204	0.198139E-02
87.0000	113.297	2.39920	0.229061E-02
88.0000	114.458	2.53035	0.263943E-02
89.0000	115.606	2.66548	0.303172E-02
90.0000	116.741	2.80458	0.347164E-02
91.0000	117.865	2.94764	0.396359E-02
92.0000	118.977	3.09464	0.451224E-02
93.0000	120.077	3.24558	0.512253E-02
94.0000	121.166	3.40042	0.579968E-02
95.0000	122.243	3.55915	0.654918E-02
96.0000	123.309	3.72174	0.737678E-02
97.0000	124.363	3.88816	0.828854E-02
98.0000	125.406	4.05838	0.929078E-02
99.0000	126.439	4.23237	0.103901E-01
100.000	127.461	4.41010	0.115934E-01
101.000	128.472	4.59153	0.129079E-01
102.000	129.472	4.77662	0.143410E-01
103.000	130.462	4.96533	0.159003E-01
104.000	131.442	5.15762	0.175941E-01
105.000	132.412	5.35345	0.194304E-01
106.000	133.372	5.55277	0.214178E-01
107.000	134.322	5.75554	0.235651E-01
108.000	135.262	5.96172	0.258815E-01
109.000	136.192	6.17125	0.283761E-01

110.000	137.113	6.38409	0.310585E-01
111.000	138.024	6.60018	0.339385E-01
112.000	138.926	6.81948	0.370262E-01
113.000	139.819	7.04193	0.403317E-01
114.000	140.703	7.26749	0.438654E-01
115.000	141.578	7.49610	0.476382E-01
116.000	142.444	7.72770	0.516608E-01
117.000	143.302	7.96225	0.559441E-01
118.000	144.150	8.19969	0.604996E-01
119.000	144.990	8.43997	0.653385E-01
120.000	145.822	8.68302	0.704724E-01
121.000	146.646	8.92880	0.759129E-01
122.000	147.461	9.17725	0.816720E-01
123.000	148.268	9.42831	0.877615E-01
124.000	149.067	9.68194	0.941936E-01
125.000	149.858	9.93806	0.100980
126.000	150.642	10.1966	0.108134
127.000	151.417	10.4576	0.115667
128.000	152.185	10.7209	0.123592
129.000	152.945	10.9865	0.131920
130.000	153.698	11.2543	0.140666
131.000	154.444	11.5243	0.149841
132.000	155.182	11.7964	0.159458
133.000	155.913	12.0706	0.169529
134.000	156.637	12.3467	0.180068
135.000	157.354	12.6249	0.191086
136.000	158.064	12.9049	0.202597
137.000	158.767	13.1868	0.214612
138.000	159.464	13.4704	0.227145
139.000	160.154	13.7558	0.240208
140.000	160.837	14.0429	0.253813
141.000	161.513	14.3316	0.267973
142.000	162.183	14.6220	0.282701
143.000	162.847	14.9138	0.298007
144.000	163.504	15.2071	0.313904
145.000	164.155	15.5019	0.330405
146.000	164.800	15.7981	0.347522
147.000	165.439	16.0956	0.365265
148.000	166.072	16.3943	0.383647
149.000	166.699	16.6944	0.402679
150.000	167.320	16.9956	0.422373
151.000	167.935	17.2979	0.442739
152.000	168.544	17.6014	0.463789
153.000	169.148	17.9059	0.485534
154.000	169.746	18.2114	0.507985
155.000	170.338	18.5179	0.531151
156.000	170.925	18.8253	0.555044
157.000	171.507	19.1336	0.579673
158.000	172.083	19.4427	0.605049
159.000	172.654	19.7526	0.631181
160.000	173.220	20.0633	0.658078
161.000	173.780	20.3747	0.685751
162.000	174.335	20.6867	0.714208
163.000	174.885	20.9994	0.743459
164.000	175.430	21.3126	0.773511
165.000	175.971	21.6265	0.804374
166.000	176.506	21.9408	0.836055
167.000	177.036	22.2556	0.868563
168.000	177.562	22.5709	0.901905
169.000	178.082	22.8865	0.936089
170.000	178.598	23.2026	0.971123
171.000	179.110	23.5189	1.00701
172.000	179.617	23.8356	1.04377
173.000	180.119	24.1525	1.08139
174.000	180.617	24.4697	1.11989
175.000	181.110	24.7870	1.15927
176.000	181.599	25.1046	1.19954
177.000	182.083	25.4222	1.24070
178.000	182.563	25.7400	1.28276

179.000	183.039	26.0578	1.32572
180.000	183.511	26.3757	1.36960
181.000	183.978	26.6936	1.41438
182.000	184.442	27.0115	1.46009
183.000	184.901	27.3294	1.50671
184.000	185.356	27.6472	1.55426
185.000	185.807	27.9649	1.60274
186.000	186.255	28.2824	1.65215
187.000	186.698	28.5998	1.70250
188.000	187.137	28.9171	1.75379
189.000	187.573	29.2341	1.80601
190.000	188.004	29.5509	1.85918
191.000	188.432	29.8675	1.91330
192.000	188.857	30.1838	1.96836
193.000	189.277	30.4998	2.02437
194.000	189.694	30.8155	2.08132
195.000	190.107	31.1309	2.13923
196.000	190.517	31.4458	2.19810
197.000	190.923	31.7604	2.25791
198.000	191.326	32.0746	2.31868
199.000	191.725	32.3884	2.38040
200.000	192.121	32.7017	2.44307
201.000	192.513	33.0146	2.50670
202.000	192.902	33.3270	2.57128
203.000	193.288	33.6389	2.63681
204.000	193.670	33.9502	2.70329
205.000	194.049	34.2610	2.77073
206.000	194.425	34.5713	2.83911
207.000	194.798	34.8810	2.90843
208.000	195.167	35.1901	2.97871
209.000	195.534	35.4986	3.04992
210.000	195.897	35.8065	3.12208
211.000	196.257	36.1137	3.19518
212.000	196.614	36.4203	3.26921
213.000	196.968	36.7262	3.34418
214.000	197.319	37.0315	3.42007
215.000	197.667	37.3360	3.49690
216.000	198.013	37.6399	3.57465
217.000	198.355	37.9430	3.65332
218.000	198.694	38.2454	3.73291
219.000	199.031	38.5470	3.81341
220.000	199.365	38.8479	3.89483
221.000	199.696	39.1480	3.97714
222.000	200.024	39.4473	4.06037
223.000	200.350	39.7459	4.14449
224.000	200.672	40.0436	4.22950
225.000	200.993	40.3405	4.31540
226.000	201.310	40.6366	4.40218
227.000	201.625	40.9318	4.48984
228.000	201.937	41.2262	4.57838
229.000	202.247	41.5198	4.66778
230.000	202.554	41.8125	4.75805
231.000	202.858	42.1043	4.84917
232.000	203.160	42.3952	4.94115
233.000	203.460	42.6852	5.03397
234.000	203.757	42.9743	5.12763
235.000	204.052	43.2626	5.22213
236.000	204.344	43.5499	5.31746
237.000	204.634	43.8362	5.41360
238.000	204.921	44.1217	5.51057
239.000	205.206	44.4062	5.60834
240.000	205.489	44.6898	5.70692
241.000	205.770	44.9724	5.80629
242.000	206.048	45.2540	5.90646
243.000	206.324	45.5347	6.00740
244.000	206.598	45.8145	6.10913
245.000	206.869	46.0932	6.21162
246.000	207.138	46.3710	6.31487
247.000	207.405	46.6478	6.41888

248.000	207.670	46.9236	6.52364
249.000	207.933	47.1984	6.62914
250.000	208.194	47.4722	6.73538
251.000	208.453	47.7450	6.84234
252.000	208.709	48.0168	6.95002
253.000	208.964	48.2875	7.05841
254.000	209.216	48.5573	7.16750
255.000	209.466	48.8260	7.27730
256.000	209.715	49.0938	7.38778
257.000	209.961	49.3604	7.49894
258.000	210.205	49.6261	7.61078
259.000	210.448	49.8907	7.72328
260.000	210.688	50.1543	7.83644
261.000	210.927	50.4169	7.95025
262.000	211.164	50.6784	8.06470
263.000	211.399	50.9389	8.17979
264.000	211.632	51.1983	8.29551
265.000	211.863	51.4566	8.41184
266.000	212.092	51.7140	8.52878
267.000	212.319	51.9703	8.64633
268.000	212.545	52.2255	8.76447
269.000	212.769	52.4796	8.88320
270.000	212.991	52.7328	9.00250
271.000	213.211	52.9848	9.12238
272.000	213.430	53.2358	9.24282
273.000	213.647	53.4857	9.36381
274.000	213.862	53.7346	9.48535
275.000	214.076	53.9824	9.60743
276.000	214.287	54.2292	9.73003
277.000	214.498	54.4749	9.85316
278.000	214.706	54.7195	9.97680
279.000	214.913	54.9631	10.1009
280.000	215.118	55.2056	10.2256
281.000	215.322	55.4470	10.3507
282.000	215.524	55.6874	10.4763
283.000	215.724	55.9267	10.6024
284.000	215.923	56.1650	10.7290
285.000	216.121	56.4022	10.8560
286.000	216.317	56.6383	10.9834
287.000	216.511	56.8734	11.1113
288.000	216.704	57.1074	11.2396
289.000	216.895	57.3403	11.3684
290.000	217.085	57.5722	11.4976
291.000	217.273	57.8030	11.6271
292.000	217.460	58.0328	11.7571
293.000	217.646	58.2615	11.8875
294.000	217.830	58.4891	12.0182
295.000	218.012	58.7157	12.1494
296.000	218.193	58.9413	12.2808
297.000	218.373	59.1658	12.4127
298.000	218.552	59.3892	12.5449
299.000	218.729	59.6116	12.6775
300.000	218.904	59.8330	12.8103
301.000	219.079	60.0532	12.9436
302.000	219.252	60.2725	13.0771
303.000	219.423	60.4907	13.2109
304.000	219.594	60.7079	13.3451
305.000	219.763	60.9240	13.4795
306.000	219.930	61.1391	13.6143
307.000	220.097	61.3532	13.7493
308.000	220.262	61.5662	13.8846
309.000	220.426	61.7782	14.0202
310.000	220.589	61.9891	14.1560
311.000	220.750	62.1991	14.2921
312.000	220.910	62.4080	14.4284
313.000	221.069	62.6158	14.5649
314.000	221.227	62.8227	14.7017
315.000	221.384	63.0286	14.8387
316.000	221.539	63.2334	14.9760

317.000	221.693	63.4372	15.1134
318.000	221.846	63.6400	15.2510
319.000	221.998	63.8418	15.3889
320.000	222.149	64.0426	15.5269
321.000	222.298	64.2424	15.6651
322.000	222.447	64.4412	15.8034
323.000	222.594	64.6390	15.9420
324.000	222.740	64.8358	16.0807
325.000	222.886	65.0316	16.2195
326.000	223.030	65.2264	16.3585
327.000	223.173	65.4202	16.4976
328.000	223.314	65.6131	16.6369
329.000	223.455	65.8049	16.7763
330.000	223.595	65.9958	16.9158
331.000	223.734	66.1857	17.0554
332.000	223.871	66.3746	17.1951
333.000	224.008	66.5626	17.3349
334.000	224.144	66.7496	17.4748
335.000	224.278	66.9356	17.6148
336.000	224.412	67.1207	17.7549
337.000	224.544	67.3049	17.8951
338.000	224.676	67.4880	18.0353
339.000	224.807	67.6702	18.1756
340.000	224.936	67.8515	18.3159
341.000	225.065	68.0318	18.4563
342.000	225.193	68.2112	18.5967
343.000	225.319	68.3897	18.7372
344.000	225.445	68.5672	18.8776
345.000	225.570	68.7438	19.0182
346.000	225.694	68.9194	19.1587
347.000	225.817	69.0942	19.2992
348.000	225.939	69.2680	19.4398
349.000	226.060	69.4409	19.5804
350.000	226.181	69.6128	19.7209
351.000	226.300	69.7839	19.8615
352.000	226.419	69.9541	20.0020
353.000	226.536	70.1233	20.1425
354.000	226.653	70.2917	20.2830
355.000	226.769	70.4591	20.4234
356.000	226.884	70.6257	20.5638
357.000	226.998	70.7914	20.7042
358.000	227.112	70.9562	20.8445
359.000	227.224	71.1201	20.9848
360.000	227.336	71.2831	21.1250
361.000	227.447	71.4452	21.2652
362.000	227.557	71.6065	21.4053
363.000	227.666	71.7669	21.5453
364.000	227.775	71.9265	21.6852
365.000	227.882	72.0851	21.8251
366.000	227.989	72.2429	21.9648
367.000	228.095	72.3999	22.1045
368.000	228.201	72.5560	22.2441
369.000	228.305	72.7113	22.3836
370.000	228.409	72.8657	22.5229
371.000	228.512	73.0193	22.6622
372.000	228.614	73.1720	22.8013
373.000	228.716	73.3239	22.9404
374.000	228.816	73.4750	23.0793
375.000	228.917	73.6252	23.2181
376.000	229.016	73.7746	23.3567
377.000	229.114	73.9232	23.4952
378.000	229.212	74.0710	23.6336
379.000	229.309	74.2180	23.7718
380.000	229.406	74.3642	23.9099
381.000	229.502	74.5095	24.0478
382.000	229.597	74.6541	24.1856
383.000	229.691	74.7978	24.3232
384.000	229.785	74.9408	24.4606
385.000	229.878	75.0829	24.5979

386.000	229.970	75.2243	24.7350
387.000	230.062	75.3649	24.8719
388.000	230.153	75.5047	25.0087
389.000	230.243	75.6438	25.1453
390.000	230.333	75.7820	25.2816
391.000	230.422	75.9195	25.4178
392.000	230.510	76.0563	25.5538
393.000	230.598	76.1922	25.6896
394.000	230.685	76.3274	25.8252
395.000	230.771	76.4619	25.9606
396.000	230.857	76.5956	26.0958
397.000	230.942	76.7285	26.2308
398.000	231.027	76.8607	26.3655
399.000	231.111	76.9922	26.5001
400.000	231.194	77.1229	26.6344
401.000	231.277	77.2529	26.7685
402.000	231.359	77.3821	26.9024
403.000	231.441	77.5107	27.0360
404.000	231.522	77.6385	27.1695
405.000	231.602	77.7655	27.3026
406.000	231.682	77.8919	27.4356
407.000	231.762	78.0175	27.5683
408.000	231.840	78.1425	27.7007
409.000	231.919	78.2667	27.8329
410.000	231.996	78.3902	27.9649
411.000	232.073	78.5131	28.0966
412.000	232.150	78.6352	28.2281
413.000	232.226	78.7566	28.3593
414.000	232.301	78.8774	28.4902
415.000	232.376	78.9974	28.6209
416.000	232.450	79.1168	28.7513
417.000	232.524	79.2355	28.8815
418.000	232.597	79.3535	29.0113
419.000	232.670	79.4708	29.1409
420.000	232.742	79.5875	29.2703
421.000	232.814	79.7035	29.3993
422.000	232.885	79.8189	29.5281
423.000	232.956	79.9336	29.6566
424.000	233.026	80.0476	29.7848
425.000	233.096	80.1609	29.9128
426.000	233.165	80.2737	30.0404
427.000	233.234	80.3857	30.1678
428.000	233.302	80.4972	30.2948
429.000	233.369	80.6080	30.4216
430.000	233.437	80.7181	30.5481
431.000	233.503	80.8277	30.6743
432.000	233.570	80.9365	30.8001
433.000	233.636	81.0448	30.9257
434.000	233.701	81.1524	31.0510
435.000	233.766	81.2595	31.1760
436.000	233.830	81.3659	31.3007
437.000	233.894	81.4716	31.4250
438.000	233.958	81.5768	31.5491
439.000	234.021	81.6814	31.6728
440.000	234.083	81.7854	31.7963
441.000	234.146	81.8887	31.9194
442.000	234.207	81.9915	32.0422
443.000	234.269	82.0937	32.1647
444.000	234.330	82.1952	32.2869
445.000	234.390	82.2962	32.4087
446.000	234.450	82.3966	32.5303
447.000	234.510	82.4964	32.6515
448.000	234.569	82.5957	32.7724
449.000	234.628	82.6943	32.8929
450.000	234.686	82.7924	33.0132
451.000	234.744	82.8899	33.1331
452.000	234.801	82.9869	33.2527
453.000	234.858	83.0833	33.3719
454.000	234.915	83.1791	33.4909

455.000	234.972	83.2743	33.6095
456.000	235.027	83.3690	33.7277
457.000	235.083	83.4632	33.8456
458.000	235.138	83.5568	33.9632
459.000	235.193	83.6499	34.0805
460.000	235.247	83.7424	34.1974
461.000	235.301	83.8343	34.3140
462.000	235.355	83.9258	34.4303
463.000	235.408	84.0167	34.5462
464.000	235.461	84.1070	34.6617
465.000	235.513	84.1969	34.7770
466.000	235.566	84.2862	34.8919
467.000	235.617	84.3750	35.0064
468.000	235.669	84.4632	35.1206
469.000	235.720	84.5510	35.2345
470.000	235.770	84.6382	35.3480
471.000	235.821	84.7249	35.4611
472.000	235.871	84.8111	35.5740
473.000	235.920	84.8968	35.6864
474.000	235.970	84.9820	35.7985
475.000	236.019	85.0667	35.9103
476.000	236.067	85.1509	36.0218
477.000	236.116	85.2346	36.1328
478.000	236.163	85.3178	36.2436
479.000	236.211	85.4005	36.3540
480.000	236.258	85.4828	36.4640
481.000	236.305	85.5645	36.5737
482.000	236.352	85.6458	36.6830
483.000	236.398	85.7266	36.7920
484.000	236.444	85.8069	36.9006
485.000	236.490	85.8867	37.0089
486.000	236.535	85.9661	37.1168
487.000	236.580	86.0450	37.2244
488.000	236.625	86.1234	37.3316
489.000	236.669	86.2013	37.4384
490.000	236.713	86.2788	37.5450
491.000	236.757	86.3559	37.6511
492.000	236.800	86.4324	37.7569
493.000	236.844	86.5086	37.8624
494.000	236.886	86.5843	37.9674
495.000	236.929	86.6595	38.0722
496.000	236.971	86.7343	38.1766
497.000	237.013	86.8086	38.2806
498.000	237.055	86.8825	38.3843
499.000	237.096	86.9560	38.4876
500.000	237.137	87.0290	38.5905
501.000	237.178	87.1016	38.6932
502.000	237.219	87.1737	38.7954
503.000	237.259	87.2454	38.8973
504.000	237.299	87.3167	38.9988
505.000	237.339	87.3876	39.1000
506.000	237.378	87.4581	39.2009
507.000	237.417	87.5281	39.3013
508.000	237.456	87.5977	39.4014
509.000	237.495	87.6669	39.5012
510.000	237.533	87.7357	39.6006
511.000	237.571	87.8041	39.6997
512.000	237.609	87.8721	39.7984
513.000	237.647	87.9397	39.8967
514.000	237.684	88.0068	39.9947
515.000	237.721	88.0736	40.0923
516.000	237.758	88.1399	40.1896
517.000	237.795	88.2059	40.2866
518.000	237.831	88.2715	40.3831
519.000	237.867	88.3367	40.4794
520.000	237.903	88.4015	40.5752
521.000	237.938	88.4659	40.6707
522.000	237.974	88.5299	40.7659
523.000	238.009	88.5935	40.8607

524.000	238.044	88.6568	40.9552
525.000	238.078	88.7197	41.0493
526.000	238.113	88.7822	41.1430
527.000	238.147	88.8443	41.2364
528.000	238.181	88.9061	41.3295
529.000	238.214	88.9675	41.4222
530.000	238.248	89.0285	41.5146
531.000	238.281	89.0891	41.6066
532.000	238.314	89.1494	41.6982
533.000	238.347	89.2094	41.7895
534.000	238.379	89.2689	41.8805
535.000	238.411	89.3281	41.9711
536.000	238.444	89.3870	42.0613
537.000	238.475	89.4455	42.1513
538.000	238.507	89.5037	42.2408
539.000	238.538	89.5615	42.3301
540.000	238.570	89.6189	42.4189
541.000	238.601	89.6760	42.5075
542.000	238.631	89.7328	42.5956
543.000	238.662	89.7892	42.6835
544.000	238.692	89.8453	42.7710
545.000	238.723	89.9011	42.8581
546.000	238.753	89.9565	42.9450
547.000	238.782	90.0116	43.0314
548.000	238.812	90.0663	43.1176
549.000	238.841	90.1207	43.2034
550.000	238.870	90.1748	43.2888
551.000	238.899	90.2286	43.3739
552.000	238.928	90.2821	43.4587
553.000	238.957	90.3352	43.5431
554.000	238.985	90.3880	43.6272
555.000	239.013	90.4405	43.7110
556.000	239.041	90.4926	43.7944
557.000	239.069	90.5445	43.8775
558.000	239.096	90.5960	43.9602
559.000	239.124	90.6473	44.0426
560.000	239.151	90.6982	44.1247
561.000	239.178	90.7488	44.2065
562.000	239.205	90.7991	44.2879
563.000	239.232	90.8491	44.3689
564.000	239.258	90.8988	44.4497
565.000	239.285	90.9482	44.5301
566.000	239.311	90.9973	44.6102
567.000	239.337	91.0462	44.6900
568.000	239.362	91.0947	44.7694
569.000	239.388	91.1429	44.8485
570.000	239.413	91.1908	44.9273
571.000	239.439	91.2385	45.0057
572.000	239.464	91.2858	45.0839
573.000	239.489	91.3329	45.1617
574.000	239.514	91.3797	45.2391
575.000	239.538	91.4262	45.3163
576.000	239.563	91.4724	45.3931
577.000	239.587	91.5183	45.4696
578.000	239.611	91.5640	45.5458
579.000	239.635	91.6094	45.6217
580.000	239.659	91.6545	45.6972
581.000	239.682	91.6993	45.7724
582.000	239.706	91.7439	45.8473
583.000	239.729	91.7882	45.9219
584.000	239.752	91.8322	45.9962
585.000	239.775	91.8760	46.0702
586.000	239.798	91.9195	46.1438
587.000	239.821	91.9627	46.2171
588.000	239.843	92.0057	46.2901
589.000	239.865	92.0484	46.3629
590.000	239.888	92.0909	46.4352
591.000	239.910	92.1331	46.5073
592.000	239.932	92.1750	46.5791

593.000	239.953	92.2167	46.6506
594.000	239.975	92.2581	46.7217
595.000	239.996	92.2993	46.7926
596.000	240.018	92.3403	46.8631
597.000	240.039	92.3809	46.9333
598.000	240.060	92.4214	47.0033
599.000	240.081	92.4616	47.0729
600.000	240.102	92.5015	47.1422
601.000	240.122	92.5412	47.2112
602.000	240.143	92.5807	47.2799
603.000	240.163	92.6199	47.3484
604.000	240.183	92.6589	47.4165
605.000	240.203	92.6977	47.4843
606.000	240.223	92.7362	47.5518
607.000	240.243	92.7745	47.6190
608.000	240.263	92.8125	47.6860
609.000	240.282	92.8503	47.7526
610.000	240.302	92.8879	47.8189
611.000	240.321	92.9253	47.8850
612.000	240.340	92.9624	47.9507
613.000	240.359	92.9993	48.0162
614.000	240.378	93.0360	48.0813
615.000	240.397	93.0725	48.1462
616.000	240.416	93.1087	48.2108
617.000	240.434	93.1447	48.2751
618.000	240.452	93.1805	48.3391
619.000	240.471	93.2161	48.4028
620.000	240.489	93.2515	48.4663
621.000	240.507	93.2866	48.5294
622.000	240.525	93.3216	48.5923
623.000	240.543	93.3563	48.6549
624.000	240.560	93.3908	48.7172
625.000	240.578	93.4251	48.7792
626.000	240.595	93.4592	48.8410
627.000	240.613	93.4931	48.9024
628.000	240.630	93.5268	48.9636
629.000	240.647	93.5603	49.0245
630.000	240.664	93.5935	49.0851
631.000	240.681	93.6266	49.1455
632.000	240.698	93.6595	49.2056
633.000	240.714	93.6921	49.2654
634.000	240.731	93.7246	49.3249
635.000	240.747	93.7569	49.3842
636.000	240.763	93.7890	49.4432
637.000	240.780	93.8208	49.5019
638.000	240.796	93.8525	49.5603
639.000	240.812	93.8840	49.6185
640.000	240.828	93.9153	49.6764
641.000	240.843	93.9464	49.7341
642.000	240.859	93.9774	49.7915
643.000	240.875	94.0081	49.8486
644.000	240.890	94.0386	49.9054
645.000	240.905	94.0690	49.9620
646.000	240.921	94.0992	50.0184
647.000	240.936	94.1292	50.0744
648.000	240.951	94.1590	50.1302
649.000	240.966	94.1886	50.1858
650.000	240.981	94.2180	50.2411
651.000	240.995	94.2473	50.2961
652.000	241.010	94.2764	50.3509
653.000	241.025	94.3053	50.4054
654.000	241.039	94.3340	50.4597
655.000	241.053	94.3626	50.5137
656.000	241.068	94.3910	50.5675
657.000	241.082	94.4192	50.6210
658.000	241.096	94.4472	50.6742
659.000	241.110	94.4751	50.7272
660.000	241.124	94.5028	50.7800
661.000	241.138	94.5303	50.8325

662.000	241.151	94.5577	50.8848
663.000	241.165	94.5849	50.9368
664.000	241.178	94.6119	50.9885
665.000	241.192	94.6388	51.0401
666.000	241.205	94.6655	51.0914
667.000	241.219	94.6920	51.1424
668.000	241.232	94.7184	51.1932
669.000	241.245	94.7446	51.2437
670.000	241.258	94.7706	51.2941
671.000	241.271	94.7965	51.3441
672.000	241.284	94.8223	51.3940
673.000	241.296	94.8478	51.4436
674.000	241.309	94.8733	51.4930
675.000	241.322	94.8985	51.5421
676.000	241.334	94.9236	51.5910
677.000	241.346	94.9486	51.6396
678.000	241.359	94.9734	51.6881
679.000	241.371	94.9981	51.7363
680.000	241.383	95.0226	51.7842
681.000	241.395	95.0469	51.8320
682.000	241.407	95.0711	51.8795
683.000	241.419	95.0952	51.9268
684.000	241.431	95.1191	51.9738
685.000	241.443	95.1429	52.0206
686.000	241.454	95.1665	52.0672
687.000	241.466	95.1900	52.1136
688.000	241.478	95.2133	52.1598
689.000	241.489	95.2365	52.2057
690.000	241.500	95.2595	52.2514
691.000	241.512	95.2824	52.2969
692.000	241.523	95.3052	52.3421
693.000	241.534	95.3278	52.3872
694.000	241.545	95.3503	52.4320
695.000	241.556	95.3727	52.4766
696.000	241.567	95.3949	52.5210
697.000	241.578	95.4170	52.5652
698.000	241.589	95.4389	52.6091
699.000	241.600	95.4607	52.6529
700.000	241.610	95.4824	52.6964
701.000	241.621	95.5039	52.7397
702.000	241.631	95.5253	52.7829
703.000	241.642	95.5466	52.8258
704.000	241.652	95.5678	52.8684
705.000	241.663	95.5888	52.9109
706.000	241.673	95.6097	52.9532
707.000	241.683	95.6305	52.9953
708.000	241.693	95.6511	53.0371
709.000	241.703	95.6716	53.0788
710.000	241.713	95.6920	53.1202
711.000	241.723	95.7122	53.1615
712.000	241.733	95.7324	53.2025
713.000	241.743	95.7524	53.2433
714.000	241.752	95.7723	53.2840
715.000	241.762	95.7921	53.3244
716.000	241.772	95.8117	53.3647
717.000	241.781	95.8312	53.4047
718.000	241.791	95.8506	53.4445
719.000	241.800	95.8699	53.4842
720.000	241.809	95.8891	53.5236
721.000	241.819	95.9082	53.5629
722.000	241.828	95.9271	53.6019
723.000	241.837	95.9459	53.6408
724.000	241.846	95.9646	53.6795
725.000	241.855	95.9832	53.7179
726.000	241.864	96.0017	53.7562
727.000	241.873	96.0201	53.7943
728.000	241.882	96.0383	53.8322
729.000	241.891	96.0565	53.8699
730.000	241.899	96.0745	53.9075

731.000	241.908	96.0924	53.9448
732.000	241.917	96.1102	53.9820
733.000	241.925	96.1279	54.0189
734.000	241.934	96.1455	54.0557
735.000	241.942	96.1630	54.0923
736.000	241.951	96.1804	54.1287
737.000	241.959	96.1977	54.1650
738.000	241.967	96.2148	54.2010
739.000	241.976	96.2319	54.2369
740.000	241.984	96.2488	54.2726
741.000	241.992	96.2657	54.3081
742.000	242.000	96.2824	54.3434
743.000	242.008	96.2991	54.3786
744.000	242.016	96.3156	54.4136
745.000	242.024	96.3321	54.4484
746.000	242.032	96.3484	54.4830
747.000	242.040	96.3647	54.5175
748.000	242.048	96.3808	54.5517
749.000	242.055	96.3969	54.5858
750.000	242.063	96.4128	54.6198
751.000	242.071	96.4286	54.6535
752.000	242.078	96.4444	54.6871
753.000	242.086	96.4601	54.7206
754.000	242.093	96.4756	54.7538
755.000	242.101	96.4911	54.7869
756.000	242.108	96.5064	54.8198
757.000	242.115	96.5217	54.8526
758.000	242.123	96.5369	54.8851
759.000	242.130	96.5520	54.9175
760.000	242.137	96.5670	54.9498
761.000	242.144	96.5819	54.9819
762.000	242.151	96.5967	55.0138
763.000	242.158	96.6114	55.0456
764.000	242.165	96.6260	55.0772
765.000	242.172	96.6406	55.1086
766.000	242.179	96.6550	55.1399
767.000	242.186	96.6694	55.1710
768.000	242.193	96.6837	55.2020
769.000	242.200	96.6979	55.2328
770.000	242.206	96.7120	55.2634
771.000	242.213	96.7260	55.2939
772.000	242.220	96.7399	55.3242
773.000	242.226	96.7538	55.3544
774.000	242.233	96.7675	55.3844
775.000	242.239	96.7812	55.4143
776.000	242.246	96.7948	55.4440
777.000	242.252	96.8083	55.4736
778.000	242.259	96.8217	55.5030
779.000	242.265	96.8351	55.5323
780.000	242.271	96.8483	55.5614
781.000	242.277	96.8615	55.5903
782.000	242.284	96.8746	55.6191
783.000	242.290	96.8876	55.6478
784.000	242.296	96.9006	55.6763
785.000	242.302	96.9134	55.7047
786.000	242.308	96.9262	55.7329
787.000	242.314	96.9389	55.7610
788.000	242.320	96.9515	55.7889
789.000	242.326	96.9641	55.8167
790.000	242.332	96.9765	55.8443
791.000	242.338	96.9889	55.8718
792.000	242.344	97.0012	55.8992
793.000	242.350	97.0135	55.9264
794.000	242.355	97.0257	55.9535
795.000	242.361	97.0377	55.9804
796.000	242.367	97.0498	56.0072
797.000	242.372	97.0617	56.0339
798.000	242.378	97.0736	56.0604
799.000	242.384	97.0854	56.0868

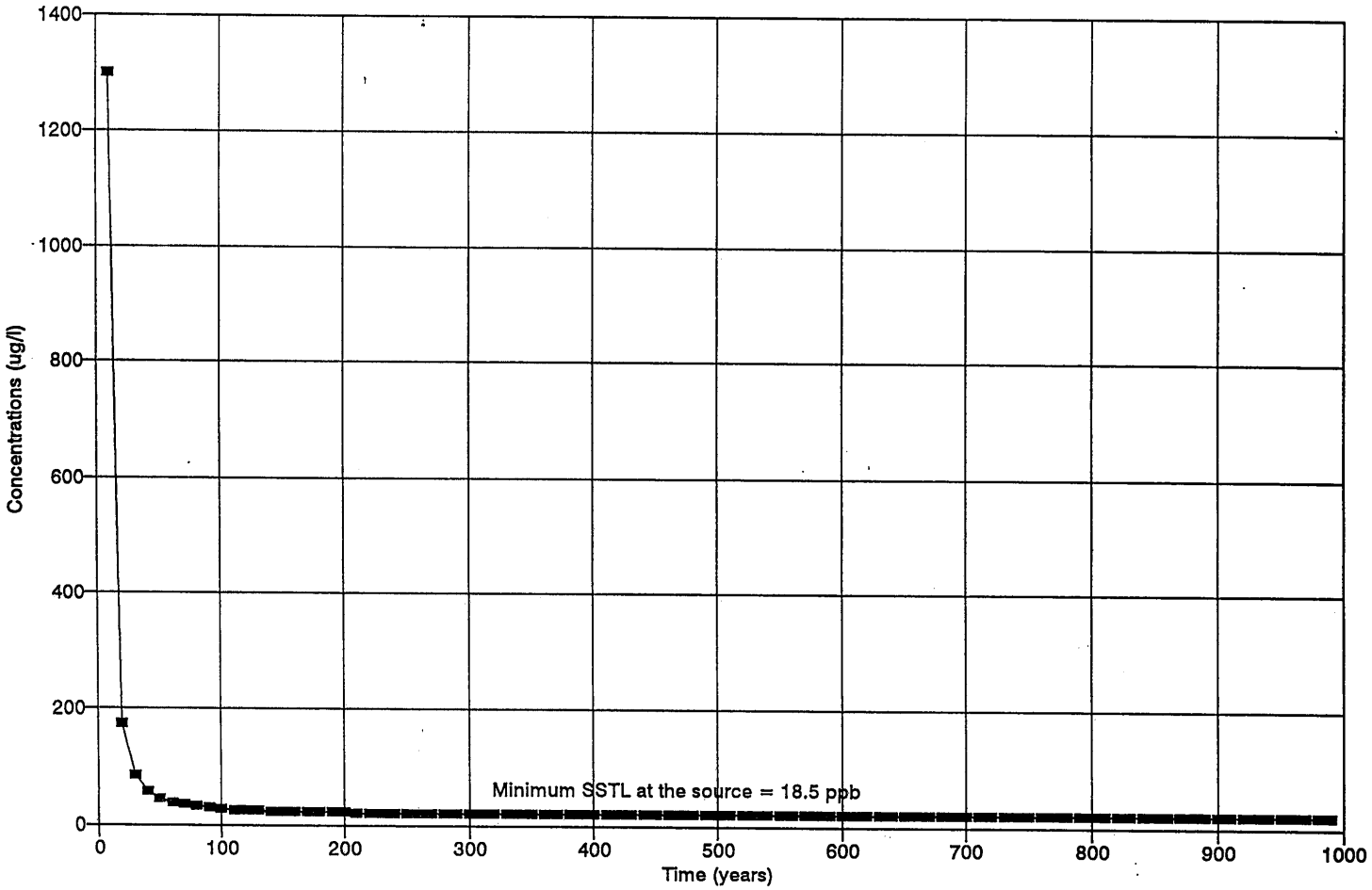
800.000	242.389	97.0971	56.1130
801.000	242.395	97.1088	56.1391
802.000	242.400	97.1203	56.1651
803.000	242.406	97.1319	56.1909
804.000	242.411	97.1433	56.2166
805.000	242.416	97.1547	56.2422
806.000	242.422	97.1660	56.2676
807.000	242.427	97.1772	56.2929
808.000	242.432	97.1884	56.3181
809.000	242.437	97.1994	56.3431
810.000	242.443	97.2105	56.3680
811.000	242.448	97.2214	56.3928
812.000	242.453	97.2323	56.4174
813.000	242.458	97.2431	56.4420
814.000	242.463	97.2539	56.4664
815.000	242.468	97.2646	56.4906
816.000	242.473	97.2752	56.5148
817.000	242.478	97.2858	56.5388
818.000	242.483	97.2963	56.5627
819.000	242.488	97.3067	56.5864
820.000	242.493	97.3171	56.6101
821.000	242.497	97.3274	56.6336
822.000	242.502	97.3376	56.6569
823.000	242.507	97.3478	56.6802
824.000	242.512	97.3579	56.7034
825.000	242.516	97.3680	56.7264
826.000	242.521	97.3780	56.7493
827.000	242.526	97.3879	56.7721
828.000	242.530	97.3978	56.7947
829.000	242.535	97.4076	56.8173
830.000	242.540	97.4173	56.8397
831.000	242.544	97.4270	56.8620
832.000	242.549	97.4367	56.8842
833.000	242.553	97.4462	56.9062
834.000	242.557	97.4557	56.9282
835.000	242.562	97.4652	56.9500
836.000	242.566	97.4746	56.9718
837.000	242.571	97.4839	56.9934
838.000	242.575	97.4932	57.0149
839.000	242.579	97.5024	57.0362
840.000	242.584	97.5116	57.0575
841.000	242.588	97.5207	57.0787
842.000	242.592	97.5298	57.0997
843.000	242.596	97.5388	57.1206
844.000	242.600	97.5477	57.1414
845.000	242.604	97.5566	57.1622
846.000	242.609	97.5655	57.1828
847.000	242.613	97.5742	57.2033
848.000	242.617	97.5830	57.2236
849.000	242.621	97.5916	57.2439
850.000	242.625	97.6003	57.2641
851.000	242.629	97.6088	57.2841
852.000	242.633	97.6173	57.3041
853.000	242.637	97.6258	57.3239
854.000	242.641	97.6342	57.3437
855.000	242.644	97.6426	57.3633
856.000	242.648	97.6509	57.3828
857.000	242.652	97.6591	57.4023
858.000	242.656	97.6674	57.4216
859.000	242.660	97.6755	57.4408
860.000	242.663	97.6836	57.4599
861.000	242.667	97.6917	57.4790
862.000	242.671	97.6997	57.4979
863.000	242.675	97.7076	57.5167
864.000	242.678	97.7155	57.5354
865.000	242.682	97.7234	57.5540
866.000	242.685	97.7312	57.5725
867.000	242.689	97.7390	57.5910
868.000	242.693	97.7467	57.6093

869.000	242.696	97.7544	57.6275
870.000	242.700	97.7620	57.6456
871.000	242.703	97.7696	57.6636
872.000	242.707	97.7771	57.6816
873.000	242.710	97.7846	57.6994
874.000	242.714	97.7920	57.7171
875.000	242.717	97.7994	57.7348
876.000	242.720	97.8068	57.7523
877.000	242.724	97.8141	57.7698
878.000	242.727	97.8213	57.7872
879.000	242.730	97.8285	57.8044
880.000	242.734	97.8357	57.8216
881.000	242.737	97.8428	57.8387
882.000	242.740	97.8499	57.8557
883.000	242.743	97.8569	57.8726
884.000	242.747	97.8639	57.8894
885.000	242.750	97.8709	57.9061
886.000	242.753	97.8778	57.9227
887.000	242.756	97.8847	57.9393
888.000	242.759	97.8915	57.9557
889.000	242.762	97.8983	57.9721
890.000	242.765	97.9050	57.9884
891.000	242.769	97.9117	58.0046
892.000	242.772	97.9184	58.0207
893.000	242.775	97.9250	58.0367
894.000	242.778	97.9316	58.0526
895.000	242.781	97.9381	58.0684
896.000	242.784	97.9446	58.0842
897.000	242.787	97.9511	58.0999
898.000	242.790	97.9575	58.1154
899.000	242.792	97.9639	58.1310
900.000	242.795	97.9702	58.1464
901.000	242.798	97.9765	58.1617
902.000	242.801	97.9827	58.1770
903.000	242.804	97.9890	58.1921
904.000	242.807	97.9952	58.2072
905.000	242.810	98.0013	58.2222
906.000	242.812	98.0074	58.2371
907.000	242.815	98.0135	58.2520
908.000	242.818	98.0195	58.2668
909.000	242.821	98.0255	58.2814
910.000	242.823	98.0315	58.2960
911.000	242.826	98.0374	58.3106
912.000	242.829	98.0433	58.3250
913.000	242.831	98.0491	58.3394
914.000	242.834	98.0550	58.3537
915.000	242.837	98.0607	58.3679
916.000	242.839	98.0665	58.3820
917.000	242.842	98.0722	58.3961
918.000	242.845	98.0779	58.4101
919.000	242.847	98.0835	58.4240
920.000	242.850	98.0891	58.4378
921.000	242.852	98.0947	58.4516
922.000	242.855	98.1002	58.4653
923.000	242.857	98.1057	58.4789
924.000	242.860	98.1112	58.4924
925.000	242.862	98.1166	58.5059
926.000	242.865	98.1220	58.5192
927.000	242.867	98.1274	58.5326
928.000	242.869	98.1327	58.5458
929.000	242.872	98.1380	58.5590
930.000	242.874	98.1433	58.5721
931.000	242.877	98.1485	58.5851
932.000	242.879	98.1537	58.5980
933.000	242.881	98.1589	58.6109
934.000	242.884	98.1641	58.6237
935.000	242.886	98.1692	58.6365
936.000	242.888	98.1743	58.6492
937.000	242.891	98.1793	58.6618

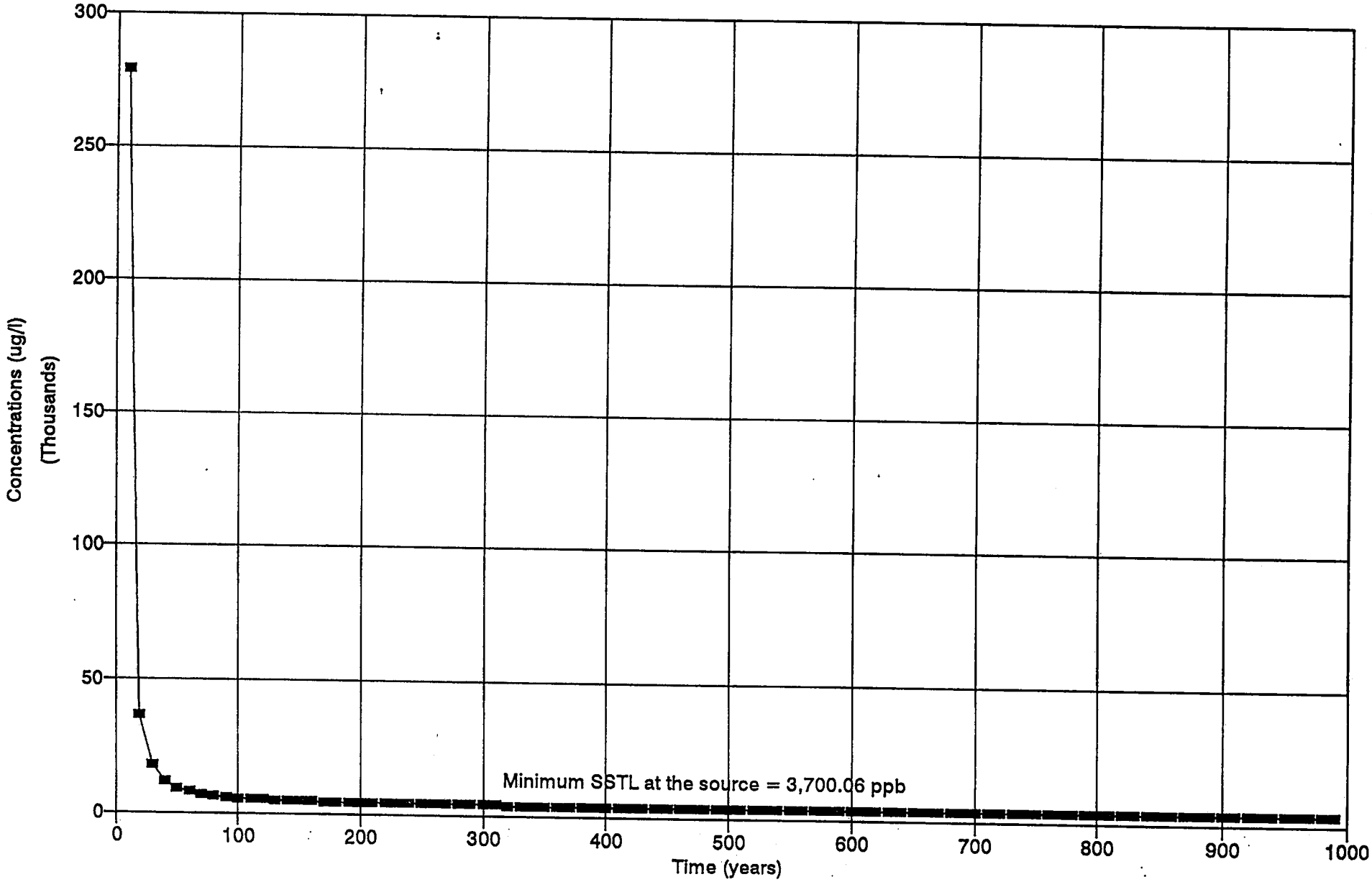
938.000	242.893	98.1843	58.6743
939.000	242.895	98.1893	58.6868
940.000	242.897	98.1943	58.6992
941.000	242.900	98.1992	58.7115
942.000	242.902	98.2041	58.7238
943.000	242.904	98.2090	58.7360
944.000	242.906	98.2138	58.7481
945.000	242.908	98.2186	58.7602
946.000	242.911	98.2234	58.7722
947.000	242.913	98.2281	58.7841
948.000	242.915	98.2328	58.7960
949.000	242.917	98.2375	58.8078
950.000	242.919	98.2422	58.8195
951.000	242.921	98.2468	58.8312
952.000	242.923	98.2514	58.8428
953.000	242.925	98.2560	58.8544
954.000	242.927	98.2606	58.8658
955.000	242.929	98.2651	58.8773
956.000	242.931	98.2696	58.8886
957.000	242.933	98.2740	58.8999
958.000	242.935	98.2785	58.9112
959.000	242.937	98.2829	58.9223
960.000	242.939	98.2873	58.9334
961.000	242.941	98.2916	58.9445
962.000	242.943	98.2959	58.9555
963.000	242.945	98.3002	58.9664
964.000	242.947	98.3045	58.9773
965.000	242.949	98.3088	58.9881
966.000	242.951	98.3130	58.9988
967.000	242.953	98.3172	59.0095
968.000	242.955	98.3214	59.0202
969.000	242.957	98.3255	59.0307
970.000	242.959	98.3296	59.0413
971.000	242.960	98.3337	59.0517
972.000	242.962	98.3378	59.0621
973.000	242.964	98.3419	59.0725
974.000	242.966	98.3459	59.0827
975.000	242.968	98.3499	59.0930
976.000	242.969	98.3538	59.1032
977.000	242.971	98.3578	59.1133
978.000	242.973	98.3617	59.1233
979.000	242.975	98.3656	59.1333
980.000	242.976	98.3695	59.1433
981.000	242.978	98.3734	59.1532
982.000	242.980	98.3772	59.1630
983.000	242.982	98.3810	59.1728
984.000	242.983	98.3848	59.1825
985.000	242.985	98.3885	59.1922
986.000	242.987	98.3923	59.2019
987.000	242.988	98.3960	59.2114
988.000	242.990	98.3997	59.2209
989.000	242.992	98.4033	59.2304
990.000	242.993	98.4070	59.2398
991.000	242.995	98.4106	59.2492
992.000	242.996	98.4142	59.2585
993.000	242.998	98.4178	59.2678
994.000	243.000	98.4213	59.2770
995.000	243.001	98.4249	59.2861
996.000	243.003	98.4284	59.2952
997.000	243.004	98.4319	59.3043
998.000	243.006	98.4353	59.3133
999.000	243.007	98.4388	59.3223
1000.00	243.009	98.4422	59.3312

APPENDIX M
SSTL CALCULATIONS

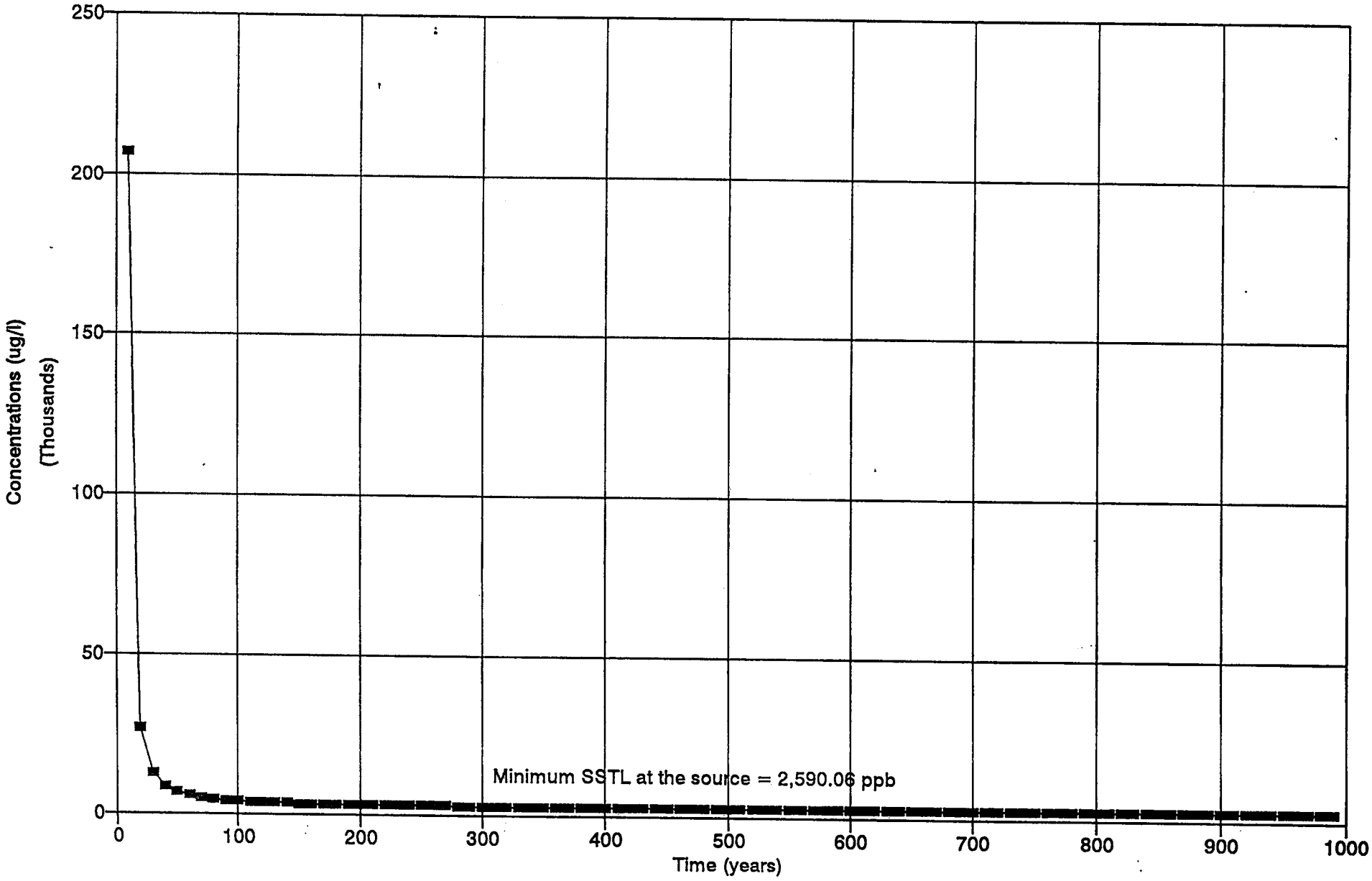
Source Concentrations
Benzene



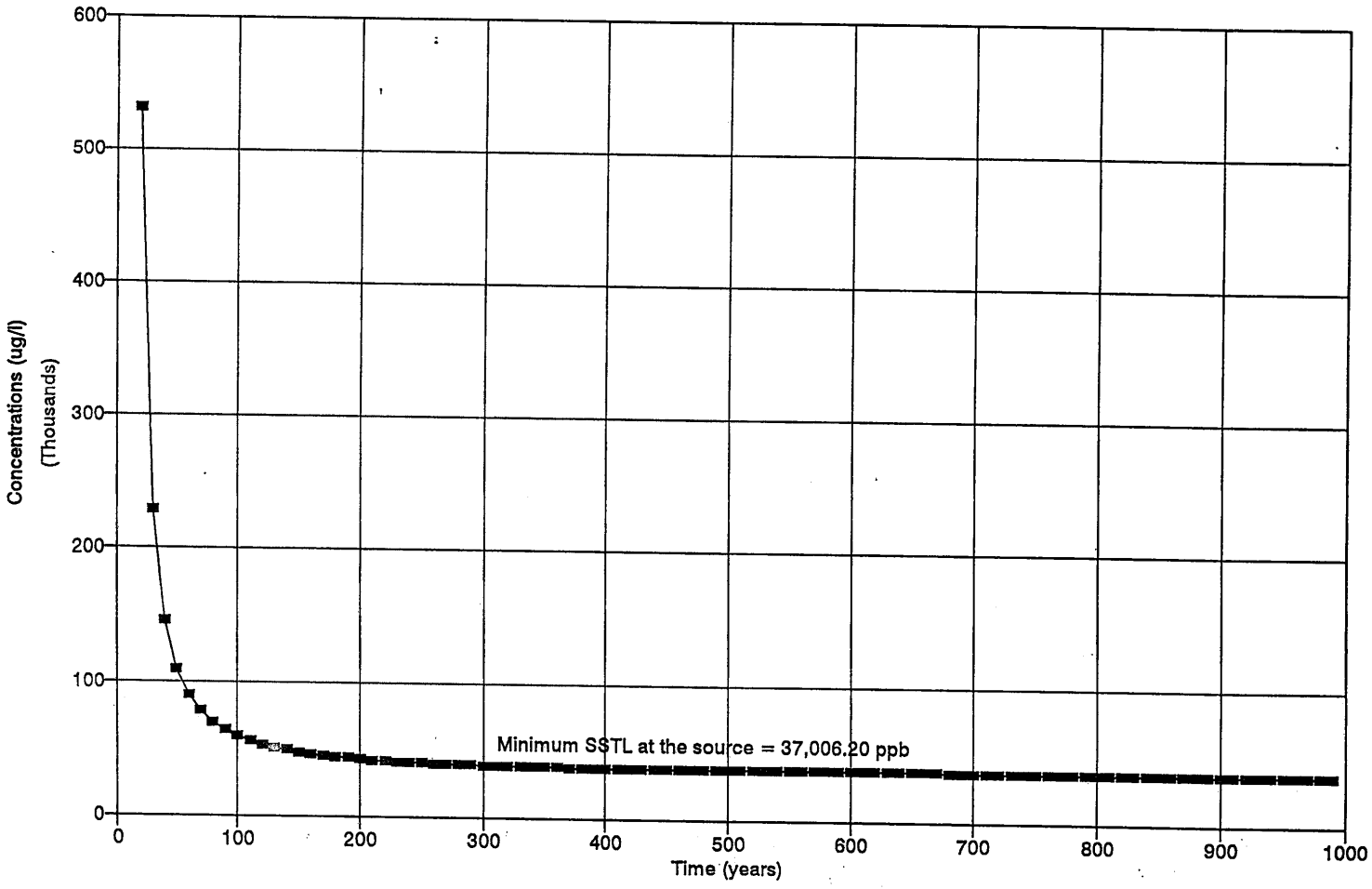
Source Concentrations
Toluene



Source Concentrations
Ethylbenzene

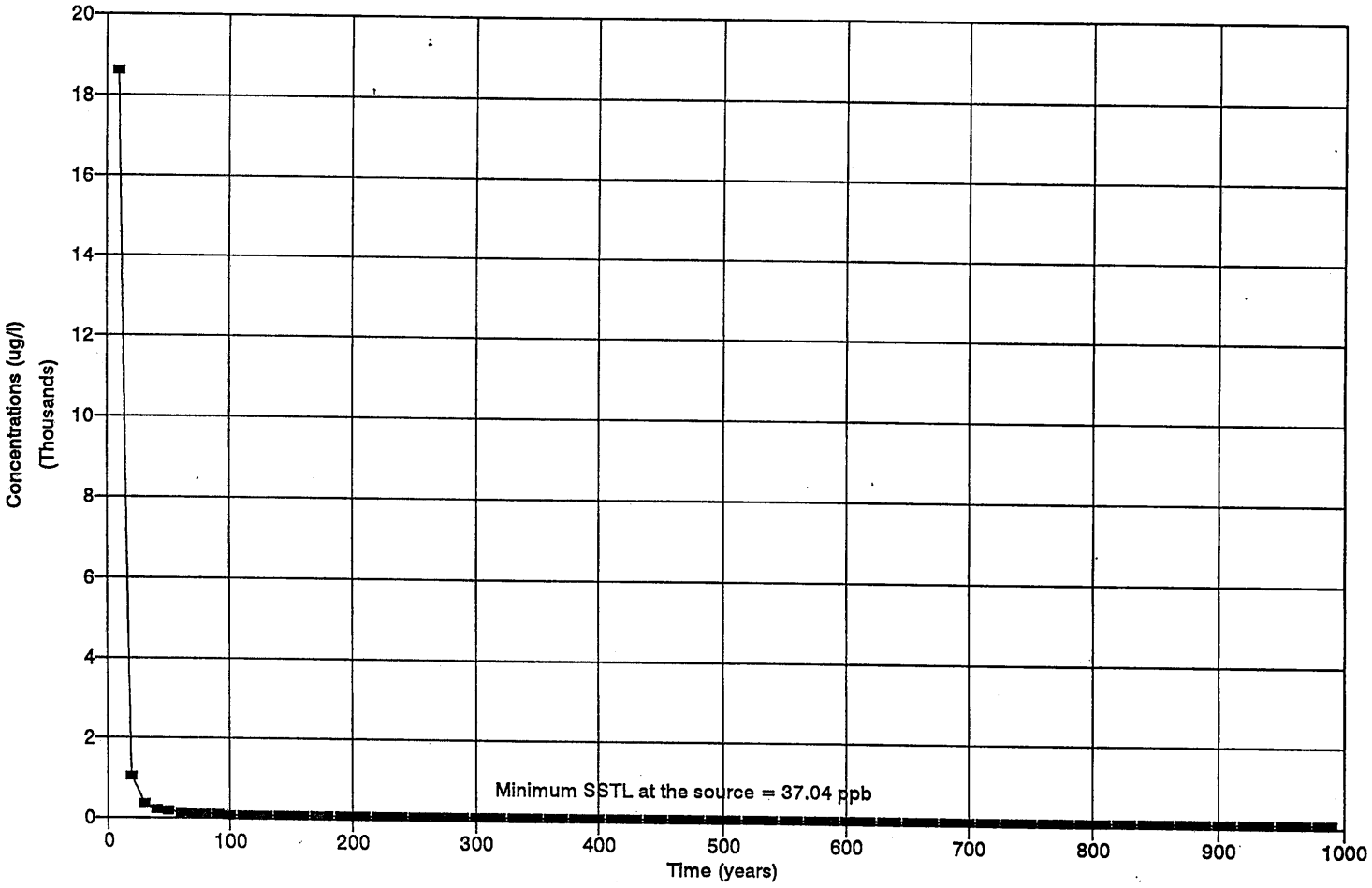


Source Concentrations
Xylenes



Source Concentrations

Naphthalene



TITLE : SMITHS GROCERY
CBM JOB # : 10629
SC ID # : 09322

Contaminant of Concern is BENZENE

C(x,0,0,t)=(C0/2)erfc[(x-vt)/2(Ax*vt)1/2] erf[Y/4(Ay*x)1/2]erf[Z/2(alphz*x)1/2]

INPUT PARAMETERS :
Concentration of Source (ppb) = 36000.00
Source Width (ft) = 150.00
Vertical Thickness of Source (ft) = 38.00
Distance of Recipient (ft) =1000.00
Groundwater Flow Velocity (ft/yr) = 3.65
RBSL concentration for COC(ppb) = 5.00
Longitudinal Dispersivity (ft) = 100.000000
Transverse Dispersivity (ft) = 33.333332
Vertical Dispersivity (ft) = 5.000000
Total Organic Carbon, TOC (mg/kg) = 60.00
Total Petroleum Hydrocarbons,TPH(mg/kg) = 0.00
Soil/Water Part. Coefficient,Koc(ml/g) = 81.00
Organic Carbon Fraction, foc (%) = 0.0000600
Porosity = .250
Bulk Density (g/cc) = 1.530
Retardation Factor, Rf = 1.02974
Contaminant Velocity (ft/yr) = 3.54457

SSTL CONCENTRATION COMPUTED FOR :
220.000 ft.

TIME (yrs)	SSTL FOR RECEPTOR 1 (ppb)
0.100000E-01	Plume will not reach receptor in given time
10.0100	1298.47
20.0100	175.598
30.0100	84.8667
40.0100	57.5865
50.0100	45.0958
60.0100	38.0722
70.0100	33.6178
80.0100	30.5630
90.0100	28.3511
100.010	26.6847
110.010	25.3910
120.010	24.3628
130.010	23.5303
140.010	22.8461
150.010	22.2767
160.010	21.7978
170.010	21.3917
180.010	21.0445
190.010	20.7460
200.010	20.4879
210.010	20.2635
220.010	20.0678
230.010	19.8964
240.010	19.7457
250.010	19.6130
260.010	19.4957
270.010	19.3918
280.010	19.2997
290.010	19.2177
300.010	19.1448
310.010	19.0797
320.010	19.0216
330.010	18.9696
340.010	18.9231
350.010	18.8814
360.010	18.8440

370.010	18.8104
380.010	18.7802
390.010	18.7531
400.010	18.7286
410.010	18.7066
420.010	18.6868
430.010	18.6690
440.010	18.6528
450.010	18.6383
460.010	18.6252
470.010	18.6133
480.010	18.6026
490.010	18.5929
500.010	18.5841
510.010	18.5762
520.010	18.5691
530.010	18.5626
540.010	18.5567
550.010	18.5514
560.010	18.5466
570.010	18.5422
580.010	18.5382
590.010	18.5347
600.010	18.5314
610.010	18.5285
620.010	18.5258
630.010	18.5234
640.010	18.5212
650.010	18.5192
660.010	18.5174
670.010	18.5157
680.010	18.5142
690.010	18.5129
700.010	18.5116
710.010	18.5105
720.010	18.5095
730.010	18.5086
740.010	18.5078
750.010	18.5070
760.010	18.5063
770.010	18.5057
780.010	18.5051
790.010	18.5046
800.010	18.5041
810.010	18.5037
820.010	18.5033
830.010	18.5029
840.010	18.5026
850.010	18.5023
860.010	18.5021
870.010	18.5018
880.010	18.5016
890.010	18.5014
900.010	18.5012
910.010	18.5010
920.010	18.5009
930.010	18.5008
940.010	18.5006
950.010	18.5005
960.010	18.5004
970.010	18.5003
980.010	18.5002
990.010	18.5002

Based on a travel time of 62.0668 years
For the receptor to be at 5.00000 ppb
The SSTL should be (in ppb): 36.9987

TITLE : SMITHS GROCERY
CBM JOB # : 10629
SC ID # : 09322

Contaminant of Concern is TOLUENE

C(x,0,0,t)=(C0/2)erfc[(x-vt)/2(Ax*vt)1/2] erf[Y/4(Ay*x)1/2]erf[Z/2(alphz*x)1/2]

INPUT PARAMETERS :
Concentration of Source (ppb) = 60000.00
Source Width (ft) = 150.00
Vertical Thickness of Source (ft) = 38.00
Distance of Recipient (ft) =1000.00
Groundwater Flow Velocity (ft/yr) = 3.65
RBSL concentration for COC(ppb) = 1000.00
Longitudinal Dispersivity (ft) = 100.000000
Transverse Dispersivity (ft) = 33.333332
Vertical Dispersivity (ft) = 5.000000
Total Organic Carbon, TOC (mg/kg) = 60.00
Total Petroleum Hydrocarbons,TPH(mg/kg) = 0.00
Soil/Water Part. Coefficient,Koc(ml/g) = 133.00
Organic Carbon Fraction, foc (%) = 0.0000600
Porosity = .250
Bulk Density (g/cc) = 1.530
Retardation Factor, Rf = 1.04884
Contaminant Velocity (ft/yr) = 3.48004

SSTL CONCENTRATION COMPUTED FOR :
220.000 ft.

TIME (yrs)	SSTL FOR RECEPTOR 1 (ppb)
0.100000E-01	Plume will not reach receptor in given time
10.0100	278924.
20.0100	36521.0
30.0100	17455.0
40.0100	11775.5
50.0100	9187.65
60.0100	7736.75
70.0100	6818.31
80.0100	6189.23
90.0100	5734.06
100.010	5391.28
110.010	5125.21
120.010	4913.75
130.010	4742.50
140.010	4601.70
150.010	4484.46
160.010	4385.82
170.010	4302.10
180.010	4230.50
190.010	4168.87
200.010	4115.53
210.010	4069.13
220.010	4028.61
230.010	3993.09
240.010	3961.84
250.010	3934.27
260.010	3909.88
270.010	3888.27
280.010	3869.06
290.010	3851.96
300.010	3836.72
310.010	3823.10
320.010	3810.93
330.010	3800.03
340.010	3790.26
350.010	3781.49
360.010	3773.61

370.010	3766.52
380.010	3760.15
390.010	3754.41
400.010	3749.23
410.010	3744.57
420.010	3740.36
430.010	3736.56
440.010	3733.12
450.010	3730.02
460.010	3727.21
470.010	3724.68
480.010	3722.38
490.010	3720.30
500.010	3718.42
510.010	3716.71
520.010	3715.16
530.010	3713.76
540.010	3712.49
550.010	3711.34
560.010	3710.30
570.010	3709.35
580.010	3708.49
590.010	3707.70
600.010	3706.99
610.010	3706.35
620.010	3705.76
630.010	3705.23
640.010	3704.75
650.010	3704.31
660.010	3703.91
670.010	3703.55
680.010	3703.22
690.010	3702.92
700.010	3702.65
710.010	3702.40
720.010	3702.17
730.010	3701.97
740.010	3701.78
750.010	3701.61
760.010	3701.46
770.010	3701.31
780.010	3701.19
790.010	3701.07
800.010	3700.96
810.010	3700.87
820.010	3700.78
830.010	3700.70
840.010	3700.62
850.010	3700.56
860.010	3700.50
870.010	3700.44
880.010	3700.39
890.010	3700.35
900.010	3700.30
910.010	3700.27
920.010	3700.23
930.010	3700.20
940.010	3700.17
950.010	3700.14
960.010	3700.12
970.010	3700.10
980.010	3700.08
990.010	3700.06

Based on a travel time of 63.2177 years
For the receptor to be at 1000.00 ppb
The SSTL should be (in ppb): 7399.74

TITLE : SMITHS GROCERY
CBM JOB # : 10629
SC ID # : 09322

Contaminant of Concern is ETHYLBENZENE

C(x,0,0,t)=(C0/2)erfc[(x-vt)/2(Ax*vt)1/2] erf[Y/4(Ay*x)1/2]erf[Z/2(alphz*x)1/2]

INPUT PARAMETERS :
Concentration of Source (ppb) = 4900.00
Source Width (ft) = 150.00
Vertical Thickness of Source (ft) = 38.00
Distance of Recipient (ft) =1000.00
Groundwater Flow Velocity (ft/yr) = 3.65
RBSL concentration for COC(ppb) = 700.00
Longitudinal Dispersivity (ft) = 100.000000
Transverse Dispersivity (ft) = 33.333332
Vertical Dispersivity (ft) = 5.000000
Total Organic Carbon, TOC (mg/kg) = 60.00
Total Petroleum Hydrocarbons,TPH(mg/kg) = 0.00
Soil/Water Part. Coefficient,Koc(ml/g) = 176.00
Organic Carbon Fraction, foc (%) = 0.0000600
Porosity = .250
Bulk Density (g/cc) = 1.530
Retardation Factor, Rf = 1.06463
Contaminant Velocity (ft/yr) = 3.42842

SSTL CONCENTRATION COMPUTED FOR :
220.000 ft.

TIME (yrs)	SSTL FOR RECEPTOR 1 (ppb)
0.100000E-01	Plume will not reach receptor in given time
10.0100	207107.
20.0100	26403.1
30.0100	12503.7
40.0100	8394.87
50.0100	6530.24
60.0100	5487.36
70.0100	4828.24
80.0100	4377.23
90.0100	4051.12
100.010	3805.63
110.010	3615.10
120.010	3463.67
130.010	3341.03
140.010	3240.16
150.010	3156.15
160.010	3085.43
170.010	3025.38
180.010	2973.99
190.010	2929.73
200.010	2891.40
210.010	2858.04
220.010	2828.87
230.010	2803.28
240.010	2780.76
250.010	2760.87
260.010	2743.26
270.010	2727.63
280.010	2713.73
290.010	2701.35
300.010	2690.30
310.010	2680.42
320.010	2671.58
330.010	2663.65
340.010	2656.54
350.010	2650.14
360.010	2644.40

370.010	2639.22
380.010	2634.56
390.010	2630.36
400.010	2626.57
410.010	2623.14
420.010	2620.05
430.010	2617.25
440.010	2614.73
450.010	2612.44
460.010	2610.37
470.010	2608.49
480.010	2606.79
490.010	2605.25
500.010	2603.86
510.010	2602.59
520.010	2601.44
530.010	2600.40
540.010	2599.45
550.010	2598.59
560.010	2597.81
570.010	2597.10
580.010	2596.46
590.010	2595.87
600.010	2595.34
610.010	2594.85
620.010	2594.41
630.010	2594.01
640.010	2593.65
650.010	2593.31
660.010	2593.01
670.010	2592.74
680.010	2592.49
690.010	2592.26
700.010	2592.05
710.010	2591.86
720.010	2591.69
730.010	2591.53
740.010	2591.39
750.010	2591.26
760.010	2591.14
770.010	2591.03
780.010	2590.93
790.010	2590.84
800.010	2590.76
810.010	2590.69
820.010	2590.62
830.010	2590.56
840.010	2590.50
850.010	2590.45
860.010	2590.40
870.010	2590.36
880.010	2590.32
890.010	2590.28
900.010	2590.25
910.010	2590.22
920.010	2590.20
930.010	2590.17
940.010	2590.15
950.010	2590.13
960.010	2590.11
970.010	2590.09
980.010	2590.08
990.010	2590.06

Based on a travel time of 64.1695 years
For the receptor to be at 700.000 ppb
The SSTL should be (in ppb): 5179.82

TITLE : SMITHS GROCERY
CBM JOB # : 10629
SC ID # : 09322

Contaminant of Concern is XYLENES

C(x,0,0,t)=(C0/2)erfc[(x-vt)/2(Ax*vt)1/2] erf[Y/4(Ay*x)1/2]erf[Z/2(alphz*x)1/2]

INPUT PARAMETERS :
Concentration of Source (ppb) = 24900.00
Source Width (ft) = 150.00
Vertical Thickness of Source (ft) = 38.00
Distance of Recipient (ft) =1000.00
Groundwater Flow Velocity (ft/yr) = 3.65
RBSL concentration for COC(ppb) = 10000.00
Longitudinal Dispersivity (ft) = 100.000000
Transverse Dispersivity (ft) = 33.333332
Vertical Dispersivity (ft) = 5.000000
Total Organic Carbon, TOC (mg/kg) = 60.00
Total Petroleum Hydrocarbons,TPH(mg/kg) = 0.00
Soil/Water Part. Coefficient,Koc(ml/g) = 639.00
Organic Carbon Fraction, foc (%) = 0.0000600
Porosity = .250
Bulk Density (g/cc) = 1.530
Retardation Factor, Rf = 1.23465
Contaminant Velocity (ft/yr) = 2.95630

SSTL CONCENTRATION COMPUTED FOR :
220.000 ft.

TIME (yrs)	SSTL FOR RECEPTOR 1 (ppb)
0.100000E-01	Plume will not reach receptor in given time
10.0100	0.555408E+07
20.0100	531557.
30.0100	228139.
40.0100	145551.
50.0100	109664.
60.0100	90118.5
70.0100	77979.1
80.0100	69769.8
90.0100	63880.2
100.010	59468.9
110.010	56055.1
120.010	53345.3
130.010	51150.3
140.010	49342.6
150.010	47833.7
160.010	46559.7
170.010	45473.7
180.010	44540.3
190.010	43732.4
200.010	43028.8
210.010	42412.7
220.010	41870.8
230.010	41392.1
240.010	40967.7
250.010	40590.2
260.010	40253.4
270.010	39952.1
280.010	39682.0
290.010	39439.3
300.010	39220.7
310.010	39023.6
320.010	38845.6
330.010	38684.5
340.010	38538.6
350.010	38406.3
360.010	38286.1

370.010	38176.9
380.010	38077.5
390.010	37986.9
400.010	37904.4
410.010	37829.2
420.010	37760.4
430.010	37697.7
440.010	37640.3
450.010	37587.9
460.010	37539.9
470.010	37496.0
480.010	37455.7
490.010	37418.8
500.010	37385.0
510.010	37354.0
520.010	37325.6
530.010	37299.5
540.010	37275.5
550.010	37253.5
560.010	37233.3
570.010	37214.8
580.010	37197.7
590.010	37182.0
600.010	37167.6
610.010	37154.3
620.010	37142.1
630.010	37130.9
640.010	37120.6
650.010	37111.0
660.010	37102.3
670.010	37094.2
680.010	37086.8
690.010	37080.0
700.010	37073.7
710.010	37067.9
720.010	37062.5
730.010	37057.6
740.010	37053.0
750.010	37048.8
760.010	37045.0
770.010	37041.4
780.010	37038.1
790.010	37035.1
800.010	37032.3
810.010	37029.7
820.010	37027.4
830.010	37025.2
840.010	37023.1
850.010	37021.3
860.010	37019.6
870.010	37018.0
880.010	37016.5
890.010	37015.1
900.010	37013.9
910.010	37012.7
920.010	37011.7
930.010	37010.7
940.010	37009.8
950.010	37008.9
960.010	37008.2
970.010	37007.4
980.010	37006.8
990.010	37006.2

Based on a travel time of 74.4173 years
For the receptor to be at 10000.0 ppb
The SSTL should be (in ppb): 73997.4

TITLE : SMITHS GROCERY
CBM JOB # : 10629
SC ID # : 09322

Contaminant of Concern is NAPHTHALENE

C(x,0,0,t)=(C0/2)erfc[(x-vt)/2(Ax*vt)1/2] erf[Y/4(Ay*x)1/2]erf[Z/2(alphz*x)1/2]

INPUT PARAMETERS :
Concentration of Source (ppb) = 900.00
Source Width (ft) = 150.00
Vertical Thickness of Source (ft) = 38.00
Distance of Recipient (ft) =1000.00
Groundwater Flow Velocity (ft/yr) = 3.65
RBSL concentration for COC(ppb) = 10.00
Longitudinal Dispersivity (ft) = 100.000000
Transverse Dispersivity (ft) = 33.333332
Vertical Dispersivity (ft) = 5.000000
Total Organic Carbon, TOC (mg/kg) = 60.00
Total Petroleum Hydrocarbons,TPH(mg/kg) = 0.00
Soil/Water Part. Coefficient,Koc(ml/g) = 1543.00
Organic Carbon Fraction, foc (%) = 0.0000600
Porosity = .250
Bulk Density (g/cc) = 1.530
Retardation Factor, Rf = 1.56661
Contaminant Velocity (ft/yr) = 2.32987

SSTL CONCENTRATION COMPUTED FOR :
220.000 ft.

TIME (yrs)	SSTL FOR RECEPTOR 1 (ppb)
0.100000E-01	Plume will not reach receptor in given time
10.0100	18595.1
20.0100	1019.68
30.0100	362.041
40.0100	209.543
50.0100	148.637
60.0100	117.163
70.0100	98.2964
80.0100	85.8532
90.0100	77.0860
100.010	70.6044
110.010	65.6350
120.010	61.7155
130.010	58.5534
140.010	55.9550
150.010	53.7873
160.010	51.9555
170.010	50.3909
180.010	49.0421
190.010	47.8701
200.010	46.8446
210.010	45.9417
220.010	45.1426
230.010	44.4320
240.010	43.7973
250.010	43.2284
260.010	42.7166
270.010	42.2549
280.010	41.8371
290.010	41.4581
300.010	41.1135
310.010	40.7996
320.010	40.5131
330.010	40.2511
340.010	40.0111
350.010	39.7910
360.010	39.5888

370.010	39.4028
380.010	39.2316
390.010	39.0738
400.010	38.9281
410.010	38.7936
420.010	38.6693
430.010	38.5542
440.010	38.4477
450.010	38.3490
460.010	38.2575
470.010	38.1726
480.010	38.0938
490.010	38.0206
500.010	37.9526
510.010	37.8893
520.010	37.8305
530.010	37.7758
540.010	37.7248
550.010	37.6773
560.010	37.6331
570.010	37.5918
580.010	37.5534
590.010	37.5175
600.010	37.4841
610.010	37.4529
620.010	37.4237
630.010	37.3965
640.010	37.3711
650.010	37.3474
660.010	37.3252
670.010	37.3045
680.010	37.2851
690.010	37.2670
700.010	37.2500
710.010	37.2342
720.010	37.2194
730.010	37.2055
740.010	37.1925
750.010	37.1804
760.010	37.1690
770.010	37.1584
780.010	37.1484
790.010	37.1391
800.010	37.1304
810.010	37.1222
820.010	37.1145
830.010	37.1073
840.010	37.1006
850.010	37.0943
860.010	37.0884
870.010	37.0829
880.010	37.0777
890.010	37.0728
900.010	37.0682
910.010	37.0640
920.010	37.0600
930.010	37.0562
940.010	37.0527
950.010	37.0494
960.010	37.0463
970.010	37.0434
980.010	37.0406
990.010	37.0381

Based on a travel time of 94.4259 years
For the receptor to be at 10.0000 ppb
The SSTL should be (in ppb): 73.9974

□

C&L CONSULTANTS, Inc.

P.O. Box 50307, Columbia, SC 29250
(803) 438-0934 Voice or FAX

RECEIVED
DEC 2 0 1999

Report of

SIEVE/HYDROMETER ANALYSIS

Report Date: 12/10/99 Analysis Date: 12/8/99

Client: CBM Environmental
377 Carowinds Blvd, Suite 118
Fort Mill, SC 29708

C&L Job #: 9095

Project: SMITH'S GROCERY, CBM #10629
Sample ID: SB-8 (8'-10')

Method of Analysis: ASTM D422-63(1990)

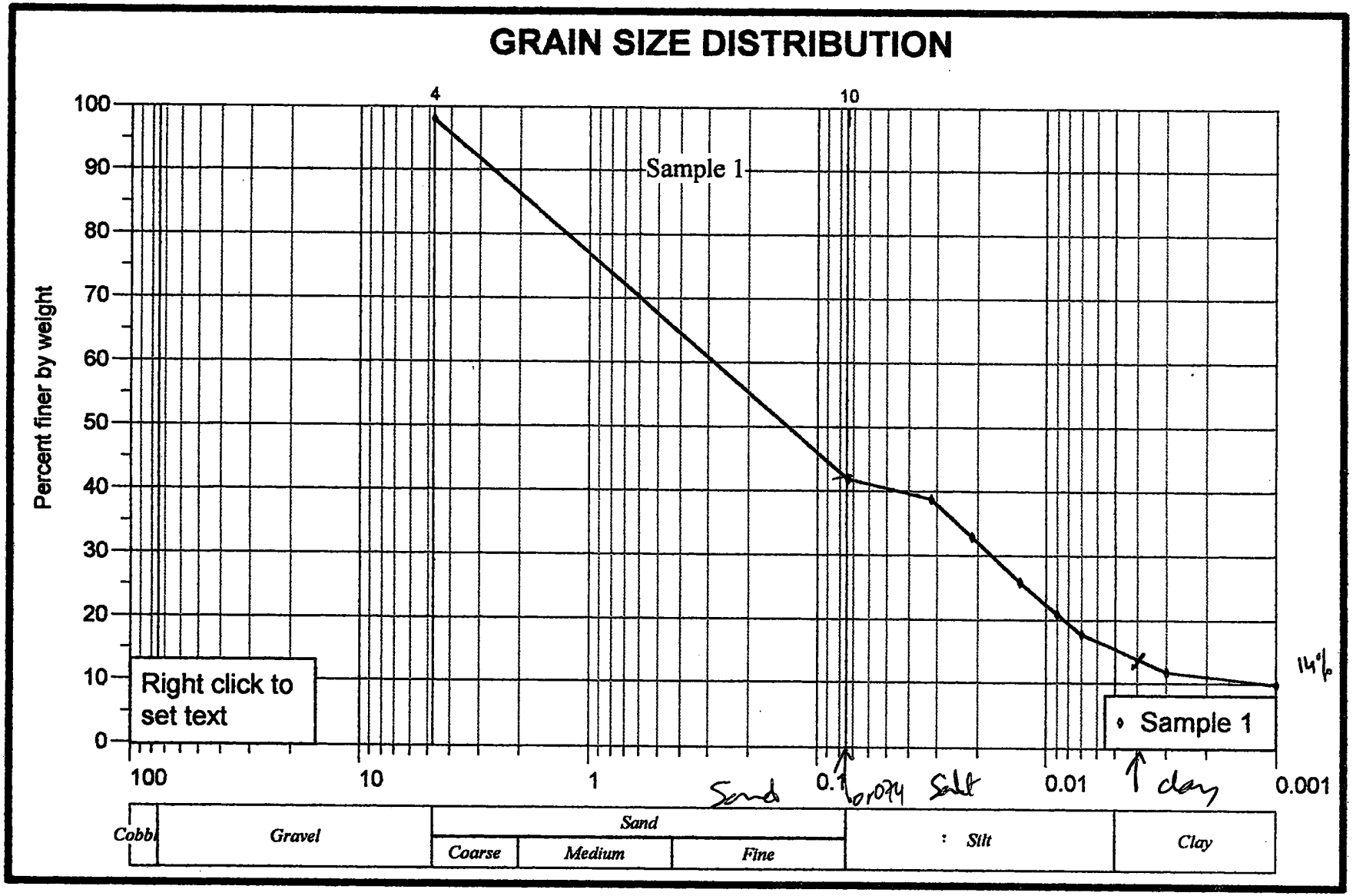
Analyst: R.H. NeSmith

1.	Gravel, passing 3-in. and retained on No.4 sieve:	2 %
2.	Sand, passing No. 4 sieve and retained on No. 200 sieve	56 %
	(a) Coarse Sand, passing No. 4, retained on No. 10	-- %
	(b) Medium Sand, passing No.10, retained on No.40	-- %
	(c) Fine Sand, passing No.40, retained on No. 200	-- %
3.	Silt, 0.074 to 0.005 mm	28 %
4.	Clay, smaller than 0.005 mm	16 %
5.	% Moisture	10

Respectfully Submitted,
C&L Consultants, Inc.

Randall H. NeSmith

Randall H. NeSmith, Laboratory Director


GRAIN SIZE DISTRIBUTION
Percent finer by weight
100
90
80
70
60
50
40
30
20
10
0
4
10
Sample 1
Right click to set text
Sample 1
100
10
1
0.1
0.01
0.001
Sand
Silt
clay
Cobbl
Gravel
Sand
Coarse
Medium
Fine
Silt
Clay

57%

14%

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

RECEIVED
DEC 14 1999

12/10/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery #10629
Customer Sample ID: SB-1(15-20)
Prism Sample ID: AB49617
Login Group: 4138F5
Sample Collection Date/Time: 11/19/99 14:45
Lab Submittal Date/Time: 11/22/99 17:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	11/26/99	PEL
BENZENE	Not detected	ug/kg	5.00	8260/5035	12/2/99 15:06	PEL
TOLUENE	Not detected	ug/kg	5.00	8260/5035	12/2/99 15:06	PEL
ETHYLBENZENE	Not detected	ug/kg	5.00	8260/5035	12/2/99 15:06	PEL
XYLENES	Not detected	ug/kg	10.00	8260/5035	12/2/99 15:06	PEL
NAPHTHALENE	Not detected	ug/kg	5.00	8260/5035	12/2/99 15:06	PEL
SURR: TOLUENE-D8	101.00	%		8260/5035	12/2/99 15:06	PEL
SURR: 1,-DCB-D4	103.50	%		8260/5035	12/2/99 15:06	PEL
SURR: DIBROMOFLUOROMETHANE	89.50	%		8260/5035	12/2/99 15:06	PEL
NAPHTHALENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
ACENAPHTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
FLUORENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
BENZO(a)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
BENZO(a)PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
BENZO(b)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
BENZO(k)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
CHRYSENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
ACENAPTHYLENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
BENZO(g,h,I)PERYLENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
PHENANTHRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:22	PEL
SURR: D5-NITROBENZENE	31.70	%		8270	11/26/99 12:22	PEL
SURR: 2-FLUOROBIPHENYL	44.30	%		8270	11/26/99 12:22	PEL
SURR: 4-TERPHENYL, D14	49.70	%		8270	11/26/99 12:22	PEL

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

12/10/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **SB-1(15-20)**
Prism Sample ID: **AB49617**
Login Group: 4138F5
Sample Collection Date/Time: 11/19/99 14:45
Lab Submittal Date/Time: 11/22/99 17:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

12/10/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: SB-2(15-20)
Prism Sample ID: AB49618
Login Group: 4138F5
Sample Collection Date/Time: 11/19/99 15:45
Lab Submittal Date/Time: 11/22/99 17:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	11/26/99	PEL
BENZENE	Not detected	ug/kg	5.00	8260/5035	12/2/99 15:07	PEL
TOLUENE	29.0	ug/kg	5.00	8260/5035	12/2/99 15:07	PEL
ETHYLBENZENE	30.3	ug/kg	5.00	8260/5035	12/2/99 15:07	PEL
XYLENES	174.9	ug/kg	10.00	8260/5035	12/2/99 15:07	PEL
NAPHTHALENE	Not detected	ug/kg	5.00	8260/5035	12/2/99 15:07	PEL
SURR: TOLUENE-D8	100.00	%		8260/5035	12/2/99 15:07	PEL
SURR: 1,-DCB-D4	110.50	%		8260/5035	12/2/99 15:07	PEL
SURR: DIBROMOFLUOROMETHANE	88.75	%		8260/5035	12/2/99 15:07	PEL
NAPHTHALENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
ACENAPHTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
FLUORENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
BENZO(a)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
BENZO(a)PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
BENZO(b)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
BENZO(k)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
CHRYSENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
ACENAPTHYLENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
BENZO(g,h,i)PERYLENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
PHENANTHRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:23	PEL
SURR: D5-NITROBENZENE	34.80	%		8270	11/26/99 12:23	PEL
SURR: 2-FLUOROBIPHENYL	59.10	%		8270	11/26/99 12:23	PEL
SURR: 4-TERPHENYL, D14	73.70	%		8270	11/26/99 12:23	PEL

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

12/10/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: SB-2(15-20)
Prism Sample ID: AB49618
Login Group: 4138F5
Sample Collection Date/Time: 11/19/99 15:45
Lab Submittal Date/Time: 11/22/99 17:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

12/10/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: SB-3(15-20)
Prism Sample ID: AB49619
Login Group: 4138F5
Sample Collection Date/Time: 11/19/99 17:30
Lab Submittal Date/Time: 11/22/99 17:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	11/26/99	PEL
BENZENE	Not detected	ug/kg	5.00	8260/5035	12/4/99 15:08	PEL
TOLUENE	Not detected	ug/kg	5.00	8260/5035	12/4/99 15:08	PEL
ETHYLBENZENE	Not detected	ug/kg	5.00	8260/5035	12/4/99 15:08	PEL
XYLENES	16.8	ug/kg	10.00	8260/5035	12/4/99 15:08	PEL
NAPHTHALENE	Not detected	ug/kg	5.00	8260/5035	12/4/99 15:08	PEL
SURR: TOLUENE-D8	100.00	%		8260/5035	12/4/99 15:08	PEL
SURR: 1,-DCB-D4	105.50	%		8260/5035	12/4/99 15:08	PEL
SURR: DIBROMOFLUOROMETHANE	95.75	%		8260/5035	12/4/99 15:08	PEL
NAPHTHALENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
ACENAPHTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
FLUORENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
BENZO(a)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
BENZO(a)PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
BENZO(b)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
BENZO(k)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
CHRYSENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
ACENAPTHYLENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
BENZO(g,h,I)PERYLENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
PHENANTHRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:25	PEL
SURR: D5-NITROBENZENE	46.20	%		8270	11/26/99 12:25	PEL
SURR: 2-FLUOROBIPHENYL	65.10	%		8270	11/26/99 12:25	PEL
SURR: 4-TERPHENYL, D14	70.60	%		8270	11/26/99 12:25	PEL

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

12/10/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **SB-3(15-20)**
Prism Sample ID: **AB49619**
Login Group: 4138F5
Sample Collection Date/Time: 11/19/99 17:30
Lab Submittal Date/Time: 11/22/99 17:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

12/10/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: SB-4(15-20)
Prism Sample ID: AB49620
Login Group: 4138F5
Sample Collection Date/Time: 11/19/99 16:25
Lab Submittal Date/Time: 11/22/99 17:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	11/26/99	PEL
BENZENE	307	ug/kg	50.00	8260/5035	12/7/99 10:49	PEL
TOLUENE	5010	ug/kg	50.00	8260/5035	12/7/99 10:49	PEL
ETHYLBENZENE	9420	ug/kg	50.00	8260/5035	12/7/99 10:49	PEL
XYLENES	65180	ug/kg	100.00	8260/5035	12/7/99 10:49	PEL
NAPHTHALENE	2160	ug/kg	50.00	8260/5035	12/7/99 10:49	PEL
SURR: TOLUENE-D8	98.75	%		8260/5035	12/7/99 10:49	PEL
SURR: 1,-DCB-D4	101.25	%		8260/5035	12/7/99 10:49	PEL
SURR: DIBROMOFLUOROMETHANE	93.75	%		8260/5035	12/7/99 10:49	PEL

NAPHTHALENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
ACENAPHTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
FLUORENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
BENZO(a)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
BENZO(a)PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
BENZO(b)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
BENZO(k)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
CHRYSENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
ACENAPTHYLENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
BENZO(g,h,i)PERYLENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
PHENANTHRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:26	PEL
SURR: D5-NITROBENZENE	33.10	%		8270	11/26/99 12:26	PEL
SURR: 2-FLUOROBIPHENYL	52.70	%		8270	11/26/99 12:26	PEL
SURR: 4-TERPHENYL, D14	74.50	%		8270	11/26/99 12:26	PEL

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

12/10/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **SB-4(15-20)**
Prism Sample ID: **AB49620**
Login Group: 4138F5
Sample Collection Date/Time: 11/19/99 16:25
Lab Submittal Date/Time: 11/22/99 17:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

12/10/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: SB-5(15-20)
Prism Sample ID: AB49621
Login Group: 4138F5
Sample Collection Date/Time: 11/19/99 16:50
Lab Submittal Date/Time: 11/22/99 17:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	11/26/99	PEL
BENZENE	15.9	ug/kg	5.00	8260/5035	12/5/99 10:53	PEL
TOLUENE	64.2	ug/kg	5.00	8260/5035	12/5/99 10:53	PEL
ETHYLBENZENE	250	ug/kg	5.00	8260/5035	12/5/99 10:53	PEL
XYLENES	1430	ug/kg	10.00	8260/5035	12/5/99 10:53	PEL
NAPHTHALENE	280	ug/kg	5.00	8260/5035	12/5/99 10:53	PEL
SURR: TOLUENE-D8	99.00	%		8260/5035	12/5/99 10:53	PEL
SURR: 1,-DCB-D4	103.00	%		8260/5035	12/5/99 10:53	PEL
SURR: DIBROMOFLUOROMETHANE	88.50	%		8260/5035	12/5/99 10:53	PEL

NAPHTHALENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
ACENAPHTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
FLUORENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
BENZO(a)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
BENZO(a)PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
BENZO(b)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
BENZO(k)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
CHRYSENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
ACENAPTHYLENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
BENZO(g,h,i)PERYLENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
PHENANTHRENE	Not detected	mg/kg	0.33	8270	11/26/99 12:27	PEL
SURR: D5-NITROBENZENE	41.70	%		8270	11/26/99 12:27	PEL
SURR: 2-FLUOROBIPHENYL	51.40	%		8270	11/26/99 12:27	PEL
SURR: 4-TERPHENYL, D14	63.80	%		8270	11/26/99 12:27	PEL
---						

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

12/10/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery**
Customer Sample ID: **SB-5(15-20)**
Prism Sample ID: **AB49621**
Login Group: 4138F5
Sample Collection Date/Time: 11/19/99 16:50
Lab Submittal Date/Time: 11/22/99 17:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 3°	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

Client CBM ENVIRONMENTAL SERVICES, INC.
Physical Address 377 CAROWINDS BLVD, SUITE 118 FORT MILL, SC 29708
Phone (803) 548-5989 Fax (803) 548-5892
P.O.#/Billing Reference 11102
Project Name SMITH'S GROCERY - JOB #10629

REPORT TO: Name SCOTT BALL
Address
BILL TO: Name CBM
Address
Requested Due Date STANDARD TURNAROUND
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ___ NA ✓
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	8260 w SD35	BTEX+NAP 8270 PAHs					REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
SB-1 (15-20')	11/19/99	1445	SOIL	VOA/G/C	2/1/1	40ml/4oz/8oz	NaHSO4/-/-	✓	✓							49617
SB-2 (15-20')	↓	1545	↓	↓	↓	↓	↓	✓	✓							49618
SB-3 (15-20')	↓	1730	↓	↓	↓	↓	↓	✓	✓							49619
SB-4 (15-20')	↓	1625	↓	↓	↓	↓	↓	✓	✓							49620
SB-5 (15-20)	↓	1650	↓	↓	↓	↓	↓	✓	✓							49621

Sampler's Signature Shannon L. Cottrill Sampled By (Print Name) SHANNON L. COTTRILL Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Shannon L. Cottrill	Heath McClure	11/22/99	1720
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) Heath McClure	Received For Prism Laboratories By: Kathryn Nunez	11/22/99	1745
Method of Shipment		Log-In Group No. 413855	

Additional Comments

1715

NPDES NC ___ SC ___ OTHER ___ UST: NC ✓ SC ✓ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

Lab Report

RECEIVED
NOV 1 0 1999

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job #10629
Customer Sample ID: SB-6(10-15)
Prism Sample ID: AB47082
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 13:15
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	11/2/99	PEL
BENZENE	Not detected	mg/kg	0.005	8260/5035	11/4/99 14:49	MP
ETHYLBENZENE	Not detected	mg/kg	0.005	8260/5035	11/4/99 14:49	MP
TOLUENE	0.007	mg/kg	0.005	8260/5035	11/4/99 14:49	MP
XYLENES	Not detected	mg/kg	0.010	8260/5035	11/4/99 14:49	MP
NAPHTHALENE	Not detected	mg/kg	0.005	8260/5035	11/4/99 14:49	MP
SURR: DIBROMOFLUOROMETHANE	102	%	80-120	8260/5035	11/4/99 14:49	MP
SURR: TOLUENE-D8	91	%	81-117	8260/5035	11/4/99 14:49	MP
SURR: BROMOFLUOROBENZENE	113	%	74-121	8260/5035	11/4/99 14:49	MP
DILUTION FACTOR	1	mg/kg		8260/5035	11/4/99 14:49	MP

NAPHTHALENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
ACENAPHTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
ANTHRACENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
FLUORENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
PYRENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
BENZO(a)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
BENZO(a)PYRENE	Not detected	mg/kg	0.10	8270	11/3/99 09:32	PEL
BENZO(b)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
BENZO(k)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
CHRYSENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	mg/kg	0.10	8270	11/3/99 09:32	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
ACENAPTHYLENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
BENZO(g,h,i)PERYLENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
PHENANTHRENE	Not detected	mg/kg	0.33	8270	11/3/99 09:32	PEL
SURR: D5-NITROBENZENE	50.00	%		8270	11/3/99 09:32	PEL
SURR: 2-FLUOROBIPHENYL	66.20	%		8270	11/3/99 09:32	PEL
SURR: 4-TERPHENYL, D14	66.80	%		8270	11/3/99 09:32	PEL

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job #10629
Customer Sample ID: SB-6(10-15)
Prism Sample ID: AB47082
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 13:15
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
CALCULATIONS BASED ON DRY WT.	88	% DRY WT.	0.01	SM 2540 G	11/2/99 15:20	GAM

Sample Comments:
Sample for 8270 was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job #10629
Customer Sample ID: SB-7(8-10)
Prism Sample ID: AB47083
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 10:32
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	11/2/99	PEL
BENZENE	0.021	mg/kg	0.005	8260/5035	11/3/99 22:02	MP
ETHYLBENZENE	0.030	mg/kg	0.005	8260/5035	11/3/99 22:02	MP
TOLUENE	0.081	mg/kg	0.005	8260/5035	11/3/99 22:02	MP
XYLENES	0.190	mg/kg	0.010	8260/5035	11/3/99 22:02	MP
NAPHTHALENE	0.110	mg/kg	0.005	8260/5035	11/3/99 22:02	MP
SURR: DIBROMOFLUOROMETHANE	117	%	80-120	8260/5035	11/3/99 22:02	MP
SURR: TOLUENE-D8	90	%	81-117	8260/5035	11/3/99 22:02	MP
SURR: BROMOFLUOROBENZENE	119	%	74-121	8260/5035	11/3/99 22:02	MP
DILUTION FACTOR	1	mg/kg		8260/5035	11/3/99 22:02	MP

NAPHTHALENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
ACENAPHTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
ANTHRACENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
FLUORENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
PYRENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
BENZO(a)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
BENZO(a)PYRENE	Not detected	mg/kg	0.10	8270	11/3/99 09:33	PEL
BENZO(b)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
BENZO(k)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
CHRYSENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	mg/kg	0.10	8270	11/3/99 09:33	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
ACENAPTHYLENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
BENZO(g,h,i)PERYLENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
PHENANTHRENE	Not detected	mg/kg	0.33	8270	11/3/99 09:33	PEL
SURR: D5-NITROBENZENE	30.60	%		8270	11/3/99 09:33	PEL
SURR: 2-FLUOROBIPHENYL	45.50	%		8270	11/3/99 09:33	PEL
SURR: 4-TERPHENYL, D14	88.10	%		8270	11/3/99 09:33	PEL
---						

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery Job #10629**
Customer Sample ID: **SB-7(8-10)**
Prism Sample ID: **AB47083**
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 10:32
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
CALCULATIONS BASED ON DRY WT.	86	% DRY WT.	0.01	SM 2540 G	11/2/99 15:20	GAM

Sample Comments:
Sample for 8270 was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job #10629
Customer Sample ID: SB-8(8-10)
Prism Sample ID: AB47084
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 10:22
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	11/2/99	PEL
PREP. METHOD 3550	Completed			3550	11/2/99	PEL
DIESEL RANGE ORGANICS	Not detected	mg/kg	5.00	3550/8015M	11/3/99 11:03	PEL

BENZENE	Not detected	mg/kg	0.005	8260/5035	11/4/99 15:43	MP
ETHYLBENZENE	Not detected	mg/kg	0.005	8260/5035	11/4/99 15:43	MP
TOLUENE	Not detected	mg/kg	0.005	8260/5035	11/4/99 15:43	MP
XYLENES	Not detected	mg/kg	0.010	8260/5035	11/4/99 15:43	MP
NAPHTHALENE	0.050	mg/kg	0.005	8260/5035	11/4/99 15:43	MP
SURR: DIBROMOFLUOROMETHANE	114	%	80-120	8260/5035	11/4/99 15:43	MP
SURR: TOLUENE-D8	87	%	81-117	8260/5035	11/4/99 15:43	MP
SURR: BROMOFLUOROBENZENE	107	%	74-121	8260/5035	11/4/99 15:43	MP
DILUTION FACTOR	1	mg/kg		8260/5035	11/4/99 15:43	MP

NAPHTHALENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
ACENAPHTHENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
ANTHRACENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
FLUORENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
PYRENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
BENZO(a)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
BENZO(a)PYRENE	Not detected	mg/kg	0.10	8270	11/4/99 09:37	PEL
BENZO(b)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
BENZO(k)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
CHRYSENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	mg/kg	0.10	8270	11/4/99 09:37	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
ACENAPTHYLENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
BENZO(g,h,i)PERYLENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL
PHENANTHRENE	Not detected	mg/kg	0.33	8270	11/4/99 09:37	PEL

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job #10629
Customer Sample ID: SB-8(8-10)
Prism Sample ID: AB47084
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 10:22
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SURR: D5-NITROBENZENE	49.10	%		8270	11/4/99 09:37	PEL
SURR: 2-FLUOROBIPHENYL	73.30	%		8270	11/4/99 09:37	PEL
SURR: 4-TERPHENYL, D14	71.00	%		8270	11/4/99 09:37	PEL

CALCULATIONS BASED ON DRY WT.	88	% DRY WT.	0.01	SM 2540 G	11/2/99 15:20	GAM

Sample Comments:

Sample for 8270 & 3550 was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job #10629
Customer Sample ID: SB-9(6-8)
Prism Sample ID: AB47085
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 09:53
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	11/2/99	PEL
BENZENE	0.017	mg/kg	0.005	8260/5035	11/3/99 22:44	MP
ETHYLBENZENE	Not detected	mg/kg	0.005	8260/5035	11/3/99 22:44	MP
TOLUENE	0.031	mg/kg	0.005	8260/5035	11/3/99 22:44	MP
XYLENES	0.028	mg/kg	0.010	8260/5035	11/3/99 22:44	MP
NAPHTHALENE	0.008	mg/kg	0.005	8260/5035	11/3/99 22:44	MP
SURR: DIBROMOFLUOROMETHANE	117	%	80-120	8260/5035	11/3/99 22:44	MP
SURR: TOLUENE-D8	93	%	81-117	8260/5035	11/3/99 22:44	MP
SURR: BROMOFLUOROBENZENE	104	%	74-121	8260/5035	11/3/99 22:44	MP
DILUTION FACTOR	1	mg/kg		8260/5035	11/3/99 22:44	MP

NAPHTHALENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
ACENAPHTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
ANTHRACENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
FLUORENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
PYRENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
BENZO(a)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
BENZO(a)PYRENE	Not detected	mg/kg	0.10	8270	11/3/99 09:34	PEL
BENZO(b)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
BENZO(k)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
CHRYSENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	mg/kg	0.10	8270	11/3/99 09:34	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
ACENAPTHYLENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
BENZO(g,h,i)PERYLENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
PHENANTHRENE	Not detected	mg/kg	0.33	8270	11/3/99 09:34	PEL
SURR: D5-NITROBENZENE	46.50	%		8270	11/3/99 09:34	PEL
SURR: 2-FLUOROBIPHENYL	63.50	%		8270	11/3/99 09:34	PEL
SURR: 4-TERPHENYL, D14	69.00	%		8270	11/3/99 09:34	PEL
----------						

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery Job #10629**
Customer Sample ID: **SB-9(6-8)**
Prism Sample ID: **AB47085**
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 09:53
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
CALCULATIONS BASED ON DRY WT.	84	% DRY WT.	0.01	SM 2540 G	11/2/99 15:20	GAM

Sample Comments:

Sample for 8270 was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job #10629
Customer Sample ID: SB-10(8-10)
Prism Sample ID: AB47086
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 10:05
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	11/2/99	PEL
BENZENE	0.007	mg/kg	0.005	8260/5035	11/3/99 20:38	MP
ETHYLBENZENE	Not detected	mg/kg	0.005	8260/5035	11/3/99 20:38	MP
TOLUENE	0.014	mg/kg	0.005	8260/5035	11/3/99 20:38	MP
XYLENES	0.016	mg/kg	0.010	8260/5035	11/3/99 20:38	MP
NAPHTHALENE	0.011	mg/kg	0.005	8260/5035	11/3/99 20:38	MP
SURR: DIBROMOFLUOROMETHANE	104	%	80-120	8260/5035	11/3/99 20:38	MP
SURR: TOLUENE-D8	89	%	81-117	8260/5035	11/3/99 20:38	MP
SURR: BROMOFLUOROBENZENE	117	%	74-121	8260/5035	11/3/99 20:38	MP
DILUTION FACTOR	1	mg/kg		8260/5035	11/3/99 20:38	MP

NAPHTHALENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
ACENAPHTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
ANTHRACENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
FLUORENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
PYRENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
BENZO(a)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
BENZO(a)PYRENE	Not detected	mg/kg	0.10	8270	11/3/99 09:35	PEL
BENZO(b)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
BENZO(k)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
CHRYSENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	mg/kg	0.10	8270	11/3/99 09:35	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
ACENAPTHYLENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
BENZO(g,h,i)PERYLENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
PHENANTHRENE	Not detected	mg/kg	0.33	8270	11/3/99 09:35	PEL
SURR: D5-NITROBENZENE	38.70	%		8270	11/3/99 09:35	PEL
SURR: 2-FLUOROBIPHENYL	51.10	%		8270	11/3/99 09:35	PEL
SURR: 4-TERPHENYL, D14	63.70	%		8270	11/3/99 09:35	PEL
---						

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: **Smith's Grocery Job #10629**
Customer Sample ID: **SB-10(8-10)**
Prism Sample ID: **AB47086**
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 10:05
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
CALCULATIONS BASED ON DRY WT.	85	% DRY WT.	0.01	SM 2540 G	11/2/99 15:20	GAM

Sample Comments:

Sample for 8270 was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job #10629
Customer Sample ID: SB-11(8-10)
Prism Sample ID: AB47087
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 09:43
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	11/2/99	PEL
BENZENE	Not detected	mg/kg	0.005	8260/5035	11/3/99 21:20	MP
ETHYLBENZENE	Not detected	mg/kg	0.005	8260/5035	11/3/99 21:20	MP
TOLUENE	0.011	mg/kg	0.005	8260/5035	11/3/99 21:20	MP
XYLENES	0.012	mg/kg	0.010	8260/5035	11/3/99 21:20	MP
NAPHTHALENE	Not detected	mg/kg	0.005	8260/5035	11/3/99 21:20	MP
SURR: DIBROMOFLUOROMETHANE	117	%	80-120	8260/5035	11/3/99 21:20	MP
SURR: TOLUENE-D8	87	%	81-117	8260/5035	11/3/99 21:20	MP
SURR: BROMOFLUOROBENZENE	109	%	74-121	8260/5035	11/3/99 21:20	MP
DILUTION FACTOR	1	mg/kg		8260/5035	11/3/99 21:20	MP

NAPHTHALENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
ACENAPHTHENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
ANTHRACENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
FLUORENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
PYRENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
BENZO(a)ANTHRACENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
BENZO(a)PYRENE	Not detected	mg/kg	0.10	8270	11/4/99 09:36	PEL
BENZO(b)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
BENZO(k)FLUORANTHENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
CHRYSENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	mg/kg	0.10	8270	11/4/99 09:36	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
ACENAPTHYLENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
BENZO(g,h,i)PERYLENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
PHENANTHRENE	Not detected	mg/kg	0.33	8270	11/4/99 09:36	PEL
SURR: D5-NITROBENZENE	23.10	%		8270	11/4/99 09:36	PEL
SURR: 2-FLUOROBIPHENYL	40.30	%		8270	11/4/99 09:36	PEL
SURR: 4-TERPHENYL, D14	68.40	%		8270	11/4/99 09:36	PEL

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job #10629
Customer Sample ID: SB-11(8-10)
Prism Sample ID: AB47087
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 09:43
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
CALCULATIONS BASED ON DRY WT.	89	% DRY WT.	0.01	SM 2540 G	11/2/99 15:20	GAM

Sample Comments:
Sample for 8270 was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/8/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job #10629
Customer Sample ID: SB-12(8-10)
Prism Sample ID: AB47088
Login Group: 3298F7
Sample Collection Date/Time: 10/22/99 10:51
Lab Submittal Date/Time: 11/1/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TOTAL ORGANIC CARBON	60	mg/kg	1.0	SW846-9060M	11/3/99 16:33	PEL

Sample Comments:

Sample for TOC was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 0.6°	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client: CBM ENVIRONMENTAL SERVICES, INC
Physical Address: 377 CAROLINDS BLVD, SUITE 11B
FORT MILL, SOUTH CAROLINA 29708
Phone: (803) 548-5989 Fax: (803) 548-5892
P.O.#/Billing Reference: 11102
Project Name: SMITH'S GROCERY - TOB #10629

REPORT TO: Name: SCOTT BALL
Address:
BILL TO: Name: CBM
Address:
Requested Due Date: STANDARD TURNAROUND
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ___ NA ✓
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: BTEX+MTBE 8260 w/ 5035	BTEX+MTBE 8021B	PAHs 8270 SIM	TPH 3550	TCE			REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
SB-1 ( )			SOIL	C/C/VOA	1/1/2	40z/60z/40ml	-/-/$Na_2S_2O_3$	✓	✓								47081
SB-2 ( )								✓	✓	*					* TO BE SUBMITTED @ A		
SB-3 ( )								✓	✓	*					* LATER DATE. SC 10/01/99		
SB-4 ( )								✓	✓	*							
SB-5 ( )								✓	✓	*							
SB-6 (10-15')	10/22/99	1315						✓	✓								47082
SB-7 (8-10')	10/22/99	1032						✓	✓								47083
SB-8 (8-10')		1022		C/C/C/VOA	1/1/1/2	40z/40z/40ml/40ml	-/-/-/$Na_2S_2O_3$	✓	✓	✓							47084
SB-9 (6-8')		0953		C/C/VOA	1/1/2	40z/40z/40ml	-/-/$Na_2S_2O_3$	✓	✓								47085
SB-10 (8-10')	↓	1005	↓	↓	↓	↓	↓	✓	✓								47086

Sampler's Signature: Shannon Cottrill Sampled By (Print Name): SHANNON COTTRILL/CHIP CREATH S.C. Affiliation: CBM ENVIRONMENTAL

Relinquished By: (Signature) Shannon Cottrill	Received By: (Signature)	Date 10/22/99	SC Military/Hours 1700	Additional Comments SC 1/10
Relinquished By: (Signature)	Received By: (Signature)	Date 11/01/99		
Relinquished By: (Signature)	Received For Prism Laboratories By: Kimmon Wing	Date 11/1/99	1430	
Method of Shipment		Log-In Group No. 32981	7 PAG	

NPDES NC ___ SC ___ OTHER ___ UST: NC ✓ SC ✓ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 2 OF 2 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 2.3	✓		
PROPER PRESERVATIVES Indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client: CBM ENVIRONMENTAL SERVICES, INC.
Physical Address: 377 CROWDERS BLVD, SUITE 118
FORT MILL SOUTH CAROLINA 29708
Phone: (803) 548-5997 Fax: (803) 548-5992
P.O.#/Billing Reference: 1107
Project Name: [illegible] GROCERY - JOB # 10609

REPORT TO: Name SCOTT BALL
Address
BILL TO: Name CBM
Address
Requested Due Date STANDARD TURNAROUND
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ___ NA ✓
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: 8260 w/ 5035 BTEX+MTBE	8270 PAHs	8270 PAH (HIGH + LOW) 3550 TPH	TOC				REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
SB-1/(8-10')	10/27/99	0945	SOIL	C/C/VOA	1/1/2	40g/40z/40ml	—/—/NaHSO4	✓	✓								41057
SB-1/(8-10') Background	10/27/99	1051	SOIL	C	1	4oz	—				✓						41058
																	41059

Sampler's Signature [signature]
Sampled By (Print Name) SHANNON COTTRILL/CHIP CREAGH Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
[signature]	[signature]	10/27/99	1700
Relinquished By: (Signature)	Received By: (Signature)	Date 11/01/99	
Relinquished By: (Signature) [signature]	Received For Prism Laboratories By: [signature]	Date 11/1/99	1130
Method of Shipment		Log-In Group No. 32985	

Additional Comments
SC. [illegible]

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ✓ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

APPENDIX H
GROUNDWATER SAMPLING DATA SHEETS

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter:
serial no. pH Tester 2
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter
serial no. 45233
Standard _____
Standard _____ Red Line
Standard _____

Chain of Custody

Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.
Relinquished by	Date /Time	Received by	Date/Time

Well # MW 1

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 35 ft.
Depth to GW (DGW) 27.85 ft.

Length of Water Column(LWC=TWD-DGW) 7.15 ft.

1 Csg. Volume(LWC * C) = 7.15 X 0.163 = 11.65 gals.
3 Csg. Volumes = 3 X 11.65 = 3.49 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.49 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st Bailer	1.16	1.16					
Time (military)	1105	1110	1130	Went				1130
pH (s.u.)	5.4	5.6	5.9					5.9
Specific Cond. (umhos/cm)	100	69	50	DRY				50
Water Temp (°C)	16	15	15					
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 3.4 HC odor.

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter:
serial no. pH Tester 2
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter
serial no. 45133
Standard _____
Standard _____ Red Line
Standard _____

Chain of Custody

Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.
Relinquished by	Date /Time	Received by	Date/Time

Well # MW2

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 38 ft.
Depth to GW (DGW) 31.58 ft.

Length of Water Column(LWC=TWD-DGW) 6.42 ft.

1 Csg. Volume(LWC * C) = 6.42 X 0.163 = 1.046 gals.
3 Csg. Volumes = 3 X 1.046 = 3.139 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.139 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	1.046	1.046	1.046				3.139
Time (military)	1545	1550	1555	1600				1600
pH (s.u.)	6.4	6.2	6.3	6.6				6.6
Specific Cond. (umhos/cm)	190	110	160	310				310
Water Temp (°C)	18.5	11.5	18	18.5				18.5
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 2.57, well dry so could not purge another volume.

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter serial no. 45233
Standard _____
Standard _____ Red Line
Standard _____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.

Well # MW3

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 36 ft.
Depth to GW (DGW) 28.62 ft.

Length of Water Column(LWC=TWD-DGW) 7.38 ft.

1 Csg. Volume(LWC * C) = 7.38 X 0.163 = 1.202 gals.
3 Csg. Volumes = 3 X 1.202 = 3.60 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.608 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st water	1.202	1.202	1.202				3.608
Time (military)	1400	1405	1410	1415				1415
pH (s.u.)	5.8	6.0	6.0	6.0				6.0
Specific Cond. (umhos/cm)	195	80	70	79				79
Water Temp (°C)	18	17	16	16				16
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO : 5.86

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter: serial no. pH Tester 2
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter serial no. 45233
Standard _____
Standard _____ Red Line
Standard _____

Chain of Custody

Scott Ball / Rodney Hinger	12-2-99 / 12-3-99	PACE ANALYTICAL	12-2-99 / 12-3-99.
Relinquished by	Date /Time	Received by	Date/Time

Well # MW4

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 28 ft.
Depth to GW (DGW) 22.76 ft.

Length of Water Column(LWC=TWD-DGW) 5.24 ft.

1 Csg. Volume(LWC * C) = 5.24 X 0.163 = 0.854 gals.
3 Csg. Volumes = 3 X 0.854 = 2.56 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 2.56 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	0.854	1.708	2.56				2.56
Time (military)	0900	0902	0905	0909				0909
pH (s.u.)	5.3	5.8	5.9	6.0				6.0
Specific Cond. (umhos/cm)	70	55	50	50				50
Water Temp (°C)	14	15	16	17				17
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO : 5.83

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 12-1-99 | 12-2-99
Field Personnel SONYA PUNCH | RODNEY MINGER
General Weather Conditions SUNNY, COLD
Ambient Air Temperature 50 °C

Facility Name SMITH'S GROCERY Site ID# _____

Quality Assurance:

pH Meter:
serial no. pH Tester 2
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter
serial no. 45233
Standard _____
Standard _____ Red Line
Standard _____

Chain of Custody

Scott Ball	12-2-99	PACE	12-2-99
Rodney Hinger	12-3-99	ANALYTICAL	12-3-99.
Relinquished by	Date /Time	Received by	Date/Time

Well # MW 5

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 30.50 ft.
Depth to GW (DGW) 26.20 ft.

Length of Water Column(LWC=TWD-DGW) 2.589 ft.

1 Csg. Volume(LWC * C) = 2.587 X 0.163 = 8.422 gals.
3 Csg. Volumes = 3 X 4.22 = 1.266 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 1.266 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	1st bailer	0.422	0.422					0.844.
Time (military)	1000	1005	1010	D				1010
pH (s.u.)	6.6	6.6	6.7					6.7
Specific Cond. (umhos/cm)	100	60	60	R				60
Water Temp (°C)	15	16	16	Y				16
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks DO: 4.18

CBM

ENVIRONMENTAL SERVICES, INC.

RECEIVED
DEC 15 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

December 13, 1999

Ms. Pamela DuBois
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

RE: Site Survey
Smith's Grocery
York, York County
Site ID #: 09322
CBM #: 10629

Dear Ms. DuBois:

The purpose of this correspondence is to request approval of the attached proposal to complete a survey of the above referenced site. Based on the unusually large size of the site and the number of monitoring wells and other features that are to be located, the usual sum of $1,000 provided by the SCHHEC to complete the survey is insufficient. Similar situations have been encountered at other sites where RA activities were conducted and include Moore Food Store # 208 in Davis Station, South Carolina (Site ID #02459), Ridge Gas & Oil and Ridge Tire & Oil Company in Ridge Spring, South Carolina (Site ID #s 07965 and 07971) and the Santee Service Center in Santee, South Carolina (Site ID #11756). Additional costs above the standard $1,000 to complete comprehensive surveys at these sites were approved by the SCDHEC.

If necessary, additional proposals to complete the work can be requested and submitted for your review. If this proposal is acceptable, the work can reportedly be completed this week. In order to complete the site survey in a timely fashion, your prompt attention to this matter is greatly appreciated. If you have any questions or require additional information concerning this matter, please contact the undersigned at (803) 548-5989.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

TRICO
ENGINEERING CONSULTANTS ,INC.

Civil Engineering

Surveying

Landscape Architecture

Wetland Consulting

Land Planning

Environmental Services

To: Scott Ball
CBM

From: Cleve Gillette CG

Subject: ~~Strife~~ SMITH'S Site

Date: December 9, 1999
Via Fax: 803-548-5892

Trico can provide an Environmental As-Built for ~~a site in Strife Site~~ SMITH'S GROCERY SITE, York County, South Carolina for a fee of $2500.00. Locations of 20 monitoring wells, Strife, Vickery, Hill & Smith Water Supply Wells. All structures, utilities, roads, streets etc as well as topo points across the site.

Accepted

gl/1.909

4425 Belle Oaks Drive Charleston, SC 29405 Tele 843.740.7700 Fax:843.740.7707
tricoengr@charleston.net http://tricoengineering.com

Scott Ball
mobile phone
704-578-0161

09322

CBM ENVIRONMENTAL SERVICES, INC.

RECEIVED
DEC 07 1999
DIVISION OF UNDERGROUND STORAGE TANK MGMT.

FAX COVER SHEET

To:	Pam DuBois / Lee Mintz	**From:**	Scott Ball
Company:	SCDHEC	**Date:**	12/7/99
Fax No.:		**No. Pages:**	5 (Including Cover)
Phone No.:		**Regarding:**	Smiths Grocery Site / Hill Water Supply Well

___ Urgent / For Review ___ Please Comment / Please Call Me

Notes/Comments: Attached are results of samples collected from Tony Hill residence water supply well on 12/3/99. Samples were collected for total coliform & hydrogen sulfide to determine source of sulfur odor. Pretreatment samples (raw) from the GAC reported non-detect. Post treatment samples (treated) from the GAC reported non-detect for hydrogen sulfide but reported coliform present. Laboratory suggests that the GAC unit has bacteria in the carbon and that the GAC unit should be "shock chlorinated" to kill the bacteria. What is your opinion?

– Scott

P. O. Box 411387, Charlotte NC 28241
Fax Number: 803 548-5892 377 Carowinds Boulevard, Suite 118, Fort Mill SC 29708 Phone Number: 803 548-5989

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

December 06, 1999

Mr. Scott Ball
CBM Environmental Services.Inc
377 Carowinds Blvd.
Suite 118
Fort Mill. SC 29708

RE: Pace Project Number: 9210527
Client Project ID: Smiths Grocery/10629

Dear Mr. Ball:

Enclosed are the results of analyses for sample(s) received by the laboratory on December 3, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely.

Felicia Hogan

Sherri Howard
Project Manager

Enclosures

RECEIVED
DEC 07 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

DATE: 12/06/99
PAGE: 1

CBM Environmental Services,Inc
377 Carswinds Blvd.
Suite 118
Fort Mill, SC 29708

Pace Project Number: 9210527
Client Project ID: Smiths Grocery/10629

Attn: Mr. Scott Ball
Phone: (803)548-5989

Solid results are reported on a dry weight basis

Pace Sample No: 92744586 Date Collected: 12/03/99 Matrix: Water
Client Sample ID: HILL WSW RAW Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Wet Chemistry								
Sulfide, Total	Method: EPA 376.2				Prep Method: EPA 376.2			
Sulfide	ND	mg/l	0.05	1.00	12/06/99	KAG		
Total Coliform in Water	Method: SM 9223				Prep Method:			
Coliform, Total	Absent	No units	0	1.00	12/04/99	GCW		
Date Prepared					12/03/99	17		

Laboratory Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Laboratory Certification IDs
KY Drinking Water 90090
TN UST List
VA Drinking Water 213

Pace Analytical Services, Inc.
9800 Kinsey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

DATE: 12/08/99
PAGE: 2

Pace Project Number: 9210527
Client Project ID: Smiths Grocery/10629

Pace Sample No: 92744580 Date Collected: 12/03/99 Matrix: Water
Client Sample ID: MILL WSW TREATED Date Received: 12/03/99

Parameters	Results	Units	PRL	App. DF	Analyzed	Analyst	CAS#	Footnotes
Wet Chemistry								
Sulfide, Total	Method: EPA 376.2				Prep Method: EPA 376.2			
Sulfide	ND	mg/l	0.05	1.00	12/06/99	KAG		
Total Coliform in Water	Method: SM 9223				Prep Method:			
Coliform, Total	Present	No units	0	1.00	12/04/99	GCM		
Date Prepared					12/03/99	17		

09322

CBM ENVIRONMENTAL SERVICES, INC.

RECEIVED
DEC 0 3 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

FAX COVER SHEET

To: PAM DUBOIS/ LEE MONTS
From: SCOTT BALL
Company: SCDHEC
Date: 12/3/99
Fax No.:
No. Pages: 2 (Including Cover)
Phone No.:
Regarding: SMITHS WSW SAMPLING

_____Urgent _____For Review _____Please Comment _____Please Call Me

Notes/Comments: UPDATED RESULTS OF WSW'S IN SUBDIVISION ACROSS FROM SMITHS GROCERY. HIGH RESIDENCE STILL HAS PROBLEM W/ SULFUR. WILL BE IN TOUCH W/ YOU TODAY TO DISCUSS. THANKS -

SCOTT

P. O. Box 411387, Charlotte NC 28241
Fax Number: 803 548-5892
377 Carowinds Boulevard, Suite 118, Fort Mill SC 29708
Phone Number: 803 548-5989

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Tel: 704-875-9092
Fax: 704-875-9091

Pace Analytical

Pace Project Number: 9210527
Client Project ID: Smiths Grocery/10629

PARAMETER FOOTNOTES

ND	Not Detected
NC	Not Calculable
PRL	Pace Reporting Limit
Appl. DF	Applied Dilution Factor

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

SMITH'S GROCERY
GROUNDWATER ANALYTICAL DATA[1]
WATER SUPPLY WELLS

Well ID[2]	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
Vickery	10/18/99	**64.6**[2]	ND[3]	ND	39.82	ND	5.41
	10/27/99	ND	ND	ND	ND	ND	ND
	11/2/99	ND	ND	ND	ND	ND	**25.5**
	11/9/99	1.13	2.47	2.21	ND	ND	6.64
	11/11/99	ND	ND	ND	ND	ND	ND
	11/16/99	ND	ND	ND	ND	ND	ND
	11/23/99	ND	3.45	ND	ND	ND	ND
	11/30/99	ND	ND	ND	ND	ND	ND
Hill	11/5/99	1.43	ND	ND	ND	ND	2.46
	11/17/99	ND	ND	ND	ND	ND	ND
	11/23/99	1.47	2.91	ND	ND	ND	ND
	11/30/99	1.31	ND	ND	ND	ND	ND
Barnette	10/21/99	ND	ND	ND	ND	ND	ND
Beasley	10/21/99	ND	ND	ND	ND	ND	ND
Smith	10/21/99	ND	ND	ND	ND	ND	ND
Foster	11/19/99	ND	ND	ND	ND	ND	ND
Wood	10/21/99	ND	ND	ND	ND	ND	ND
	RBSL[4]	5	1,000	700	10.00	40	10

Notes:

1. Analyses for BTEX constituents, MTBE, and naphthalene using Method 8260; results reported in µg/L
2. Concentrations in bold exceed the RBSL.
3. Not detected at or above the method detection limit specified in the laboratory analytical report.
4. Risk Based Screening Level

UST #09322

RECEIVED
NOV 29 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

FAX COVER SHEET

To: PAM DuBOIS

From: SCOTT BALL

Company: SCDHEC

Date: 11/29/99

Fax No.:

No. Pages: 2 (Including Cover)

Phone No.:

Regarding: SMITHS GROCERY

____Urgent ✓For Review ____Please Comment ✓Please Call Me

Notes/Comments: WATER SUPPLY WELL DATA TO DATE. WILL KEEP YOU POSTED AS RESULTS COME IN. WE WILL NEED EXTRA FUMES FOR COMPREHENSIVE SURVEY OF THE SITE DUE TO LARGE AREA OF ASSESSMENT. DO YOU WANT BIDS FROM SURVEYORS. ALSO, TONY HILL HAS CONTACTED BARKER FILTRATION COMPLAINING OF SULFUR ODORS IN HIS WATER AFTER GAC UNIT WAS INSTALLED. I HAVE BEEN UNABLE TO CONTACT MR. HILL. HAS HE CONTACTED YOU?

— SCOTT

Fax Number: 803 548-5892

P. O. Box 411387, Charlotte NC 28241
377 Carowinds Boulevard, Suite 118, Fort Mill SC 29708

Phone Number: 803 548-5989

RECEIVED
NOV 29 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

SMITH'S GROCERY
GROUNDWATER ANALYTICAL DATA[1]
WATER SUPPLY WELLS

Well ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
Vickery	10/18/99	**64.6**[2]	ND[3]	ND	39.82	ND	5.41
	10/27/99	ND	ND	ND	ND	ND	ND
	11/2/99	ND	ND	ND	ND	ND	**25.5**
	11/9/99	1.13	2.47	2.21	ND	ND	6.64
	11/11/99	ND	ND	ND	ND	ND	ND
	11/16/99	ND	ND	ND	ND	ND	ND
Hill	11/5/99	1.43	ND	ND	ND	ND	2.46
	11/17/99	ND	ND	ND	ND	ND	ND
Diarsette	10/21/99	ND	ND	ND	ND	ND	ND
Beasley	10/21/99	ND	ND	ND	ND	ND	ND
Strife	10/21/99	ND	ND	ND	ND	ND	ND
Wood	10/21/99	ND	ND	ND	ND	ND	ND
	RBSL[4]	5	1,000	700	10,00	40	16

Notes:

1. Analyses for BTEX constituents, MTBE, and naphthalene using Method 8260; results reported in µg/L.
2. Concentrations in bold exceed the RBSL.
3. Not detected at or above the method detection limit specified in the laboratory analytical report.
4. Risk Based Screening Level.

CBM
ENVIRONMENTAL SERVICES, INC.

RECEIVED
NOV 12 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

FAX COVER SHEET

To: PAM DUBOIS
From: SCOTT BALL
Company: SCDHEC
Date: 11/12/99
Fax No.:
No. Pages: 5 (Including Cover)
Phone No.:
Regarding: SMITHS GROCERY 09322

_____Urgent _____For Review _____Please Comment _____Please Call Me

Notes/Comments: ATTACHED IS COPY OF ANALYTICAL RESULTS FOR VICKERY RESIDENCE WATER SUPPLY WELL SAMPLE COLLECTED PRIOR TO INSTALLATION OF NEW CARBON ON GAC UNIT. ANOTHER SAMPLE WAS COLLECTED 24 HOURS AFTER UNIT WAS ACTIVATED. RESULTS ARE FORTHCOMING. ALSO ATTACHED IS RESULTS OF WELL SAMPLE COLLECTED AT THE TONY HILL RESIDENCE WHICH ADJOINS THE VICKERY PROPERTY TO THE NORTH. I WOULD ~~RECOM~~ RECOMMEND THAT DHEC OR CBM RESAMPLE THE WELL BEFORE DECIDING TO INSTALL A TREATMENT SYSTEM.

Fax Number: 803 548-5892
P. O. Box 411387, Charlotte NC 28241
377 Carowinds Boulevard, Suite 118, Fort Mill SC 29708
Phone Number: 803 548-5989

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/10/99
CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: HILL WSW
Prism Sample ID: AB47787
Login Group: PGN9F1
Sample Collection Date/Time: 11/5/99 08:55
Lab Submittal Date/Time: 11/8/99 10:05

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	1.43	ug/L	1.00	8260	11/10/99 10:54	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/10/99 10:54	PEL
NAPHTHALENE	2.46	ug/L	1.00	8260	11/10/99 10:54	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/10/99 10:54	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/10/99 10:54	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/10/99 10:54	PEL
SURR: TOLUENE d8	89.75	%		8260	11/10/99 10:54	PEL
SURR: 1,4-DCB-D4	94.75	%		8260	11/10/99 10:54	PEL
SURR: DIBROMOFLUOROMETHANE	95.00	%		8260	11/10/99 10:54	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 99023.

Angela D. Overcash, V.P. Laboratory Services

CBM ENVIRONMENTAL, ... TEL:8035485892 Nov 12'99 10:01 No.002 P.03

CHAIN OF CUSTODY RECORD

PAGE ___ OF ___ QUOTE # ___

Full Service Analytical & Environmental Solutions

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY

	YES	NO	NA
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 5.2	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd WOUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client: CBM ENVIRONMENTAL SERVICES INC
Physical Address: 373 COMMERCE BLVD, SUITE 11B
FORT MILL, SC 29715
Phone: (803) 548-5884 Fax: (803) 548-5892
P.O.#/Billing Reference: 11152
Project Name: JOB # 1067 - SMITH'S GROCERY

REPORT TO: Name: SCOTT BELL
Address:
BILL TO: Name: CBM
Address:
Requested Due Date: 24 HOUR TURNAROUND OF RSP

State Certification Requested: NC ___ SC ✓ Other ___ NA ___
Water Chlorinated: Yes ___ No ✓ NA ___
Sample Iced Upon Collection: Yes ✓ No ___

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED BTEX MTBE EDB	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
MW WSW	11/05/99	0855	WATER	VOA	3	40ml	HCl	✓			17767

Sampler's Signature: Shannon Cottrill Sampled By (Print Name): SHANNON COTTRILL Affiliation: CBM ENVIRONMENTAL

Relinquished By: (Signature) Shannon Cottrill	Received By: (Signature)	Date: 11/08/99	Miscellaneous:
Relinquished By: (Signature)	Received By: (Signature)	Time	
Relinquished By: (Signature)	Received For Prism Laboratories By: David B. King	Date: 11/8/99 Time: 1005	
Method of Shipment		Log-In Group No: 21237F1 (RV)	PGNAFI

Additional Comments

NPDES	NC ___ SC ___ OTHER ___	UST:	NC ___ SC ___ OTHER ___	GROUNDWATER:	NC ___ SC ___ OTHER ___	DRINKING WATER:	NC ✓ SC ___ OTHER ___	SOLID WASTE:	NC ___ SC ___ OTHER ___	OTHER:	NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/11/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

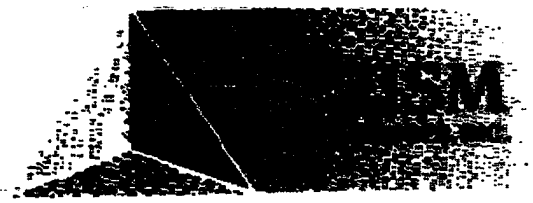
Customer Project ID: Smiths Grocery
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB47971
Login Group: PGN10F1
Sample Collection Date/Time: 11/9/99 09:50
Lab Submittal Date/Time: 11/9/99 16:50

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	1.13	ug/L	1.00	8260	11/10/99 08:38	PEL
ETHYLBENZENE	2.21	ug/L	1.00	8260	11/10/99 08:38	PEL
NAPHTHALENE	5.64	ug/L	1.00	8260	11/10/99 08:38	PEL
TOLUENE	2.47	ug/L	1.00	8260	11/10/99 08:38	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/10/99 08:38	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/10/99 08:38	PEL
SURR: TOLUENE d8	104.50	%		8260	11/10/99 08:38	PEL
SURR: 1,4-DCB-D4	96.25	%		8260	11/10/99 08:38	PEL
SURR: DIBROMOFLUOROMETHANE	102.50	%		8260	11/10/99 08:38	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services



CHAIN OF CUSTODY RECORD

PAGE 1 OF ____ QUOTE # ____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES void WOUT HEADSPACE?			
PROPER CONTAINERS used?			

Client: ____
Physical Address: ____
Phone: ____ Fax: ____
P.O.#/Billing Reference: ____
Project Name: ____

REPORT TO: Name ____ Address ____
BILL TO: Name ____ Address ____
Requested Due Date: ____

State Certification Requested: NC ___ SC ___ Other ___ NA ___
Water Chlorinated: Yes ___ No ___ NA ___
Sample Iced Upon Collection: Yes ___ No ___

SEE REVERSE SIDE FOR RUSH TURNAROUND FEES

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.

Sampler's Signature: ____ Sampled By (Print Name): ____ Affiliation: ____

Relinquished By: (Signature)	Received By: (Signature)	Date	Military Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Method of Shipment		Log-In Group No.	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

CBM ENVIRONMENTAL TEL:8035485892 Nov 10 99 10:02 No.002 P.05

HOMESTEAD

HOMESTEAD LAND & TIMBER COMPANY
3400 INTERNATIONAL AIRPORT DRIVE, SUITE 800, CHARLOTTE, NC 28208

PHONE (704) 423-0404
FAX (704) 423-0406

RECEIVED
NOV 15 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

RECEIVED
NOV 08 1999

November 5, 1999

W. Scott Ball
Project Manager
Environmental Services, Inc.
P. O. Box 411387
Charlotte, NC 28241

Dear Mr. Ball:

Enclosed are environmental reports from 1989 and 1994 for the "Cambell" property we discussed by phone this morning. I am also enclosing reports resulting from removal of the abandoned store's tanks from the property.

We hope this information will assist you in your assessment of groundwater contamination in the area. If we can be of further help to you, please feel free to phone me at 704-423-0404.

Cordially,

Treva McCain
Vice President - Operations & Administration

Enclosures

Tell Lee
w/ Smith's Grocery

TREVA G. McCAIN
VICE PRESIDENT OF OPERATIONS
OFFICE (704) 329-7350
FAX (704) 423-0406
MOBILE (704) 351-0861
E-MAIL: treemc@bellsouth.net

HOMESTEAD
LAND & TIMBER COMPANY
3400 INTERNATIONAL AIRPORT DR., SUITE 800
CHARLOTTE, NC 28208

RECEIVED
NOV 15 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

ENVIRONMENTAL ASSESSMENT REPORT
CAMPBELL PROPERTY
YORK COUNTY, SOUTH CAROLINA

Earth Management Systems
Reference No. 9410-119
October 27, 1994

— Smith's ran it, but Campbell's owned the tanks as shown by (pink indexed page)

- Homestead Lumber is buyer of property from Campbell's + developed the subdivision, had Phase I done, but perhaps no contamin. shown by report, due to lack of sampling at dispensers

EARTH MANAGEMENT SYSTEMS, INC.

Environmental Consultants

P.O. Box 24287 Columbia, SC 29224
3025 McNaughton Drive Columbia, SC 29223
(803) 736-3800

October 27, 1994

Homestead Land & Timber Co.
6729 Fairview Road, Suite B
Charlotte, NC 28210

Attention: Mr. Tom Smith

Subject: Phase I Environmental/Prebuy Assessment Report
Campbell Property - York County, South Carolina
Earth Management Systems Reference No. 9410-119

Dear Mr. Smith:

Transmitted herewith is a copy of the Phase I Environmental/Prebuy Assessment report on the Campbell property located in York County, South Carolina. The Phase I study was verbally authorized by yourself on October 10, 1994.

Should you have any questions concerning the document, or should you require any additional information, please do not hesitate to call.

We appreciate the opportunity to be of service, and look forward to working with you in the future.

Respectfully submitted,

EARTH MANAGEMENT SYSTEMS, INC.

by: Edward G. Leach, III, G.I.T.
Project Hydrogeologist

by: H. Brad Hubbard, P.G.
Senior Hydrogeologist

ENVIRONMENTAL/PREBUY ASSESSMENT
REFERENCE NUMBER 9410-119
CAMPBELL PROPERTY
York County, South Carolina

October 27, 1994

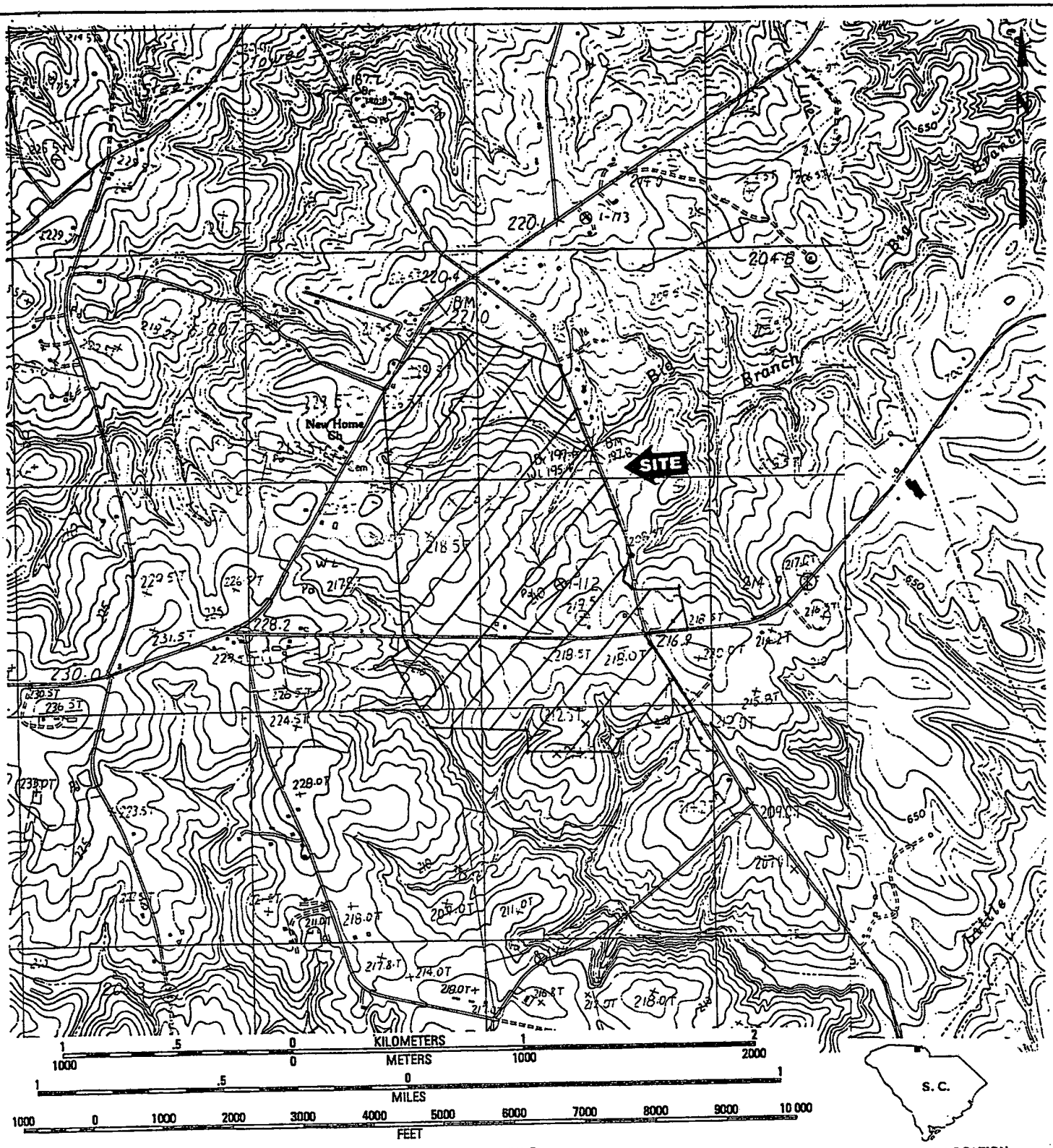
The following report presents results of the Phase I Environmental/Prebuy Assessment performed on the Campbell property, located at the intersection of Campbell Road (County Road 80) and Paraham Road (County Road 54) in York County, South Carolina. The location of the property is indicated on Figure 1. The objective of the Phase I assessment was to estimate the presence of, and potential for, significant environmental liability on the property. Completion of the Phase I assessment involved performance of the following tasks:

- review of environmental records for the property and vicinity available through the United States Environmental Protection Agency (USEPA) and the South Carolina Department of Health and Environmental Control (SCDHEC);
- inspection and interpretation of available aerial photography for the area to identify areas of potential environmental concern; and
- performance of a site inspection of the property and a reconnaissance of the surrounding area.

The following sections present methods and results of each task.

SITE DESCRIPTION

The Campbell property is located at the intersection of Campbell and Paraham Roads (County Roads 80 and 54) in York County, South Carolina. The property encompasses approximately 408.53 acres, and is bounded by private residences, Smith's Grocery and Montgomery's Garage on the west, by wooded property and private residences on the north, by Paraham Road, wooded property and private residences on the east and by wooded property and pastureland on the south. The property consists of a mixture of mature forests and young stands of managed pines with a few scattered structures.



CONTOUR INTERVAL 3 METERS

QUADRANGLE LOCATION

Base Map: USGS 7.5-Minute Topographic Quadrangles: Clover, SC and Lake Wylie, SC-NC

EARTH MANAGEMENT SYSTEMS, INC.

Environmental Consultants

FIGURE 1
SITE LOCATION & TOPOGRAPHY
CAMPBELL PROPERTY
YORK COUNTY, S.C.
Earth Management Systems
Reference No. 9410-119

A review of the Clover and Lake Wylie, SC 7.5-minute topographic quadrangles indicates that the property slopes generally toward stream valleys located on the northeast and south parts of the property. Elevations across the property range from approximately 748 to 649 feet NGVD (National Geodetic Vertical Datum). Shallow ground-water flow is thought to be generally toward the east on the northern part of the property and to discharge into headwaters of Big Branch located throughout this part of the property. Shallow ground-water flow on the southern part of the property is thought to be toward the south and to discharge into headwaters of Little Anderson Creek. Geologically, the property is located within the Charlotte Belt of the Piedmont Physiographic Province. Bedrock at the property consists of micaceous gneiss. According to the Soil Survey of York County, SC (USDA/SCS, 1965), the following soil types are found on the property: in stream valleys, Worsham sandy loam and Wilkes Complex; on slopes, Cecil clay loam, Cecil sandy loam, Helena sandy loam and Enon sandy loam; on uplands, Appling coarse sandy loam, Helena sandy loam, Cecil sandy loam, and Gullied Land. The Worsham sandy loam which is present in the stream valley at Big Branch is listed as a hydric (wetland-type) soil.

As indicated above, headwaters of Big Branch and Little Allison Creek are located on the north and south parts of the property respectively. Downstream portions of Big Branch may act as barriers to ground-water contamination. These portions of Big Branch are located adjacent the north part of the property, to within 1700 feet of the remainder of the northern two-thirds of the property. Downstream portions of Little Anderson Creek may also act as barriers to ground-water contamination. These portions of Little Anderson Creek are located adjacent to the south part of the property, to within 1200 feet of the southeast edge of the property.

Topographically, the Campbell property is situated in a highly dissected area of rolling hills with streams located in the intervening valleys. Topographically high areas are located north of the property, at the northwest corner of the property and west and southeast of the property. Surface water and shallow ground water at and near the property is thought to flow away from these upland areas toward adjoining stream valleys. Based upon these topographic features, potential off-site contaminant sources located on upland areas adjoining the north and northwest portions of the property and to the west and south would be considered those areas most likely to pose significant threats to the environmental status of the property.

REVIEW OF ENVIRONMENTAL RECORDS

Available environmental records and databases pertaining to the area near the Campbell property were reviewed by Earth Management Systems as part of the Environmental Assessment. Records and databases reviewed included the following:

- SCDHEC CERCLIS inventory;
- Inventory of USEPA National Priority List (NPL) sites in South Carolina;
- SCDHEC inventory of State Priority List (SPL) sites in York County;
- SCDHEC hazardous-waste notification list;
- USEPA inventory of Resource Conservation and Recovery Act (RCRA) facilities requiring enforcement action;
- SCDHEC underground-storage-tank (UST) notification and permit information database for York County;
- SCDHEC UST Confirmed Release Report database;
- SCDHEC inventory of permitted municipal and industrial landfills;
- SCDHEC inventory of petroleum and hazardous-materials spills in York County; and
- SCDHEC 1993 Ground-Water Contamination Inventory.

Records review were performed by (1) review of in-house inventories maintained by Earth Management Systems, (2) inquiries to the SCDHEC, and (3) performance of a computer data search by Environmental Data Resources, Inc. (EDR). The EDR Radius Map Report is included in Appendix I.

Although the data sources available from regulatory agencies include varying degrees of detail concerning listed sites, review of the materials provides a basis for identifying potential contaminant sources both within and beyond the property boundaries.

Hazardous-Waste Facilities

The USEPA FINDS list, and the SCDHEC hazardous-waste notification list, were reviewed to identify facilities within one-half mile of the Campbell property registered with the USEPA and the SCDHEC under provisions of the Resource Conservation and Recovery Act (RCRA) of 1976 to generate, treat or dispose of hazardous-waste. A variety of commercial and industrial facilities are classified by the USEPA and SCDHEC as hazardous waste facilities. The hazardous-waste notification system provides a means for regulating hazardous substances and providing for proper disposal. Hazardous-waste facilities, although potential sources for soil, surface-water or ground-water contamination, are not necessarily sites of environmental degradation. No hazardous-waste facilities were identified within one-half mile of the property.

CERCLIS/NPL/SPL Sites

The USEPA FINDS and CERCLIS lists, the USEPA NPL listing and the SCDHEC SPL listing were reviewed to identify CERCLIS sites within one mile of the Campbell property. CERCLIS sites have documented or suspected environmental problems for which the responsible party or parties may not have been clearly identified. CERCLIS sites undergo a series of investigations by either the USEPA or SCDHEC to determine the severity of contamination and the potential to impact public health and safety. Sites may be ranked by a hazard ranking system and placed on either the National or State Priority List (NPL/SPL), qualifying the site for remediation under Superfund. No CERCLIS sites were identified within one mile of the property from the review.

Permitted Domestic and Industrial Landfills

The SCDHEC list of landfills in South Carolina permitted to received domestic, industrial and cellulose wastes was reviewed to locate domestic and industrial waste landfills located within one mile of the Campbell property. None were identified within one mile of the Campbell property from the review.

Underground Storage Tanks (UST's)

Losses of petroleum and other chemical products from underground storage tanks (UST's) and associated piping are a major environmental concern, particularly because older UST's and piping generally have no systems for detection of leaks that may occur for several months or years prior to discovery. Requirements for notification and permitting of UST systems are in place or planned in most states. Recently enacted USEPA UST regulations also

require phased replacement or upgrading of all known UST systems (based on age), including installation of leak-detection systems. Many UST systems, however, remain unregistered or abandoned. Although petroleum retail facilities are currently exempted from SARA (Superfund Amendments and Reauthorization Act) innocent landowner provisions, their eventual inclusion in the regulations cannot be discounted. Also, the presence of petroleum contaminants in the subsurface can adversely affect property value, cause safety hazards, and/or preclude development of water resources on the property.

Two facilities with UST's were identified within one-half mile of the property from an area reconnaissance (page 16), and from review of the SCDHEC UST notification and permit information database for York County. The following information on the facilities was available from review of the UST database:

Facility Name (I.D. No.)	No. on Fig. 3	Address and/or Dist. & Dir. from Property	No. Tanks	Age (yrs.)	Contents
Montgomery's Amoco (N-46-NO-09453)	1	adjoins property at NW corner 3243 Char. Hwy.	2	16	GN*
Smith's Grocery (N-46-NO-09322)	2	adjoins property at NW corner 3176 Char. Hwy.	2	31	GN**

GN = gasoline, DL = Diesel, WO = waste oil, KN = kerosene, TOU = temporary out-of-use

* UST's at Montgomery's Amoco are temporarily out-of-use, although not listed as such.
** Smith's Grocery also has a kerosene UST which is not listed in the registration database.

Sites with Documented Contamination

A review of the SCDHEC Leaking Underground Storage Tanks (LUST) database, Spills Incidents database and SCDHEC Ground-Water Contamination Inventory list indicated no documented cases of soil, surface-water and/or ground-water degradation are known within one-half mile of the property. However, interviews with Lois Smith, owner of Smith's Grocery, and a SCDHEC representative yielded the following information:

Incident: Gasoline Contamination of Drinking Water Well at Smith Residence

Location: adjoins northwest part of property (no. 2 on Figure 3)

Description: In 1979, soon after UST's were installed at Smith's Grocery, the Smiths observed a strong gasoline odor in their well water. According to Lois Smith, well water discharged onto the ground burned when lit with a match. Loose piping connections at the product dispensers were found to be the source of the release, and were subsequently repaired. The shallow well (TD = 30 feet) was replaced with a deep well (TD 140 feet) to provide potable water. In 1993 Ripley Oil Company performed a soil boring program at the site. According to Julie Elam of the SCDHEC, the only information submitted concerning the assessment was a sketch map of the site and a chain-of-custody form which indicates that samples were collected from depths of 4 to 12 feet. SCDHEC has requested, but has apparently not yet received, additional details concerning the assessment program.

Established or Suspected Direction(s) of Contaminant Migration: Contamination of the Smith residence well indicates that free product migrated from the product dispensers approximately 100 feet to the north. Topography suggests a west to northwest direction of ground-water flow.

Potential to Impact Campbell property: Given the uncertainty of ground-water flow direction, some southwest spreading of contaminants cannot be ruled out. However, the likelihood of migration of any contamination onto significant portions of the Campbell property is considered minimal.

Summary

No information was found through review of available USEPA and SCDHEC data sources to indicate that the Campbell property has any past or ongoing environmental problems. The property was not included on any Federal or State database reviewed. USEPA and SCDHEC records indicate that no listed hazardous waste generators are located within one-half mile of the property, and that no CERCLIS sites or permitted landfills are located within one mile of the property. SCDHEC records indicate that four UST's are currently registered for use within one-half mile of the property. Based on a review of available information, and inquiries to SCDHEC personnel, Smith's Grocery is the only known contamination incident which has a potential to impact a portion of the Campbell property, although the likelihood is considered minimal.

INTERPRETATION OF AVAILABLE AERIAL PHOTOGRAPHY

Available aerial photography for the Campbell property and vicinity was reviewed to identify past or present areas of potential environmental concern that may not be apparent from a present-day inspection of the property and nearby areas.

Aerial-photography taken since 1941 was available for review. This included black-and-white aerial photography dated 1941, 1949, 1964 and 1970 and false-color infrared aerial photography dated 1981, 1989 and 1994. A copy of the 1989 false-color infrared photography is included in Appendix II.

The effectiveness of aerial-photography interpretation in identifying areas of past or present potential environmental concern is dependent upon several factors, for example years of coverage, clarity of available photos, whether stereo coverage (three-dimensional viewing) is possible, cloud cover and vegetative cover. Aerial photography interpretation provides a valuable method to identify areas of obvious or potential environmental concern for further evaluation, as necessary.

The following discussion, presented as a chronological outline, is to provide an overview of past land use in the area, and to identify areas of potential concern at or near the property discernable from interpretation of available photographic coverage.

Flight Year: 1941 (Photomosaic 905-41)

General Land Use(s) in Area: Land in the area is overwhelmingly in agricultural usage.

Land Use on Subject Property: The subject property is approximately 70 percent cultivated land and 30 percent woodlands. Seven structures are apparent: five bounding the north side of Campbell Road between SC 49 and Paraham Road, one bordering the north side of Campbell Road east of Paraham Road, and one on the northwest part of the property.

Potential Areas of Concern: No areas of concern are apparent.

Flight Year: 1949 Photo No.: PL-3F-149

General Land Use(s) in Area: Agricultural land use continues to dominate the area. Houses and sheds or other small buildings are evident west of the central part of the property and to the north and northwest of the property.

Land Use on Subject Property: Two additional structures are evident at the larger scale of the photography - a second structure on the northwest part and a structure on the north side of Campbell Road on the west edge of the property. A utility easement is also evident crossing east to west across the central part of the property.

Potential Areas of Concern: No areas of concern are apparent.

Flight Year: 1964 Photo No.: PL-2FF-122

General Land Use(s) in Area: Agricultural land use has declined somewhat since 1949. The number of private residences and amount of wooded land have increased. Cultivated land continues to be present north, south and west of the Campbell property. Wooded land is present to the east and south.

Land Use on Subject Property: Almost all the formerly cultivated areas appeared to have been allowed to become overgrown or have been planted in trees. Heavy tree growth is present around tributaries of Big Branch on the north part of the property. A grassed area is evident at the southwest corner of the property. A total of 15 structures are apparent - most of the structures are along Campbell Road. Three structures are evident on the northwest part of the property: one along Charlotte Hwy and two approximately 200 feet off the highway.

Potential Areas of Concern: No areas of concern are apparent.

Flight Year: 1970 Photo No.: PL-4LL-77

General Land Use(s) in Area: No significant changes in area land use are apparent.

Land Use on Subject Property: Mature trees cover approximately 50 percent of the property, specifically the southwest corner and the northeast and central parts surrounding Big Branch. Recently timbered areas occupy most of the remaining property. A small plowed field adjoins the south side of the two structures located off the road on the northwest part of the property. Immature trees surround the plowed field.

Potential Areas of Concern: No areas of concern are apparent.

Flight Year: 1981 Photo No.: 1381-143 (False-Colored Infrared)

General Land Use(s) in Area: Land in the area appears primarily to be farmed or utilized as timberland. Plowed fields are evident north and west of the property and adjoining the property's southeast corner. Mature trees bound the south and east parts of the property. A second larger structure is now evident at the current location of Montgomery's Garage at the northwest corner of the property.

Land Use on Subject Property: The property now appears to be approximately 30 percent plowed fields, 35 percent mature trees and 35 percent immature trees. Mature trees are confined to the stream valleys. Three structures are now evident at the farmhouse location on the northwest part of the property and another continues to be present at the general store location on Charlotte Hwy. Four structures are evident along Campbell Road between Paraham and Charlotte Hwy and one east of Paraham, north of Campbell Road.

Potential Areas of Concern: The presence of a relatively large structure immediately northwest of the property suggest possible commercial usage.

Flight Year: 1989 Photo No.: 1371-139 (False-Colored Infrared)

General Land Use(s) in Area: Area land use continues to be a mixture of timber land, farming and residential development. Large structures, apparently storage buildings, barns, or garages are evident immediately northwest of the property and 500 feet west of the property. A structure located at the current location of Smith's Grocery appears to have a fuel dispenser island.

Land Use on Subject Property: The subject property is now covered mostly by mature trees. Immature trees are present on the southwest part of the property and cleared areas are present on the southeast part. Small clearings are evident on the northwest part around the farmhouse and country store and in several areas on the south part of the property near Campbell Road. Only one structure is now evident at the farm house location.

Potential Areas of Concern: The apparent presence of a gas station immediately across the road from the property at its northwest part poses a concern.

Flight Year: 1994 Photo No.: 7459-57 (False-Colored Infrared)

General Land Use(s) in Area: The only significant changes in area land use are the construction of a large structure 500 feet to the north at the northwest corner of Paraham and Charlotte Hwy and the presence of a field immediately south of the property.

Land Use on Subject Property: A series of dirt roads are evident extending north and south from Campbell Road into areas of immature trees. Four or five structures are evident along Campbell Road.

Potential Areas of Concern: The new large structure located 500 feet to the north poses some concern.

Summary

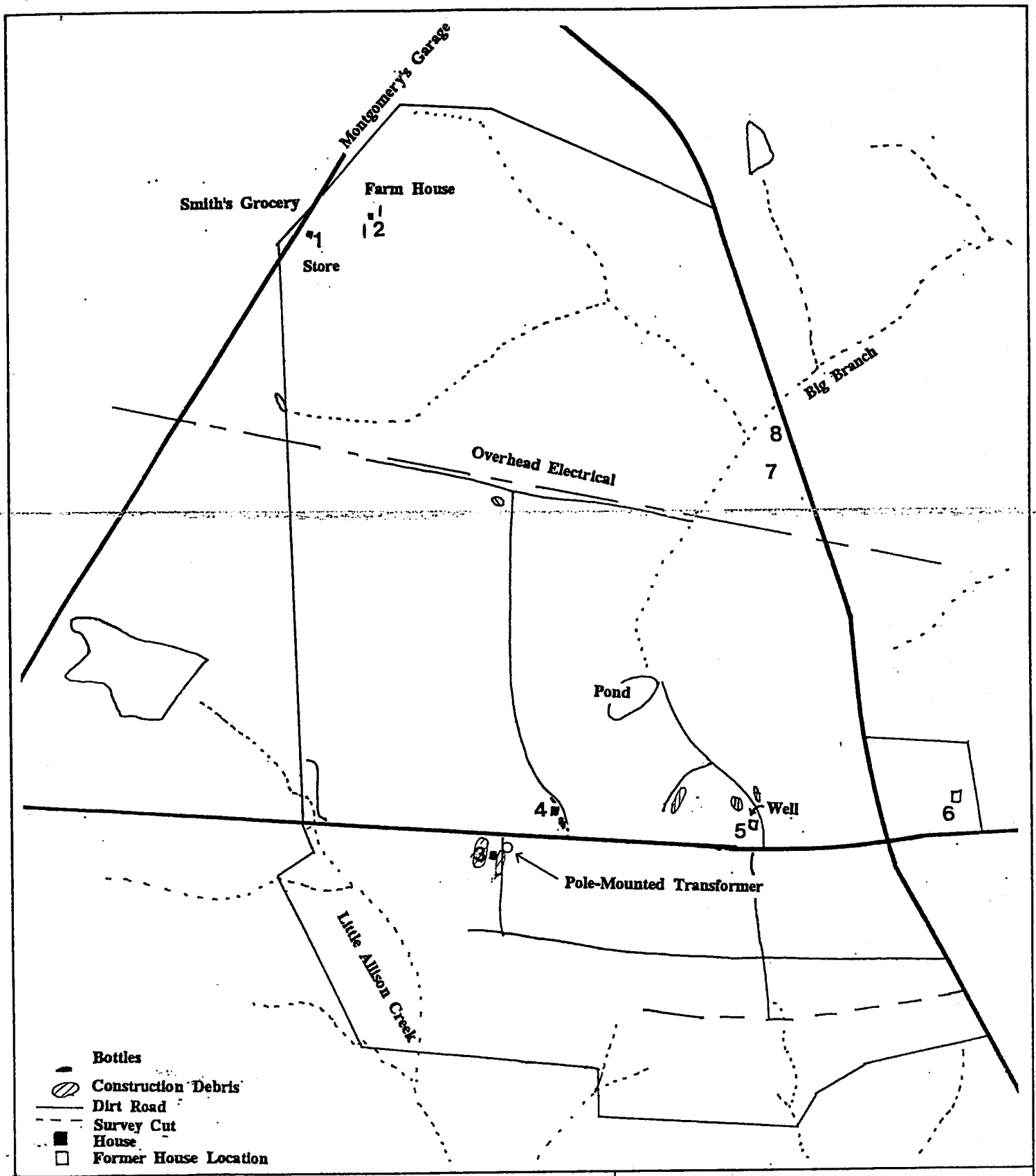
The subject property appears to have been utilized for farming and timber during the 53-year period for which photographic coverage was available. A store was first evident on the northwestern corner of the property some time between 1949 and 1964. Facilities of a possible commercial nature have been evident adjoining the northwest part of the property since 1981. Both the store and off-site facilities of a possible commercial nature are possible environmental concerns.

SITE INSPECTION

A site inspection of the Campbell property was performed by a representative of Earth Management Systems on October 13 and 19, 1994 to assess the potential for contamination of the property from on-site sources. No soil, ground-water or surface-water samples were collected for chemical analysis as part of the site inspection. Photodocumentation of many of the particulars noted during the inspection appears in Appendix III. A site map illustrating locations of features noted during the inspection is included as Figure 2.

General Land Use/Condition

The property consists of wooded land with scattered dilapidated houses and barns.



EARTH MANAGEMENT SYSTEMS, INC.
Environmental Consultants

FIGURE 2
SITE MAP DEPICTING
AREAS OF CONCERN
CAMPBELL PROPERTY
YORK COUNTY, S.C.
Earth Management Systems
Reference No. 9410-119

Structures

Structures or evidence of former structures were observed at eight locations on the property. These locations depicted on Figure 2, contained the following:

No. on Fig. 2	Description
1	General Store
2	Farmhouse & debris
3	Dilapidated house & debris
4	Dilapidated house & debris
5	Former house location, well & debris
6	Former house
7	Dilapidated barn and animal pen
8	Remains of house

Vegetative Cover

The property contains a mixture of cultivated pine timberland, and mature woodlands consisting of both hardwoods and pines. Moderate to heavy undergrowth by vines and shrubs is present in the mature woodlands and only light undergrowth is apparent in the areas of cultivated timberland.

Water-Supply Wells/Monitor Wells

As depicted on Figure 2, one inactive water-supply well was observed on the south part of the property at location no. 5. Other water supply wells may be present in the vicinity of the collapsing houses or beneath the heavy growth of vines and plum trees surrounding these structures, however, their presence could not be confirmed. Abandonment of the well by a South Carolina licensed drilling company is recommended to prevent potential contamination of ground water.

Waste Treatment

No waste treatment facilities of any kind were observed. It is possible that old septic tanks may be present in the vicinity of one or more of the old houses on the property.

Transformers/Potential Sources for PCB (Polychlorinated Biphenyl) Contamination

Transformers and other electrical equipment located outside of on-site structures were visible inspected for evidence of significant leakage, and for manufacturer placards noting the presence of PCB dielectric oils, ad part of the Phase I Assessment. Generally, ballasts and other electrical equipment located inside structures pose only minimal threats to soil and ground water; inspection of interior electrical equipment was not within the scope of the Phase I study. One pole-mounted electrical transformers was observed at the house located on the south side of the Campbell Road (no. 4). No evidence of oil leakage was observed. Accordingly, it is thought very unlikely that any release of transformer oil has occurred.

Underground/Above-Ground Tanks

Two underground storage tanks were removed from beside the old grocery store on the northwest part of the property on October 13, 1994. One of the tanks appeared to be a fuel oil tank and the other was a gasoline tank. The fuel oil tank was located on the north side of the old grocery. The gasoline tank was situated west of the fuel oil tank. Piping for only one product dispenser was evident. According to an employee of Royster Oil Company, the gasoline tank had a hole which leaked water during removal. The fuel oil tank was reported to be structurally intact with no evidence of active leakage. Soil samples were collected from two feet beneath each tank and analyzed for total petroleum hydrocarbons in the gasoline range. No petroleum hydrocarbons were reported by the laboratory above method detection levels. A copy of the laboratory report is included in Appendix IV.

Hazardous Waste or Hazardous Substances

One bottle of Lintox Livestock Spray & Dip was observed on a shelf in the old country store. According to the label, this substance contains the pesticide compounds lindane and toxaphene. Only an estimated six ounces of liquid was present in the bottle. No evidence of leakage or spillage from the bottle was observed. No other hazardous substances and no hazardous waste were observed on the property. Removal of the bottle of Lintox from the property is recommended to prevent accidental release of this hazardous substance.

Solid Waste or Debris

Several debris piles were noticed to have been dumped on the property. Building materials including roofing shingles, sheet metal and lumber make up the bulk of the dumped debris. Piles of discarded bottles and cans were evident nearby several of the houses. A large pile of discarded wooden crating material was present at the house located along the south side of Campbell Road. Locations of observed debris piles are indicated on Figure 2.

Stained Soil, Dead or Stressed Vegetation

An area of oil-stained soil was observed in front of the old house on the northwest part of the property. An area measuring at least five by seven feet appeared to be surficially impacted. The depth of staining and full lateral extent were not readily apparent. Removal of the oil impacted soil is recommended following clearing of vegetation in this area. Vegetation along survey cuts and logging roads was the only stressed vegetation observed.

Discoloration of Water Bodies

No discoloration or odor was observed in ponds and streams on the property.

Asbestos-Containing Materials

Many buildings materials manufactured between 1940 and 1980 contained asbestos. Thermal insulation of ovens, water heater and pipes typically may contain friable asbestos which may be identified by visual observation. No insulation materials were observed on the property. Inspection of the building materials present in the dilapidated houses and piles of construction debris by a SCDHEC-licensed asbestos inspector is recommended to verify the absence of asbestos containing building materials.

Summary

Four areas of environmental concern were identified on the Campbell property (1) two underground storage tanks at the general store, (2) one out-of-use water well, (3) an area of oil-stained soil beside the old farmhouse on the northwest part of the property, and (4) possible asbestos containing building materials in the dilapidated structures on the property and in construction debris piles. Closure of the UST's coupled with the absence of

reported soil contamination beneath them removes the first concern. The following measures are recommended to address remaining concerns:

- o abandonment of the well by a licensed South Carolina driller.
- o excavation and disposal of the oil-impacted soil following clearing of vegetation in that area; and
- o inspection of the structures by a SCDHEC licensed asbestos inspector.

AREA RECONNAISSANCE

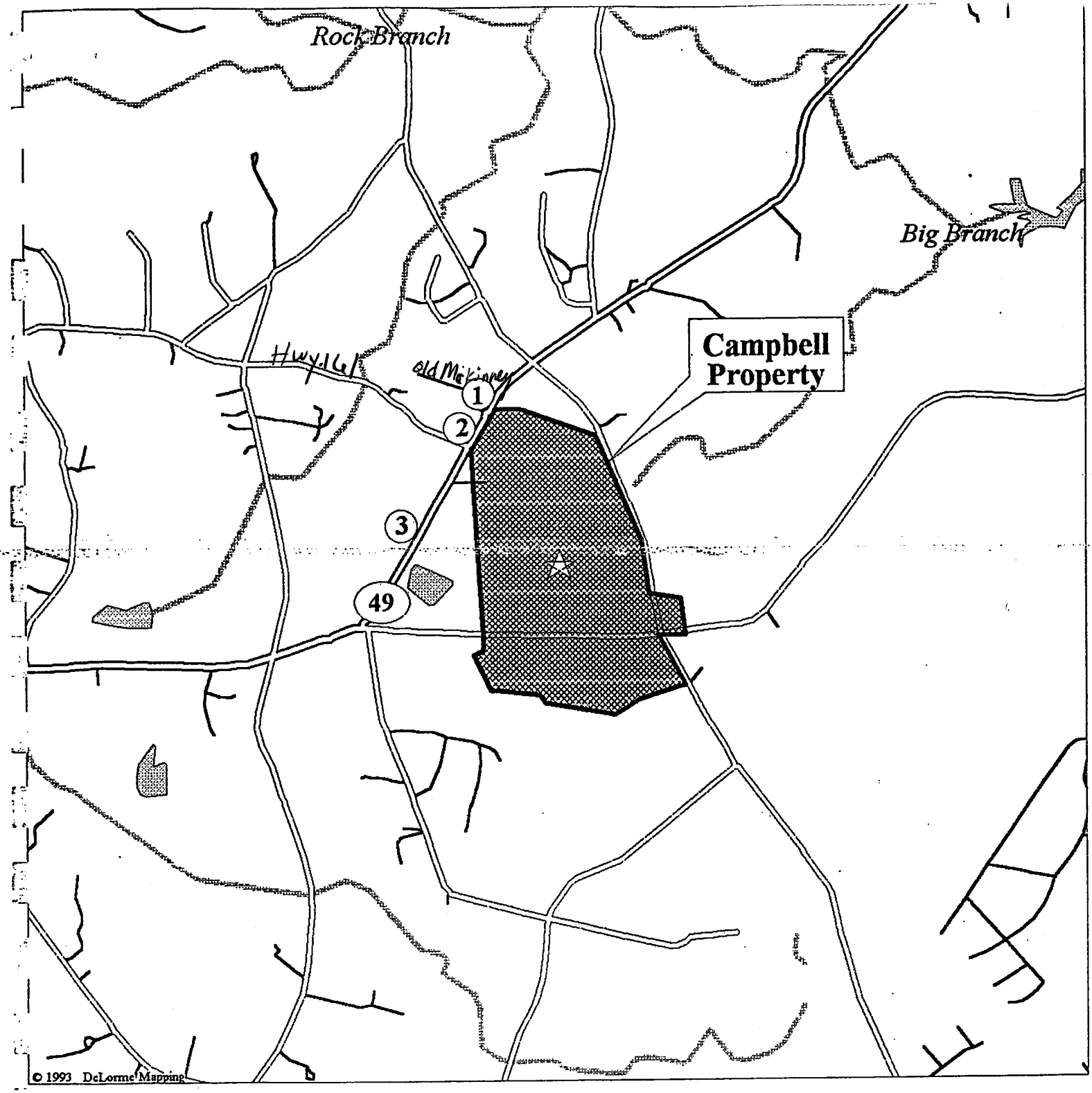
The area within about one-half mile of the Campbell property was reconnoitered by a representative of Earth Management Systems on October 19, 1994 to assess the potential for contamination of the property from off-site sources. The area reconnaissance was performed by visual inspection of properties from public roads to the extent possible based on access and time constraints. Potential off-site sources of contamination identified from the area reconnaissance are discussed in the following sections.

Adjoining Properties

3176 Char. Hwy

Direction	Property Usage	Potential Environmental Concern(s)
Northwest	Smith's Grocery (no. 2 on Fig. 3), Montgomery's Garage (no. 1 on Fig. 3) & private residences → UST #09453	UST's, waste oil, solvents
North	wooded, private residences	none apparent
East	Wooded & private residences	none apparent
South & Southwest	grassed fields	none apparent
West	wooded, grassed fields, private residence	none apparent

Monty. Amoco 3243 Char. Hwy



LEGEND

- State Route
- Street, Road
- Major Street/Road
- State Route
- River
- Open Water

Scale 1:31,250 (at center)

2000 Feet

1000 Meters

Figure 3 Off-Site Concerns
Mag 13.00
Wed Oct 26 08:36:12 1994

Of these adjoining properties, those toward the northwest and north and portions of those to the south and east are thought to be in hydraulically upgradient positions with respect to shallow ground-water flow near the Campbell property. Accordingly, any ground-water contamination present on these properties would have a significant potential to migrate to the Campbell property via ground-water flow. As indicated, the properties include Smith's Grocery and Montgomery's Garage. Smith's Grocery may located hydraulically upgradient from a sliver of the Campbell property located west of Charlotte Hwy. Accordingly, there is thought to be a slight potential for contamination of this part of the Campbell property from the past release of gasoline to shallow ground water at Smith's Grocery. Likewise, Montgomery's Garage appears to pose a potential source of contamination from the UST's, waste oil and solvents present there.

Potential Off-Site Sources Within One-Half Mile

One additional potential off-site source of contamination were identified within one-half mile of the Campbell property from the area reconnaissance:

Potential Source	No. on Fig. 3	Distance & Direction from Property	Potential Concern(s)
Private Residence	3	2400 feet W	above-ground tank

This property is thought to be in a hydraulically upgradient position with respect to shallow ground-water flow near the Campbell property. Based on review of available information, contamination has not been documented at this property. There exists little potential that the Campbell property has been impacted by a release of contaminants at this location, based on anticipated ground-water flow direction in the area and distance from the Campbell property to this potential upgradient contaminant source (2400 feet to west).

CONCLUSIONS

A Phase I Environmental Assessment has been conducted on the 408-acre Campbell property in York County, South Carolina. The assessment consisted of a review of available environmental records for the subject property and surrounding area, inspection and interpretation of topographic maps and available aerial photography, a site inspection and an area reconnaissance. Based on the results, the following conclusions are presented:

- No information was found through review of available USEPA and SCDHEC data sources to indicate that the Campbell property has any past or ongoing environmental problems. The property was not included on any Federal or State database reviewed. USEPA and SCDHEC records indicate that no listed hazardous waste generators are located within one-half mile of the property, and that no CERCLIS sites or permitted landfills are located within one mile of the property. SCDHEC records indicate that four UST's are currently registered for use within one-half mile of the property. Based on a review of available information, and inquiries to SCDHEC personnel, Smith's Grocery is the only known contamination incident which has a potential to impact a portion of the Campbell property, although the likelihood is considered minimal

- The subject property appeared to have been utilized for farming and timber during the 53-year period for which photographic coverage was available. A store was first evident on the northwestern corner of the property some time between 1949 and 1964. Facilities of a possible commercial nature have been evident adjoining the northwest part of the property since 1981. Both the store and off-site facilities of a possible commercial nature are possible environmental concerns.

- Four areas of environmental concern were identified on the Campbell property (1) two underground storage tanks at the general store, (2) one out-of-use water well, (3) an area of oil-stained soil beside the old farmhouse on the northwest part of the property, and (4) possible asbestos containing building materials in the dilapidated structures on the property and in construction debris piles. Closure of the UST's coupled with the absence of reported soil contamination beneath them removes the first concern. The following measures are recommended to address remaining concerns:

  (1) abandonment of the well by a licensed South Carolina driller.

  (2) excavation and disposal of the oil-impacted soil following clearing of vegetation in that area; and

  (3) inspection of the structures by a SCDHEC licensed asbestos inspector.

- The area reconnaissance identified Smith's Garage and Montgomery's Garage as potential off-site contamination sources which have the potential to impact small portions of the Campbell property. There is no indication, however, that a release of contaminants from either site has in fact impacted any portion of the property.

Based on results of the Phase I study, no evidence exists for significant impact to any portion of the Campbell property by identified on-site or off-site sources. As indicated, several minor concerns were noted which are recommended to be addressed, but their presence should pose no obstacle to the planned use of the property.

Respectfully submitted,

EARTH MANAGEMENT SYSTEMS, INC.

by: Edward G. Leach, III, G.I.T.
Project Hydrogeologist

by: H. Brad Hubbard, P.G.
Senior Hydrogeologist

APPENDIX I

EDR Radius Map Report

The EDR-Radius Map / Plus™ Report

Campbell Property
SC 49 @ York County 54 + 80
York, SC 29745

Inquiry Number: 58412.1s

October 17, 1994

Environmental Data Resources, Inc.

Creators of Toxicheck®

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Facsimilie: 1-800-231-6802

THE EDR-RADIUS MAP™

The EDR-Radius Map™ is a screening tool which maps sites with potential or existing environmental liabilities. Specified government databases are searched in accordance with the ASTM Standard (E 1527) or custom specifications provided by the user.

The EDR-Radius Map™ includes the following three maps:

Topographic Map:

- displays a two mile radius around the target property
- displays the United States Geological Survey (USGS) topographic contours and selected road features (i.e., major street names, and hydrographic data)

Overview Map:

- displays a one-mile (ASTM Standard) or customer specified radius around the target property
- includes major geographic attributes available in EDR's computer mapping system (i.e., street names, available hydrography)

Detail Map:

- displays a quarter-mile radius or customer specified radius around the target property and provides the user with a close-up view
- includes all geographic attributes available in EDR's computer mapping system (i.e., street names, address ranges)
- helps the user locate "orphan" sites, those sites with insufficient address information such that they can only be identified as within the zip code, city, or county of the target property

Please call EDR's Nationwide Customer Service at
1-800-352-0050 (8am - 8pm EST)
with questions or comments about your report.

Thank you for your business!

Disclaimer

EDR makes no representation or warranty regarding the accuracy, quality or completeness of any data provided by governmental or other entity used by EDR in the preparation of its reports. The customer shall take full responsibility for the use of EDR reports. **No warranty of merchantability or of fitness for particular purpose, expressed or implied, shall apply and EDR specifically disclaims the making of any such warranties.** In no event shall EDR be liable to anyone for special, incidental, consequential or exemplary damages.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM RECORDS:

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
Source: EPA/NTIS
Telephone: 703-416-0702
CERCLIS: Comprehensive Environmental Response, Compensation and Liability Information System. CERCLIS contains information on sites identified by the USEPA as abandoned, inactive or uncontrolled hazardous waste sites which may require cleanup.

Date of Government Version: 06/30/94
Date Made Active at EDR: 09/20/94
Date of Data Arrival at EDR: 07/19/94
Elapsed ASTM days: 63

ERNS: Emergency Response Notification System
Source: EPA
Telephone: 202-260-2342
ERNS: Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/93
Date Made Active at EDR: 05/25/94
Date of Data Arrival at EDR: 04/11/94
Elapsed ASTM days: 44

NPL: National Priority List
Source: EPA
Telephone: 703-603-9027
NPL: National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program.

Date of Government Version: 01/10/94
Date Made Active at EDR: 03/09/94
Date of Data Arrival at EDR: 01/26/94
Elapsed ASTM days: 42

RCRIS: Resource Conservation and Recovery Information System
Source: EPA/NTIS
Telephone: 202-260-3393
RCRIS: Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 03/31/94
Date Made Active at EDR: 07/20/94
Date of Data Arrival at EDR: 04/26/94
Elapsed ASTM days: 85

FEDERAL NON-ASTM RECORDS:

FINDS: Facility Index System
Source: EPA/NTIS
Telephone: 800-908-2493
FINDS: Facility Index System. FINDS contains both facility information and "pointers" to other sources that contain more detail. These include: RCRIS, PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]), CERCLIS, DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all envionmental statutes), FURS (Federal Underground Injection Control), FRDS (Federal Reporting Data System), SIA (Surface Impoundments), CICIS (TSCA Chemicals in Commerce Information System), PADS, RCRA-J (medical waste transporters/disposers), TRIS and TSCA.

Date of Government Version: 09/14/93 Date of Next Scheduled Update: 10/17/94

PADS: PCB Activity Database System
Source: EPA
Telephone: 202-260-3992
PADS: PCB Activity Database. PADS identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/17/94 Date of Next Scheduled Update: 09/19/94

RAATS: RCRA Administrative Action Tracking System
Source: EPA
Telephone: 202-260-2810
RAATS: RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA.

Date of Government Version: 04/06/94 Date of Next Scheduled Update: 11/07/94

TRIS: Toxic Chemical Release Inventory System
Source: EPA/NTIS
Telephone: 202-260-2320
TRIS: Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/91 Date of Next Scheduled Update: 10/03/94

TSCA: Toxic Substances Control Act
Source: EPA/NTIS
Telephone: 202-260-1444
TSCA: Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site. USEPA has no current plan to update and/or re-issue this database.

Date of Government Version: 05/15/86 Date of Next Scheduled Update: 09/19/94

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4555
HMIRS: Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/30/93 Date of Next Scheduled Update: 12/06/94

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 202-260-3733
NPL LIENS: Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91 Date of Next Scheduled Update: 11/27/94

STATE OF SOUTH CAROLINA ASTM RECORDS:

LUST: Leaking UST List
Source: Department of Health & Environmental Control
Telephone: 803-734-5376
LUST: Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 07/19/94
Date Made Active at EDR: 08/17/94
Date of Data Arrival at EDR: 07/25/94
Elapsed ASTM days: 23

SHWS: CERCLIS
Source: Department of Health & Environmental Control
Telephone: 803-734-5200
SHWS: State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 06/30/94
Date Made Active at EDR: 09/20/94
Date of Data Arrival at EDR: 07/19/94
Elapsed ASTM days: 63

SWF/LS: Permitted Landfills List/Inactive MSWLF List
Source: Department of Health & Environmental Control
Telephone: 803-734-5165
SWF/LS: Solid Waste Facilities/Landfill Sites. SWF/LS type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Section 2004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/03/94
Date Made Active at EDR: 05/11/94
Date of Data Arrival at EDR: 04/11/94
Elapsed ASTM days: 30

UST: Comprehensive Underground Storage Tanks
Source: Department of Health & Environmental Control
Telephone: 803-734-5376
UST: Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/26/94
Date Made Active at EDR: 05/11/94
Date of Data Arrival at EDR: 05/02/94
Elapsed ASTM days: 9

Historical and Other Database(s)

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc.

Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominanantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

MANUFACTURED GAS PLANT (Coal Gas) SITES

Prior to the widespread use of natural gas, combustible gas manufactured from coke, coal and oil served as the major fuel for urban heating, cooking and lighting in the U.S. for over 100 years. Beginning in 1816, manufactured gas or "town gas" was produced at thousands of plant sites throughout the United States. Pipeline distribution of natural gas during the 1950s rapidly replaced manufactured gas as the major gaseous fuel. As a result, manufactured gas production gradually came to an end through the 1950s and 1960s.

Along with the production of large volumes of gas, manufactured gas plants also yielded large quantities of by-products during their operation, including complex mixtures of coal tars, sludges, oils and other chemicals. Coal tar was the principal by-product from the gasification process. Although some of the coal tars were refined into a variety of marketable products, substantial volumes remained unused and were considered as waste. Coal tar and other waste products from the gasification plants were frequently disposed on the plant site in unlined pits or in some cases injected underground through injection wells. These practices have left behind subsurface coal tar contamination at many former manufactured gas plant (MGP) sites.

Coal tar is the waste of primary concern at MGP sites. Coal tars are relatively dense, viscous liquid mixtures. The composition of coal tar varies but is usually a mixture of the following:

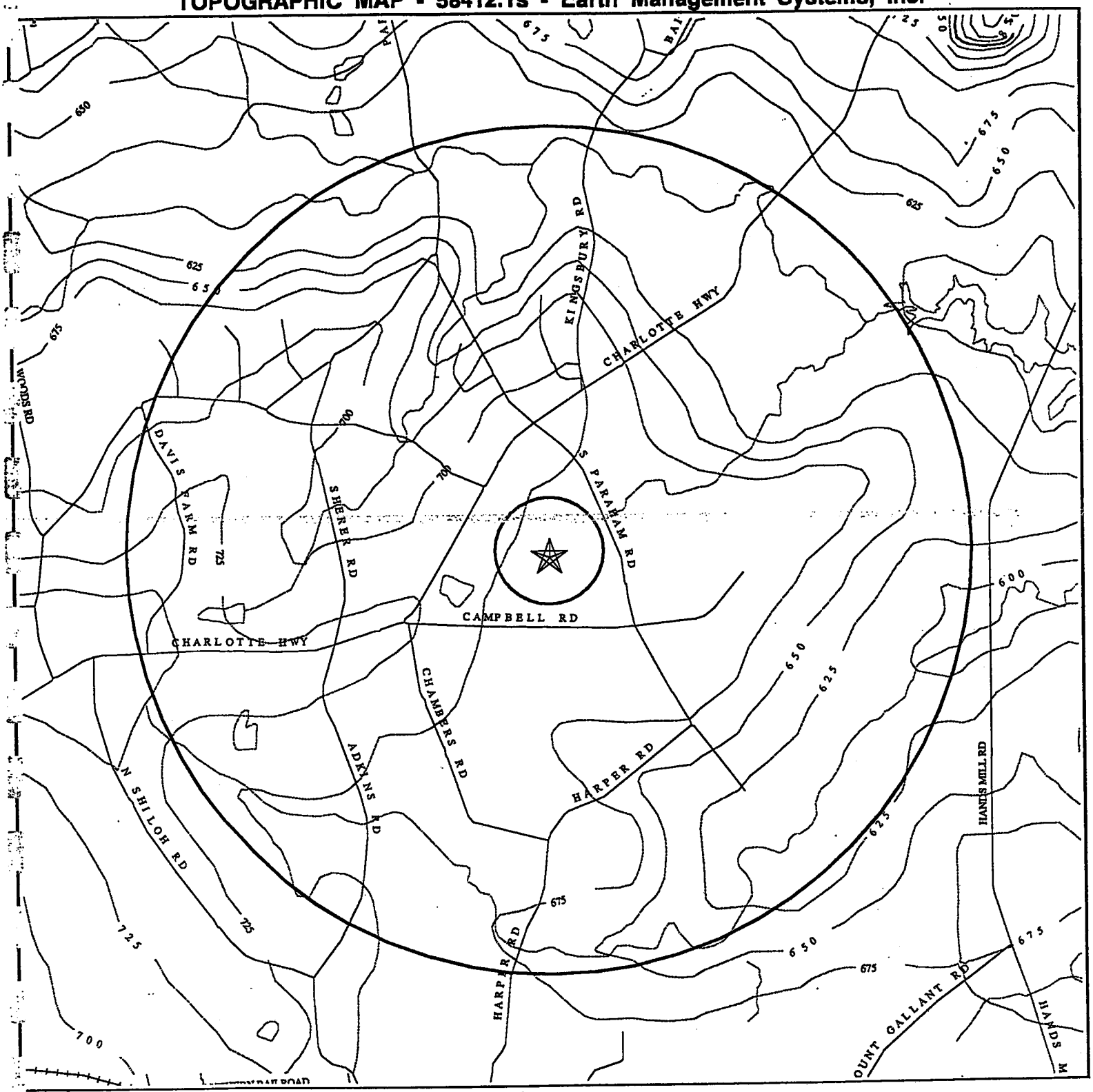
- Polycyclic aromatic hydrocarbons (PAH), such as benzo-pyrene, naphthalene, anthracene, acenaphthene and phenanthrene.
- Phenolic compounds, including phenol and methylphenols.
- Light aromatic compounds, such as benzene, toluene and xylenes.
- Miscellaneous organics, such as dibenzofuran.
- Small quantities or inorganic chemicals, such as iron, lead, copper, zinc, various sulfides, cyanides and nitrates.

Coal tar is somewhat heavier than water and tends to migrate vertically downward in the subsurface until it encounters a stratum that it cannot permeate. There it resides in an immobile state or spreads slowly. It can then serve as a continuous source of groundwater contamination in that PAH and other constituent compounds are slowly solubilized. Coal tars in the subsurface at MGP sites have persisted for decades because they are sparingly soluble, resistant to biodegration and they move slowly through porous media. The problem of coal tars in the subsurface at old MPG sites represents a significant part of the general problem of subsurface contamination with dense organic liquids in the United States.

The residue from former MGP sites often contains significant amounts of hazardous substances which can cause contamination of both soil and groundwater. A number of these sites are already included on EPA's CERCLIS list and the hazardous waste site lists of many states. Individual site cleanup costs have been estimated in the million dollar plus range.

The information included in EDR's "Former Manufactured Gas Plant Site" Database is provided under exclusive license by Real Property Scan, Inc. The information in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins on any site. This report does not constitute a legal opinion.

TOPOGRAPHIC MAP - 58412.1s - Earth Management Systems, Inc.



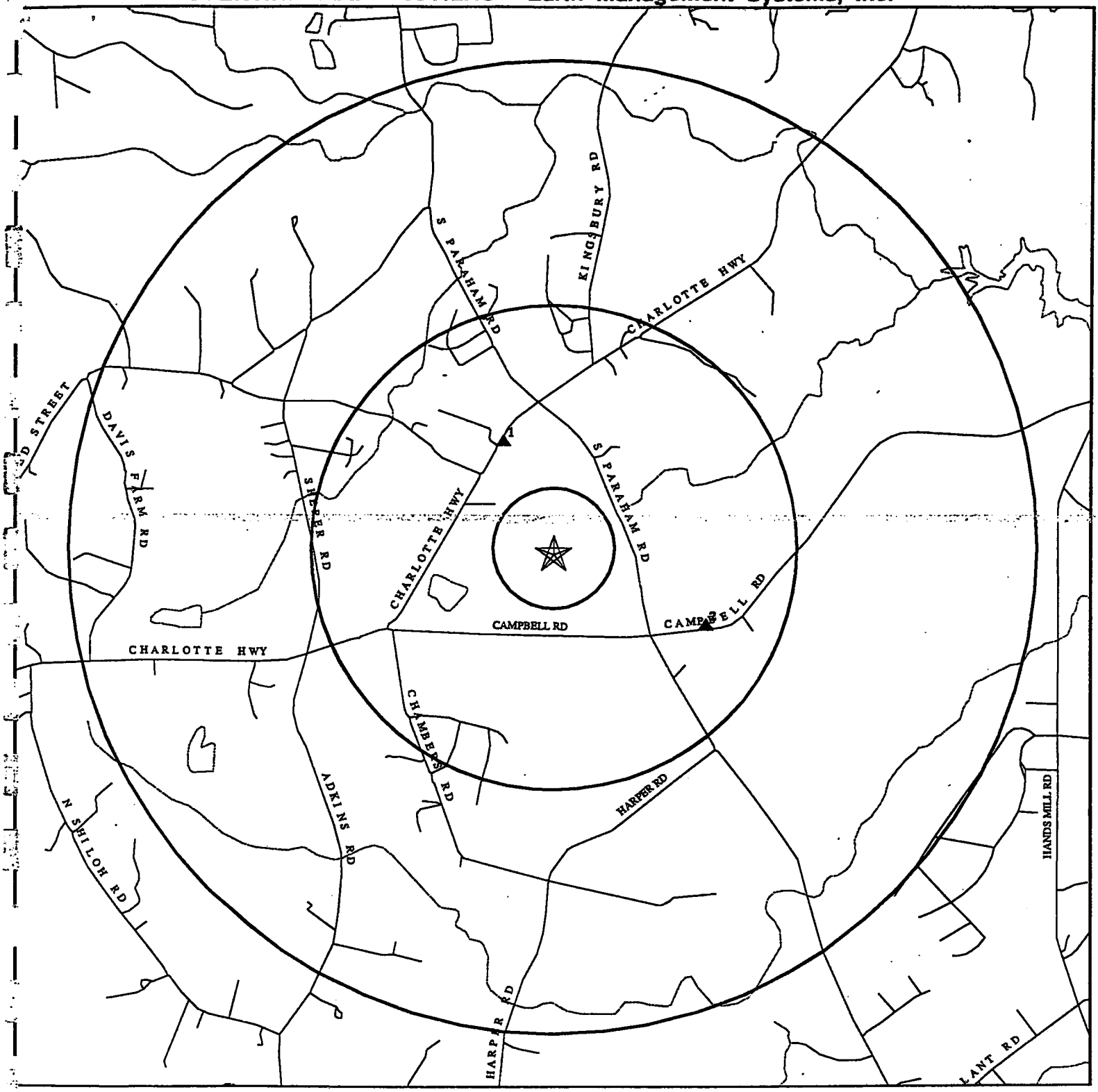
Source: US Geological Survey 1-Degree Digital Elevation Model
Compiled 09/15/92

0 1/4 1/2 1 2
Miles

- Major Roads
- Contour lines (25 foot interval unless otherwise shown)
- Waterways
- Indicates closest well in quadrant to target property.

TARGET PROPERTY:	Campbell Property	CUSTOMER:	Earth Management Systems, Inc.
ADDRESS:	SC 49 @ York County 54 + 80	CONTACT:	Ed Leach
CITY/STATE/ZIP:	York SC 29745	INQUIRY #:	58412.1s
LAT/LONG:	35.0365 / 81.1415	DATE:	October 14, 1994

OVERVIEW MAP - 58412.1s - Earth Management Systems, Inc.



★ - Indicates TARGET PROPERTY.

▲ - Indicates environmental elements at elevations higher than or equal to the target property.

◆ - Indicates environmental elements at elevations lower than the target property.

- Coal Gasification Sites (if requested)

- National Priority List Sites

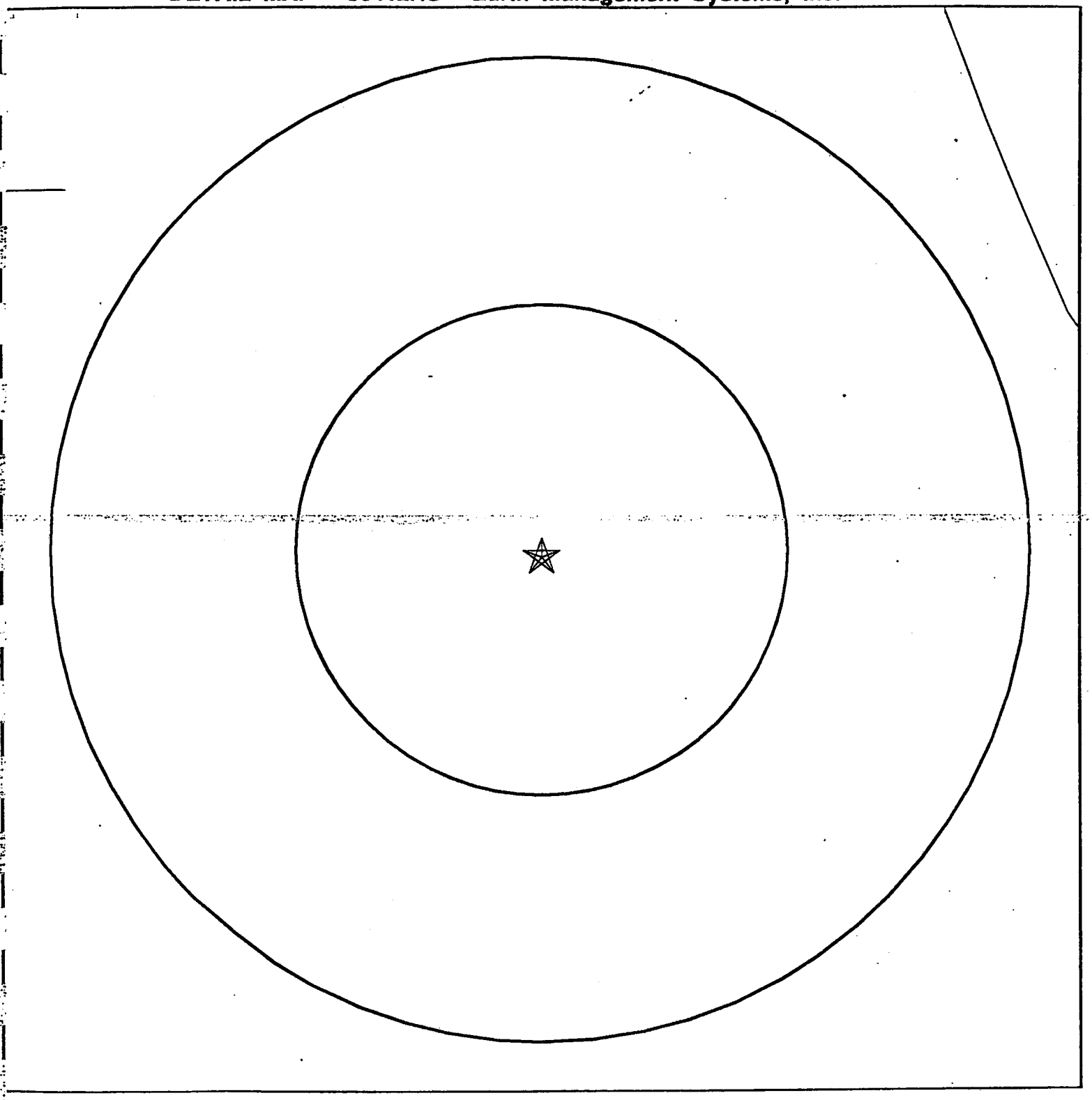
0 1/4 1/2 1 2

Miles

N

TARGET PROPERTY:	Campbell Property	CUSTOMER:	Earth Management Systems, Inc.
ADDRESS:	SC 49 @ York County 54 + 80	CONTACT:	Ed Leach
CITY/STATE/ZIP:	York SC 29745	INQUIRY #:	58412.1s
LAT/LONG:	35.0365 / 81.1415	DATE:	October 14, 1994

DETAIL MAP - 58412.1s - Earth Management Systems, Inc.



★ - Indicates TARGET PROPERTY.

▲ - Indicates environmental elements at elevations higher than or equal to the target property.

◆ - Indicates environmental elements at elevations lower than the target property.

- Coal Gasification Sites (if requested)

- National Priority List Sites

0 — 1/8 — 1/4

Miles

N

TARGET PROPERTY:	Campbell Property	CUSTOMER:	Earth Management Systems, Inc.
ADDRESS:	SC 49 @ York County 54 + 80	CONTACT:	Ed Leach
CITY/STATE/ZIP:	York SC 29745	INQUIRY #:	58412.1s
LAT/LONG:	35.0365 / 81.1415	DATE:	October 14, 1994

MAP FINDINGS SUMMARY SHOWING
ALL SITES

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1.500	0	0	0	0	0	0
RCRIS-TSD		1.500	0	0	0	1	0	1
State Haz. Waste		1.500	0	0	0	0	0	0
CERCLIS		1.000	0	0	0	0	NR	0
State Landfill		1.000	0	0	0	0	NR	0
LUST		1.000	0	0	0	0	NR	0
UST		0.625	0	0	1	0	NR	1
RAATS		0.500	0	0	0	NR	NR	0
RCRIS Sm. Quan. Gen.		0.625	0	0	0	0	NR	0
RCRIS Lg. Quan. Gen.		0.625	0	0	0	1	NR	1
HMIRS		0.500	0	0	0	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
ERNS		0.500	0	0	0	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
TSCA		0.500	0	0	0	NR	NR	0
Coal Gas		N/A	N/A	N/A	N/A	N/A	N/A	N/A

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

MAP FINDINGS SUMMARY SHOWING
ONLY SITES HIGHER THAN OR THE SAME ALTITUDE AS TP

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1.500	0	0	0	0	0	0
RCRIS-TSD		1.500	0	0	0	1	0	1
State Haz. Waste		1.500	0	0	0	0	0	0
CERCLIS		1.000	0	0	0	0	NR	0
State Landfill		1.000	0	0	0	0	NR	0
LUST		1.000	0	0	0	0	NR	0
UST		0.625	0	0	1	0	NR	1
RAATS		0.500	0	0	0	NR	NR	0
RCRIS Sm. Quan. Gen.		0.625	0	0	0	0	NR	0
RCRIS Lg. Quan. Gen.		0.625	0	0	0	1	NR	1
HMIRS		0.500	0	0	0	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
ERNS		0.500	0	0	0	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
TSCA		0.500	0	0	0	NR	NR	0
Coal Gas		N/A	N/A	N/A	N/A	N/A	N/A	N/A

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

Map ID Direction Distance Altitude	Site	Database(s)	EDR ID Number EPA ID Number

Coal Gas Site Search: EDR does not presently have coal gas site information available in this state.

1 NNW 1/4-1/2 Higher	NORTH'S GROCERY & GRILL 6017 CHARLOTTE HWY YORK, SC 29745	UST	U000484618 N/A

UST:

Facility ID:	N-46-NO-09384	Tank ID:	001
Contact:	NORMAN NORTH	Contact Tel:	(803)831-2299
Product:	Gasoline	Other Substance:	Not reported
Calcage:	21.67	Owner Tel	(803)831-2299
Owner:	NORMAN NORTH NORTH'S GROCERY & GRILL		
Capacity:	4000		
Status:	Currently in use		
Owner Address:	6017 CHARLOTTE HWY YORK, SC 29745-9629		

Facility ID:	N-46-NO-09384	Tank ID:	002
Contact:	NORMAN NORTH	Contact Tel:	(803)831-2299
Product:	Gasoline	Other Substance:	Not reported
Calcage:	11.67	Owner Tel	(803)831-2299
Owner:	NORMAN NORTH NORTH'S GROCERY & GRILL		
Capacity:	6000		
Status:	Currently in use		
Owner Address:	6017 CHARLOTTE HWY YORK, SC 29745-9629		

Facility ID:	N-46-NO-09384	Tank ID:	003
Contact:	NORMAN NORTH	Contact Tel:	(803)831-2299
Product:	Gasoline	Other Substance:	Not reported
Calcage:	11.67	Owner Tel	(803)831-2299
Owner:	NORMAN NORTH NORTH'S GROCERY & GRILL		
Capacity:	10000		
Status:	Currently in use		
Owner Address:	6017 CHARLOTTE HWY YORK, SC 29745-9629		

Facility ID:	N-46-NO-09384	Tank ID:	004
Contact:	NORMAN NORTH	Contact Tel:	(803)831-2299
Product:	Diesel	Other Substance:	Not reported
Calcage:	21.67	Owner Tel	(803)831-2299
Owner:	NORMAN NORTH NORTH'S GROCERY & GRILL		
Capacity:	4000		
Status:	Currently in use		
Owner Address:	6017 CHARLOTTE HWY YORK, SC 29745-9629		

Map ID Direction Distance Altitude	Site	Database(s)	EDR ID Number EPA ID Number
	NORTH'S GROCERY & GRILL (Continued)		U000484618

Facility ID:	N-46-NO-09384	Tank ID:	005
Contact:	NORMAN NORTH	Contact Tel:	(803)831-2299
Product:	Gasoline	Other Substance:	Not reported
Calcage:	21.67	Owner Tel	(803)831-2299
Owner:	NORMAN NORTH NORTH'S GROCERY & GRILL		
Capacity:	3000		
Status:	Currently in use		
Owner Address:	6017 CHARLOTTE HWY YORK, SC 29745-9629		

2 ESE 1/2-1 Higher	EFP PRODUCTS INC. 6247 CAMPBELL ROAD YORK, SC 29745	FINDS RCRIS-LQG RCRIS-TSD	1000128561 SCD990755514

RCRIS:
Owner: EFP PRODUCTS INC.
(404) 555-1212

Waste	Quantity	Info Source
F006	Not reported	Notification

(For more information on this site, call your EDR Customer Service Rep.)

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Reason
YORK	S101004042	YORK COUNTY COMPOSTING FACILITY		29745	SWF/LF	7
YORK	U000484626	FARMER'S MARKET	RT 1 HWY 321N	29745	UST	1
YORK	U001015826	HILLCREST GRO	RT 1 HWY 5W	29745	UST	1
YORK	U001540198	MCGILLS STORE	RT 1	29745	UST	1
YORK	U001542189	YORK CHEMICAL INDUSTRIES	HWY 161	29745	UST	1
YORK	1000220944	CABES GROCERY SUNOCO SERVICE S	HWY 161 & 321	29745	FINDS, RCRIS-LQG, UST	4
YORK	1000254542	MCGILLS SUNOCO SERVICE STATION	HWY 161 N	29745	FINDS, LUST, RCRIS-LQG	1
YORK	U001015848	MONTGOMERY'S AMOCO	RT 2 BOX 149	29745	UST	1
YORK	S100794323	FIELDCREST CANNON PLANT 19	HWY 321 NORTH	29745	LUST	2
YORK	U000484632	BOYD'S AMOCO	HWY 321 170 COUNTY RD	29745	UST	1
YORK	U001540140	YORK FLYING CLUB	HWY 321 NORTH	29745	UST	2
YORK	U001743812	FIELDCREST CANNON PLANT 19	HWY 321 NORTH	29745	UST	2
YORK	1000273131	ROCKWELL INTERNATIONAL	HWY 321 S	29745	FINDS, RCRIS-LQG, TRIS, UST	1
YORK	1000875846	YORK COMPREHENSIVE HIGH SCHOOL	HWY 321 SOUTH	29745	RCRIS-SQG	1
YORK	1000267147	YORK SCHOOL BUS SHOP	HIGHWAY 324	29745	RCRIS-SQG, FINDS, UST	1
YORK	S100566077	HANDY PANTRY #60	HWY 5	29745	LUST	1
YORK	U000484612	NEW ZION GRO	HWY 5 4020 BLACK HWY	29745	UST	1
YORK	U001540113	YORK COUNTY PRISON	HWY 5 RT 4	29745	UST	1
YORK	1000189808	WOODLANDS GROCERY SERV STA	CHARLOTTE HWY	29745	FINDS, LUST, RCRIS-LQG, UST	7
YORK	U001015823	WHITE ROSE	730 E HWY 321	29745	UST	1
YORK	U001017273	SMITH'S GROCERY	SC HWY 49	29745	UST	1
YORK	1000172710	BLACK E C SERVICE STATION	SC HWY 5	29745	FINDS, RCRIS-LQG	1
YORK	U001623560	YORK ELECTRIC COOP INC	INT OF HWY 5 & 161	29745	UST	4
YORK	U000484616	JOES GEN	LINCOLN HWY	29745	UST	3
YORK	U001540129	ROCKWELL INTERNATIONAL	OFF HWY PROD & DRIVELINE DIV	29745	UST	4
YORK COUNTY	S101004108	CUTSHAW LANDFILL			SWF/LF	7
YORK COUNTY	S101004114	ROGERS CELLULOSIC LF			SWF/LF	7
YORK COUNTY	S101004118	CITY OF ROCK HILL			SWF/LF	7
YORK COUNTY	S101004122	TC 126, INC.			SWF/LF	7
YORK COUNTY	S101004094	DUKE POWER CO. - CATAWBA			SWF/LF	7
YORK COUNTY	S101004088	CELANESE FIBERS, INC.			SWF/LF	7
YORK COUNTY	S100698599	YORK CO LANDFILL			SWF/LF	7
YORK COUNTY	S100698546	YORK CO LANDFILL, PHASE I			SWF/LF	7
YORK COUNTY	S100800267	POPE CONSTRUCTION			SWF/LF	7
YORK COUNTY	S100800231	BOWATERS CAROLINA CORP.			SWF/LF	7
YORK COUNTY	S100800199	YORK COUNTY			SWF/LF	7

Reason Codes:

1 = No matching street name
2 = No matching address range
3 = Multiple matching addresses / street intersections
4 = First street name in intersection not found
5 = Second street name in intersection not found
6 = Named streets do not intersect
7 = Other

EPA Waste Codes Addendum

Code	Description
F006	WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

GEOCHECK VERSION 1.1
SUMMARY

HYDROGEOLOGICAL INFORMATION

WELL QUADRANT	DISTANCE FROM TP	LITHOLOGY	DEPTH TO WATER TABLE
NO WELLS FOUND			

AREA RADON INFORMATION

Zip Code: 29745

Living Area - 1st Floor

Average Activity:	0.450 pCi/L
% <4 pCi/L:	100%
% 4-20 pCi/L:	0%
% >20 pCi/L:	0%

Living Area - 2nd Floor

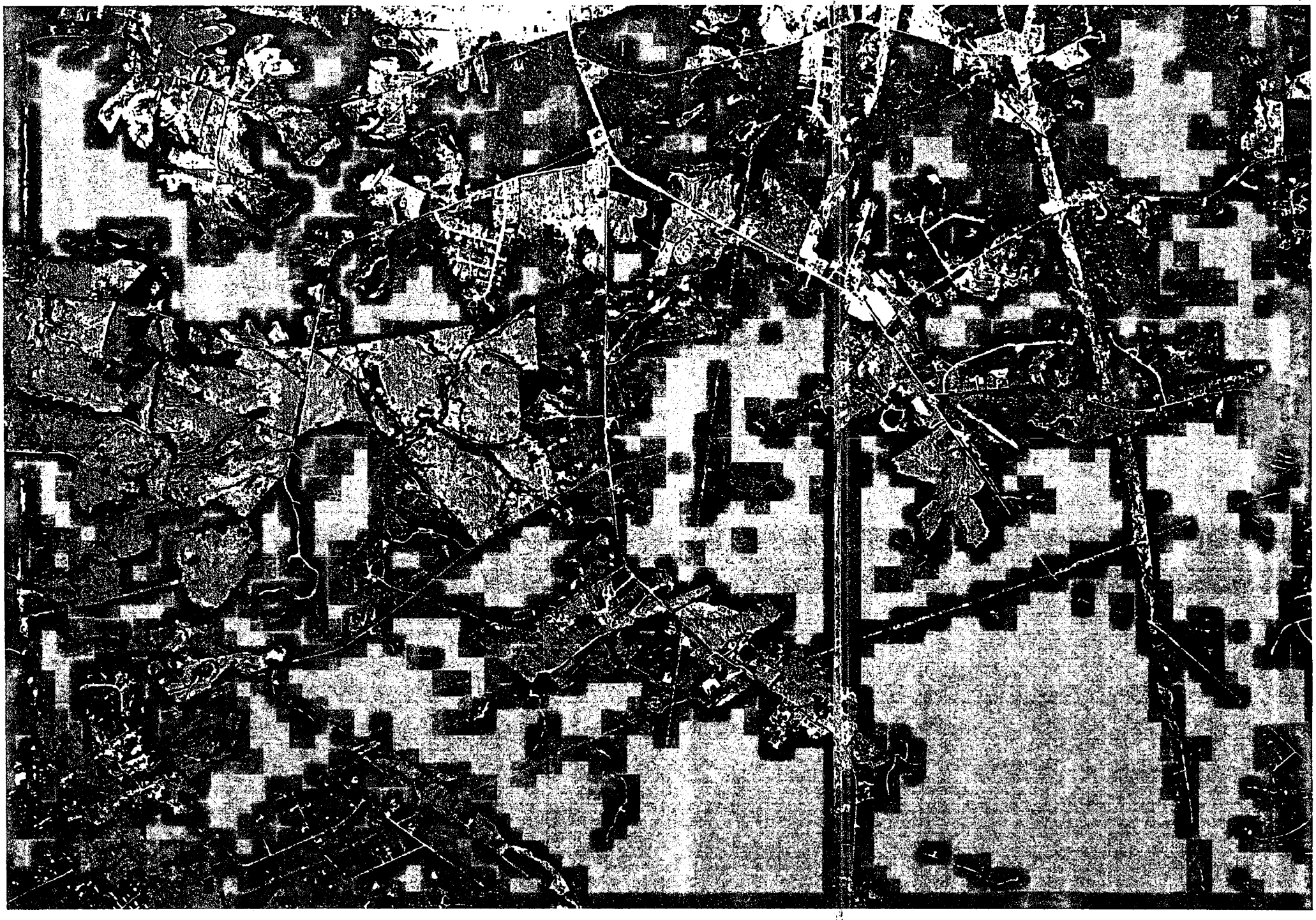
Not Reported

Basement Area

Not Reported

APPENDIX II

1989 False-Color Infrared Photography



APPENDIX III

Photodocumentation from October 13 & 19, 1994

Photo 1: Looking south towards general store. Heating oil UST location center, gasoline UST at rear of porch, dispenser at porch poles.

Photo 2: Inside general store - Lintox Livestock Dip, pyrethrine insecticide (biodegradable) and wax polish.

Photo 3: Oil-stained soil in front of farmhouse on northwest part of property.

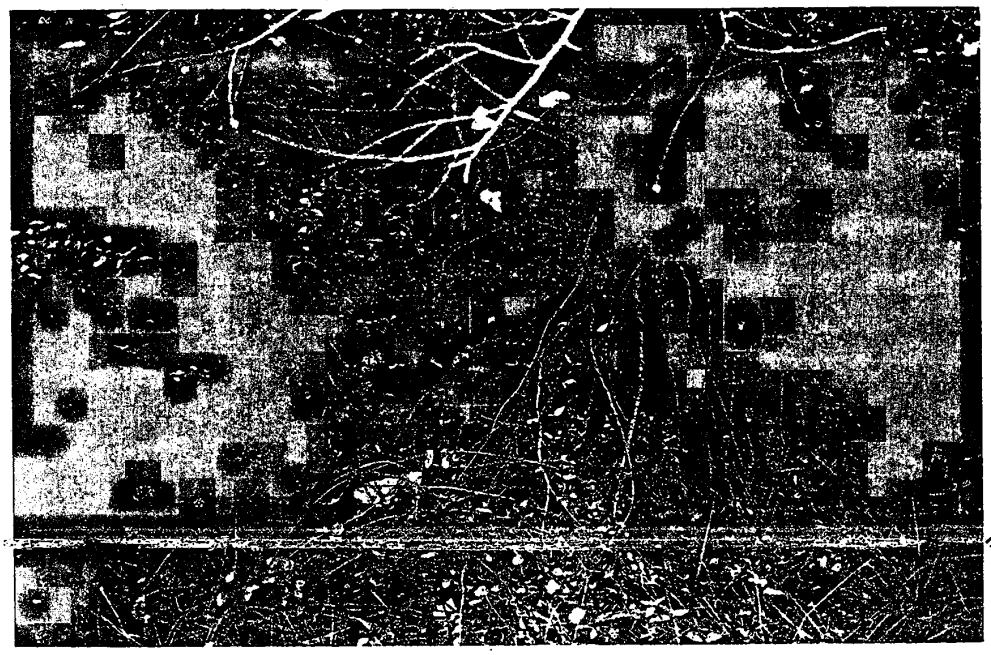


Photo 4: Discarded bottles covered by dense undergrowth at farmhouse.

Photo 5: Dense undergrowth at dilapidated house at location no. 4.

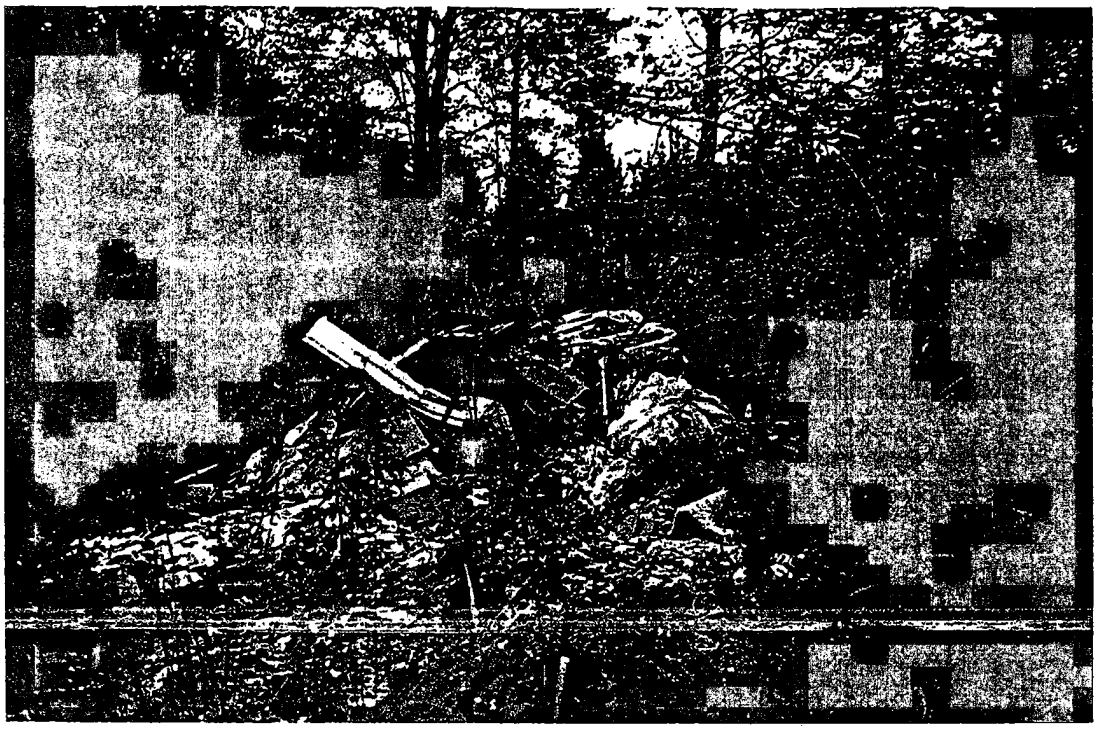


Photo 8: Construction debris at location no. 9.

Photo 9: Debris at dilapidated house - location no. 4.

Blue Ridge Labs
P.O. Box 2940 • Pine Mountain Road
Lenoir, North Carolina 28645
Telephone (704) 726-0149

CLIENT: Royster Oil Company
P.O. Box 1467
Shelby, NC 28150

Attention: Mr. M. Royster

DATE RECEIVED: October 17, 1994

DATE REPORTED: October 18, 1994

SAMPLE NUMBER	SAMPLE DESCRIPTION
410-2259A	Soil; Campbell #1 for 5030.
410-2259B	Soil; Campbell #2 for 5030.
410-2259C	Soil; Campbell #3 for 5030.
410-2259D	Soil; Campbell #4 for 5030.

PARAMETER	RESULTS	MOL	DATE ANALYZED
410-2259A - 5030	*	1.0 mg/kg	10/17/94
410-2259B - 5030	*	1.0 mg/kg	10/17/94
410-2259C - 5030	*	1.0 mg/kg	10/17/94
410-2259D - 5030	*	1.0 mg/kg	10/17/94

REPORTED BY: _____
D. R. Wessinger - General Manager

* Concentrations are below Minimum Quantification Limit except where noted.

NC Laboratory Certificate No. 275.

ENVIRONMENTAL ASSESSMENT REPORT
HOMESTEAD LAND AND TIMBER PROPERTY
YORK COUNTY, SOUTH CAROLINA

Earth Management Systems
Report No. 8910-148

September 26, 1989

EARTH MANAGEMENT SYSTEMS, INC.
Environmental Assessments, Investigations

P.O. Box 24287 Columbia, SC 29224
8605 Two Notch Road, Bldg. 3 Columbia, SC 29223
(803) 736-3800

September 26, 1989

Homestead Land & Timber
8 Heritage Park
Lake Wylie, S.C. 29710

Attention: Mr. Tom Smith

Subject: Phase I Environmental/Prebuy Assessment Report
Homestead Land and Timber Property
Earth Management Systems Report No. 8910-148

Dear Mr. Smith:

Transmitted herewith is a copy of the Phase I Environmental/Prebuy Assessment report on the Homestead Land and Timber property, located in York County, South Carolina.

Should you have any questions concerning the document, or should you require any additional information, please do not hesitate to call.

We appreciate the opportunity to be of service to Homestead Land and Timber, and look forward to working with you in the future.

Respectfully submitted,

EARTH MANAGEMENT SYSTEMS, INC.

David Wm. Brown, P.G.
Staff Hydrogeologist

Stephen C. Godfrey, P.G.
Senior Hydrogeologist

R1489.148

ENVIRONMENTAL/PREBUY ASSESSMENT
REFERENCE NUMBER 8910-148
HOMESTEAD LAND AND TIMBER PROPERTY
York County, South Carolina

September 26, 1989

The following report presents results of the Phase I Environmental/Prebuy Assessment performed on the Homestead Land and Timber property in York County, South Carolina. The location of the property is indicated on figure 1. The objective of the Phase I assessment was to estimate the presence of, and potential for, significant environmental liability on the property. Completion of the Phase I assessment involved performance of three primary tasks:

- o review of environmental records for the property and vicinity available through the United States Environmental Protection Agency (USEPA) and the South Carolina Department of Health and Environmental Control (SCDHEC);

- o inspection and interpretation of topographic maps and available aerial photography for the area to identify areas of potential environmental concern; and

- o performance of a site reconnaissance of the property and surrounding area.

The following sections present methods and results of each task.

REVIEW OF ENVIRONMENTAL RECORDS

Environmental records pertaining to the area near the Homestead Land and Timber property were reviewed by Earth Management Systems as part of the Environmental Assessment. Files reviewed included the USEPA facility index system (FINDS) list, state ground-water contamination files, the state and federal CERCLIS lists, the state hazardous waste notification list, the state underground storage tank (UST) incident file, and the state UST notification and permits files.

Base Map:
USGS 7.5 minute
Topographic Quadrangles
Clover, SC and Lake Wylie, SC

EARTH MANAGEMENT SYSTEMS, INC.
Environmental Assessments, Investigations

Figure 1
Location Map
Homestead Land and Timber Property
York County, S.C.
Earth Management Systems
Report No. 8910-148

Hazardous Waste Generating Facilities/CERCLIS Sites

The SCDHEC hazardous waste notification list was reviewed to identify facilities within one mile of the Homestead Land and Timber property registered with the USEPA and SCDHEC to generate, treat or dispose of hazardous waste. The following hazardous waste facility was identified within one mile of the property:

Facility (I.D. No.)	Distance and Direction from Property	Type Facility
EFP Products (SCD990755514)	3,700 ft East	Light Industry/Generator

The facility is discussed on page 7 of this report.

The USEPA and SCDHEC CERCLIS site inventory lists were reviewed to identify CERCLIS sites within two miles of the Homestead Land and Timber property. The CERCLIS lists include those sites with documented or suspected environmental problems. Facilities included on the lists have the potential to become state or federal Superfund sites. No CERCLIS sites were identified within two miles of the property from the review.

Underground Storage Tanks (UST's)

Two facilities with registered UST's were identified within one mile of the property from a site reconnaissance and review of SCDHEC UST notification and permit files. These are as follows:

Facility (I.D. No.)	Distance and Direction from Property	Number of UST's/Age (product)
Montgomery's Grocery & Garage (N-46-NO-09453)	adjoining, North	2/unknown (gasoline)
Smith's Grocery (N-46-NO-09322)	adjoining, North	2/10 yrs. (gasoline)

These facilities are discussed further on pages 7 and 8 of this report.

Sites with Documented Contamination

No sites with documented ground water contamination were identified within one mile of the Homestead property from review of SCDHEC files.

REVIEW OF TOPOGRAPHIC MAPS AND AERIAL PHOTOGRAPHY

Topographic maps and aerial photography for the Homestead Land and Timber property and vicinity were reviewed to evaluate shallow ground-water flow directions and to identify areas of past or present potential environmental concern at or near the property.

A review of the Lake Wylie and Clover South Carolina 7.5-minute topographic quadrangles indicates that the property slopes moderately toward stream valleys in the north and south parts of the property. Elevations on the property range from approximately 717 feet NGVD (National Geodetic Vertical Datum) to approximately 621 feet NGVD. The property is in a local ground-water recharge zone. Shallow ground-water flow at the site is thought to be generally toward the north and south in accordance with topography, and to discharge into Big Branch Creek in the north part of the property and into tributaries of little Allison Creek in the south part of the property.

The aerial-photography review included inspection of black-and-white aerial photography dated 1949, 1964 and 1970, and infrared aerial photography dated 1981.

The Homestead Land & Timber property consisted of approximately 35 percent timber stands and 65 percent cropland in 1949. Sparse homes were located along secondary roads bordering and near the property. The power line that trends roughly east-west through the property was in place in 1949. The area within about one mile of the property consisted of mixed farmland and forested acreage. No areas of potential environmental concern were apparent on or near the property from review of the 1949 aerial photography.

Little change in land use occurred at or near the property between 1949 and 1964. Houses remained along the secondary roads. The road bordering the east side of the property had been rerouted slightly since 1949, and a pond had been built in the east part of the property. Many of the fields had been planted in trees since 1949. In 1964, the property consisted of approximately 50 percent planted fields and 50 percent forested acreage. No areas of potential environmental concern were apparent.

By 1970, the north part of the property had become densely wooded. Two large areas (formerly planted in crops) north and south of the road that bisects the southern part of the property appeared very disrupted on the 1970 aerial photography. The nature of the disruption, which appeared as a chaotic, anastomosing series of linear cuts across the areas, could not be determined. No evidence of logging or crop harvesting was apparent; presumably, the disruption of the surface was related to clearing of brush from the fields.

By 1981, both of these areas had been contour plowed and replanted in crops or trees; no evidence of the past disruption was apparent on the 1981 aerial photography. A new pond had been constructed just west of the property since 1970. The Homestead Land & Timber property consisted of cleared fields and timber stands in 1981. No areas of potential environmental concern were apparent.

SITE RECONNAISSANCE

A site reconnaissance of the Homestead Land and Timber property and surrounding areas was performed by an Earth Management Systems representative on August 28, 1989 to assess the potential for contamination of the property from on-site or off-site sources. No ground-water or surface-water samples were collected for chemical analysis as part of the site reconnaissance. Soil samples were collected from the area near two UST's located on property.

Potential On-Site Sources

The Homestead property is characterized by rolling terrain, moderate slopes, and a well developed vegetative cover of hardwoods, pines, brush and grasses. Much of the property is open farm land. Bedrock exposures (mainly of adamellite, amphilbolite, phyllite, and quartzite of the Charlotte Belt) are common across the property.

Several areas of miscellaneous household and construction debris (including broken concrete, shingles, cans, bottles, vehicle parts, etc.) were identified in the north part of the property, and around past and present home sites on the property. No appreciable quantities of hazardous materials were identified among the debris. It is unlikely that the debris has resulted in any significant contamination of soil or ground water beneath the Homestead property.

An abandoned gas station is located on the property along South Carolina Highway 49. Two UST's were identified at the former gas station. One tank is 10 to 15 years old, and the other is 20 to 25 years old. Four soil borings were placed around the UST's. The borings were advanced to a depth below the level of the tanks. A soil sample was collected from the bottom of each boring. No petroleum odor or stains were noted in soil removed from the borings. A composite sample from the soil borings was shipped to Advanced Chemistry Labs of Chamblee, Georgia for Chemical Analysis. The sample was analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) and total petroleum hydrocarbons (TPH). Analytical results were as follows:

Benzene	Toluene	Ethylbenzene	Xylenes	TPH
<20 ug/kg	<20 ug/kg	<20 ug/kg	<20 ug/kg	<20 mg/kg

As indicated, no BTEX was detected in soil collected near the base of the UST's at the method detection limit of 20 micrograms per kilogram (ug/kg). Also, no total petroleum hydrocarbons were detected at the method detection limit for TPH of 10 milligrams per kilogram (mg/kg). Therefore, potential leakage from the UST's has not resulted in significant contamination of soil at the abandoned gas station. It is also highly unlikely that ground water has been impacted. A copy of the laboratory report is included in the appendix.

Earth Management Systems recommends that the UST's be properly abandoned according to USEPA and SCDHEC UST regulations. This can be accomplished either excavation and removal of the tanks, or by abandonment of the tanks in place. If the tanks are to be abandoned, a tank abandonment report should be prepared for submittal to the SCDHEC.

Outdoor privies were identified behind the abandoned gas station and near homes along Campbell Road. If these facilities are no longer in use, they should be abandoned and filled in with low-permeability clay.

Domestic water-supply wells are associated with the homes along Campbell Road. If the wells are not being used, and if there are no plans for future use of the wells, it is recommended that they be properly abandoned according to SCDHEC regulations. This may be accomplished by pulling all pump materials from the well(s), and pressure grouting the well(s) with cement, starting from the base of each well and proceeding to land surface.

Potential Off-Site Sources

As indicated on page 4 of this report, one hazardous-waste generating facility was identified within one mile of the property. No CERCLIS sites were identified near the property. The EFP Products facility (SCDHEC generator no. SCD990755514) is sufficiently removed and topographically situated across local barriers to shallow ground-water flow (streams) such that little potential exists for significant contamination of the Homestead Land and Timber property from any potential problems at the facility.

Four additional potential off site sources were identified during the area reconnaissance. These are as follows:

Facility	Distance & Direction from the property	Type
Montgomery's Grocery and Garage (Abandoned)	adjoining, North	Auto Garage
Smith's Grocery	adjoining, North	Gas Station
Carolina Screw Machine Products, Inc.	3500 ft East	Light Industry

Montgomery's Grocery and Garage (presently abandoned) adjoins the property to the north along South Carolina Highway 49. Two UST's were identified at this facility along with numerous junked vehicles. Based on topography, shallow ground-water flow beneath the site is thought to be toward the south (toward the Homestead Land and Timber property). Shallow ground-water from this site is thought to discharge to small creek behind the facility (on the Homestead property). Visible observation of this creek identified no stained soil or discolored water. It is unlikely that this facility has caused significant contamination of the Homestead Land and Timber property. Future leakage or spillage of petroleum at the Montgomery Grocery and Garage facility, however, could result in degradation of soil and/or ground water beneath the Homestead property.

Smith's Grocery adjoins the northern boundary of the Homestead property (just north of South Carolina Highway 49). Three underground tanks are present at this facility. The UST's are less than ten years old. Shallow ground-water flow at the facility is thought to be toward the northwest (away from the Homestead property) based on topography. It is doubtful that any potential loss of petroleum at Smith's Grocery has caused significant contamination of soil or ground water beneath the Homestead Land and Timber property.

The Carolina Screw Machine Products facility is located near the EFP Products facility approximately 3500 feet east of the Homestead property. Shallow ground-water flow at both facilities is thought to be toward the south and southeast (away from the Homestead property). Based on shallow ground-water flow and distance from the Homestead property, it is very unlikely that these facilities have caused significant contamination of the Homestead Land and Timber property.

CONCLUSIONS

Based on review of available environmental records for the area, inspection and interpretation of topographic maps and available aerial photography, and a site reconnaissance by a representative of Earth Management Systems, it is unlikely that the

Homestead Land and Timber property has been significantly impacted by any on-site or off-site sources of contamination.

It is recommended that the UST's associated with the former gas station be abandoned according to USEPA regulations. Outdoor privey facilities on the property not currently used should be abandoned and any domestic water supply wells not currently in use or planned for use in the future should be abandoned. Copies of SCDHEC Well Standards and Regulations and Underground Storage Tank Control Regulations are included with this report. Sections concerning UST abandonment and well abandonment are highlighted.

Respectfully submitted,
EARTH MANAGEMENT SYSTEMS, INC.

David Wm. Brown, G.I.T.
Staff Hydrogeologist

Stephen C. Godfrey, P.G.
Senior Hydrogeologist

APPENDIX

Advanced Chemistry Labs, Inc. Report

ACL ADVANCED CHEMISTRY LABS, INC.
P.O. BOX 88610 • ATLANTA, GA 30356

CLIENT: EARTH MANAGEMENT SYSTEMS, INC.
8605 Two Notch Road
Building 3
Columbia, SC 29223

ATTN: David W. Brown

CLIENT PROJ. #: 8910-148 Homestead Land & Timber
ACL PROJ. #: 4644
DATE RECEIVED: 8/30/89
REPORT DATE: 9/13/89

ANALYTICAL METHOD USED: EPA 8020

STATION	ACL #	MATRIX	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	MTBE	UNITS	% SURROGATE RECOVERY
B-1-4	15028	Soil	< 20	< 20	< 20	< 20	--	ug/kg	103.3

ANALYTICAL METHOD USED: Modified 8015 (Extraction/GC-FID)

STATION	ACL #	MATRIX	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	UNITS
B-1-4	15028	Soil	< 10	mg/kg

Steve Tsoukalas, Ph.D.
Director of Chemistry

Royster Oil Company, Inc.

WHOLESALE DISTRIBUTORS OF BP AND CHEVRON PRODUCTS

Shelby/487-6344 Forest City/245-4267 Gastonia/824-4330

HOME OFFICE:
P.O. Box 1467
720 S. Lafayette St.
Shelby, N.C. 28150

UNDERGROUND STORAGE TANK REMOVALS
CAMPBELL PROPERTY aka formerly SMITH'S STORE
HIGHWAY 49, YORK, SC
OCTOBER 13, 1994

SCOPE OF JOB

The Campbell property includes an abandoned service station/country store. The property is for sale and proper closure is needed to insure no environmental problems. According to the former operator the two 1000 gallon steel tanks were installed about 1947 and were in use until 1977. The tanks were emptied, the store closed and a new location was built across the street approximately 120 feet east of the former location. The tanks and building have not been in use since this time.

These tanks were not registered with DHEC, nor are they eligible for SUPERB funds. DHEC has been notified and the removal guidelines were outlined by Brian Cook of DHEC.

On 10/13/94 work commenced at the site under misty to light rain conditions. The tanks were located under fill dirt and had been properly installed and backfilled with sand. Both gasoline tanks were welded, unprotected steel tanks. The soil surrounding the excavations were predominantly red clays, with some saprolite. The excavations did not encounter the water table. Upon removal, the tanks were found to be in fair condition with normal corrosion/surface rust. The galvanized piping was in good condition with normal corrosion and very little pitting.

Both tanks were buried under 14" of surface cover. Soil samples were collected by hand from the floor of the excavation pit at a depth of 7½' below the ground surface. The samples were placed in glass sample jars, packed on ice in laboratory coolers and shipped via UPS to Blue Ridge Labs for analysis. The tanks were transported to Shelby, NC where they have been picked up by Services Unlimited for certified EPA disposal.

The laboratory results indicate concentrations were below the minimum detection limits.

Royster Oil Company, Inc.
by Michael R. Royster
date 10/20/94

Reviewed by J. Michael Floyd, P.G.
date 10/29/94

(GW/UST-2) Site Investigation Report For Permanent Closure or Change-in-Service of U.S.T.

FOR TANKS

Return Completed Form To:
The appropriate DEM Regional Office according to the county of the facility's location. [SEE MAP ON REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL OFFICE ADDRESS].

State Use Only
I.D. Number _____
Date Received _____

INSTRUCTIONS

Complete and return within (30) days following completion of site investigation.

I. Ownership of Tank(s)

Campbell, Bill & John
Owner Name (Corporation, Individual, Public Agency, or Other Entity)
135 Brookhill Rd
Street Address
Cleveland, NC
County
Shelby NC 28150
City State Zip Code
(704) 482-7071
Area Code Telephone Number

II. Location of Tank(s)

Former Smith's Store
Facility Name or Company
N/A
Facility ID # (if available)
Hwy 49
Street Address or State Road
York York , SC
County City Zip Code
N/A
Area Code Telephone Number

III. Contact Person

John Campbell (Name)	Owner (Job Title)	(704) 482-7071 (Telephone No. (Area Code))
Closure Contractor Royster Oil Co.,Inc. (Name)	Shelby, NC (Address)	(704) 487-6344 (Telephone No. (Area Code))
Lab Blue Ridge Labs (Name)	Lenoir, NC (Address)	(704) 728-0149 (Telephone No. (Area Code))

IV. U.S.T. Information / V. Excavation Condition

Tank No.	Size in Gallons	Tank Dimensions	Last Contents	Water In Excavation Yes	Water In Excavation No	Free Product Yes	Free Product No	Notable Odor or Visible Soil Contamination Yes	Notable Odor or Visible Soil Contamination No
1	1000	48" x 10'-8"	gasoline		XX		XX		XX
2	1000	48" x 10'-8"	gasoline		XX		XX		XX

VI. Additional Information Required

See reverse side of pink copy (owner's copy) for additional information required by DEM in the written report and sketch.

VII. Check List

Check the activities completed.

- [x] Contact local fire marshall
- [x] Notify DEM Regional Office before abandonment
- [x] Drain & flush piping into tank.
- [x] Remove all product and residuals from tank
- [x] Excavate down to tank.
- [x] Clean and inspect tank.
- [x] Remove drop tube, fill pipe, gauge pipe, vapor recovery tank connections, submersible pumps and other tank fixtures.
- [x] Cap or plug all lines except the vent and fill lines.
- [x] Purge tank of all product & flammable vapors.
- [ ] Cut one or more large holes in the tanks.
- [x] Backfill the area.

Date Tank(s) Permanently closed: 10/13/94
Date of Change-in-Service: _____

ABANDONMENT IN PLACE
- [ ] Fill tank until material overflows tank opening;
- [ ] Plug or cap all openings;
- [ ] Disconnect and cap or remove vent line
- [ ] Solid inert material used - specify: _____

REMOVAL
- [x] Create vent hole
- [x] Label tank
- [x] Dispose of tank in approved manner

Final tank destination: Services Unlimited
Bostic, NC

VIII. Certification (Read and Sign)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Print name and official title of owner or owner's authorized representative	Signature	Date Signed
Michael R. Royster Vice-President	Michael R. Royster	10/20/94

Blue Ridge Labs
P.O. Box 2940 • Pine Mountain Road
Lenoir, North Carolina 28645
Telephone (704) 728-0149

CLIENT: Royster Oil Company
P.O. Box 1467
Shelby, NC 28150

Attention: Mr. M. Royster

DATE RECEIVED: October 17, 1994

DATE REPORTED: October 18, 1994

SAMPLE NUMBER	SAMPLE DESCRIPTION
410-2259A	Soil; Campbell #1 for 5030.
410-2259B	Soil; Campbell #2 for 5030.
410-2259C	Soil; Campbell #3 for 5030.
410-2259D	Soil; Campbell #4 for 5030.

PARAMETER	RESULTS	MQL	DATE ANALYZED
410-2259A - 5030	*	1.0 mg/kg	10/17/94
410-2259B - 5030	*	1.0 mg/kg	10/17/94
410-2259C - 5030	*	1.0 mg/kg	10/17/94
410-2259D - 5030	*	1.0 mg/kg	10/17/94

REPORTED BY: _____
D. R. Wessinger - General Manager

* Concentrations are below Minimum Quantification Limit except where noted.

NC Laboratory Certificate No. 275.

410-7259

It is essential that all information be recorded on this Chain of Custody document for acceptance by PAR Laboratories, Inc. and the North Carolina Department of Health and Environmental Control.

CHAIN OF CUSTODY DOCUMENT

COMMENTS:

COMPANY NAME(BILLING): Royster Oil Company, Inc.

ADDRESS: P.O. Box 1467

CITY, STATE, ZIP CODE: Shelby, NC 28151-1467

SAMPLED BY: MRR

SAMPLES MAINTAINED <4°C YES [X] NO [ ]

CONTACT & TELEPHONE NUMBER: Mike Royster (704) 487-6344

DW [ ] WW [ ] GWMW [ ] HW [ ]

SAMPLE LOCATION & STATION NUMBER	C	G	SET UP DATE/ TIME	COLLECTION DATE/TIME	ANALYSES REQUESTED
CAMPBELL 1				10/13/94 2:15 PM	5030 GASOLINE
" 2				" 2:20 PM	" "
" 3				" 2:40 PM	" "
" 4				" 2:45 PM	" "

RELINQUISHED BY:	DATE/TIME	RELINQUISHED BY:	DATE/TIME	RELINQUISHED BY:	DATE/TIME
[signature]	10/17/94 4:30PM	[signature]	10/17/94 1:00		
RECEIVED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME

C: COMPOSITE G: GRAB
DW: DRINKING H_2O WW: WASTE H_2O
GWMW: GROUND H_2O MONITORING WELL
HW: HAZARDOUS WASTE

RECEIVED FOR LABORATORY BY: DATE/TIME

Royster Oil Company, Inc.

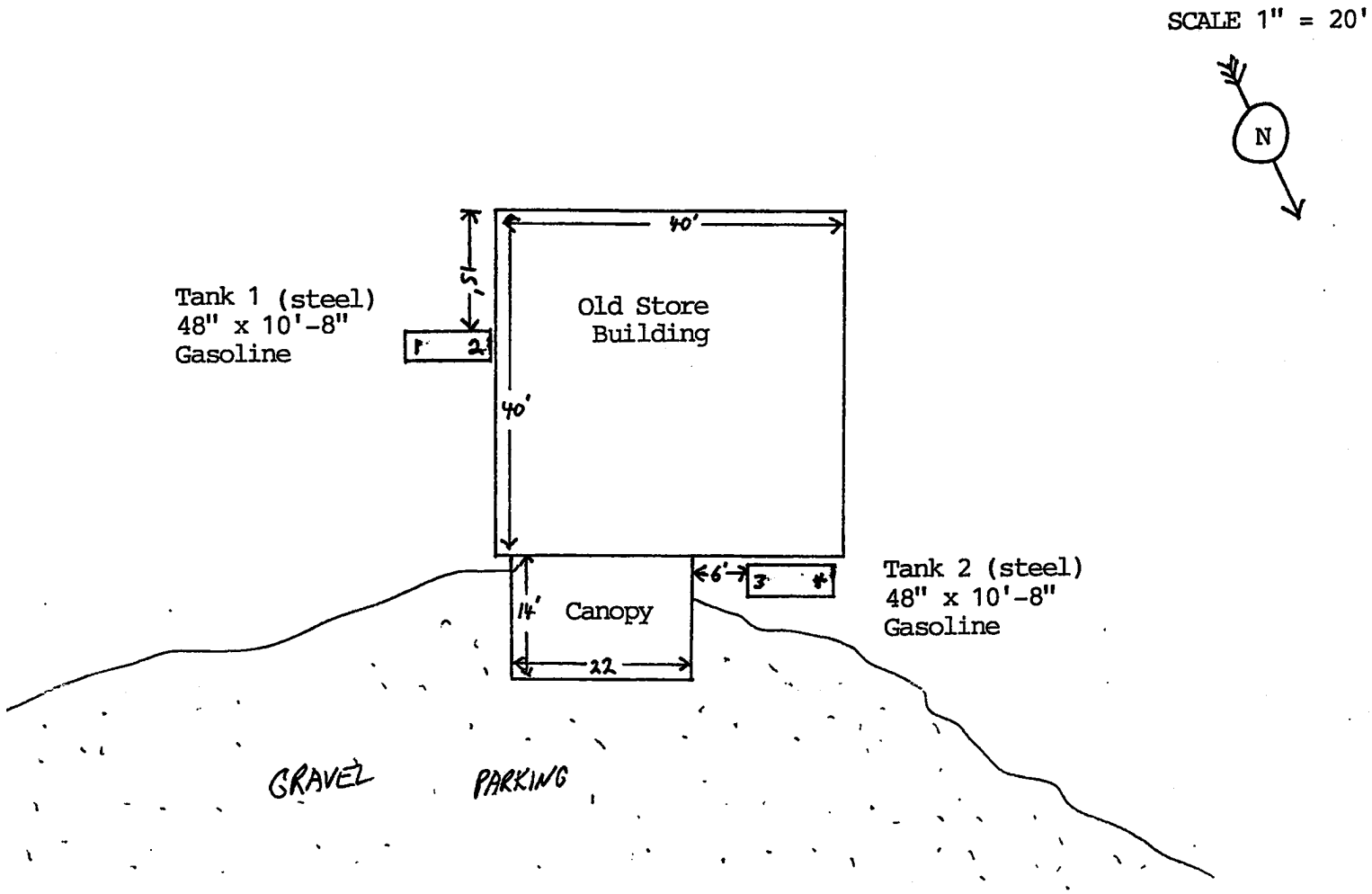
WHOLESALE DISTRIBUTORS OF BP AND CHEVRON PRODUCTS

Shelby/487-6344 Forest City/245-4267 Gastonia/824-4330

HOME OFFICE:
P.O. Box 1467
720 S. Lafayette St.
Shelby, N.C. 28150

UNDERGROUND STORAGE TANK REMOVALS
CAMPBELL PROPERTY aka FORMER SMITH'S STORE
HIGHWAY 49, YORK,SC
OCTOBER 13, 1994

SCALE 1" = 20'



HWY 49

(TO YORK, SC →)

OLD McKINNEY ROAD

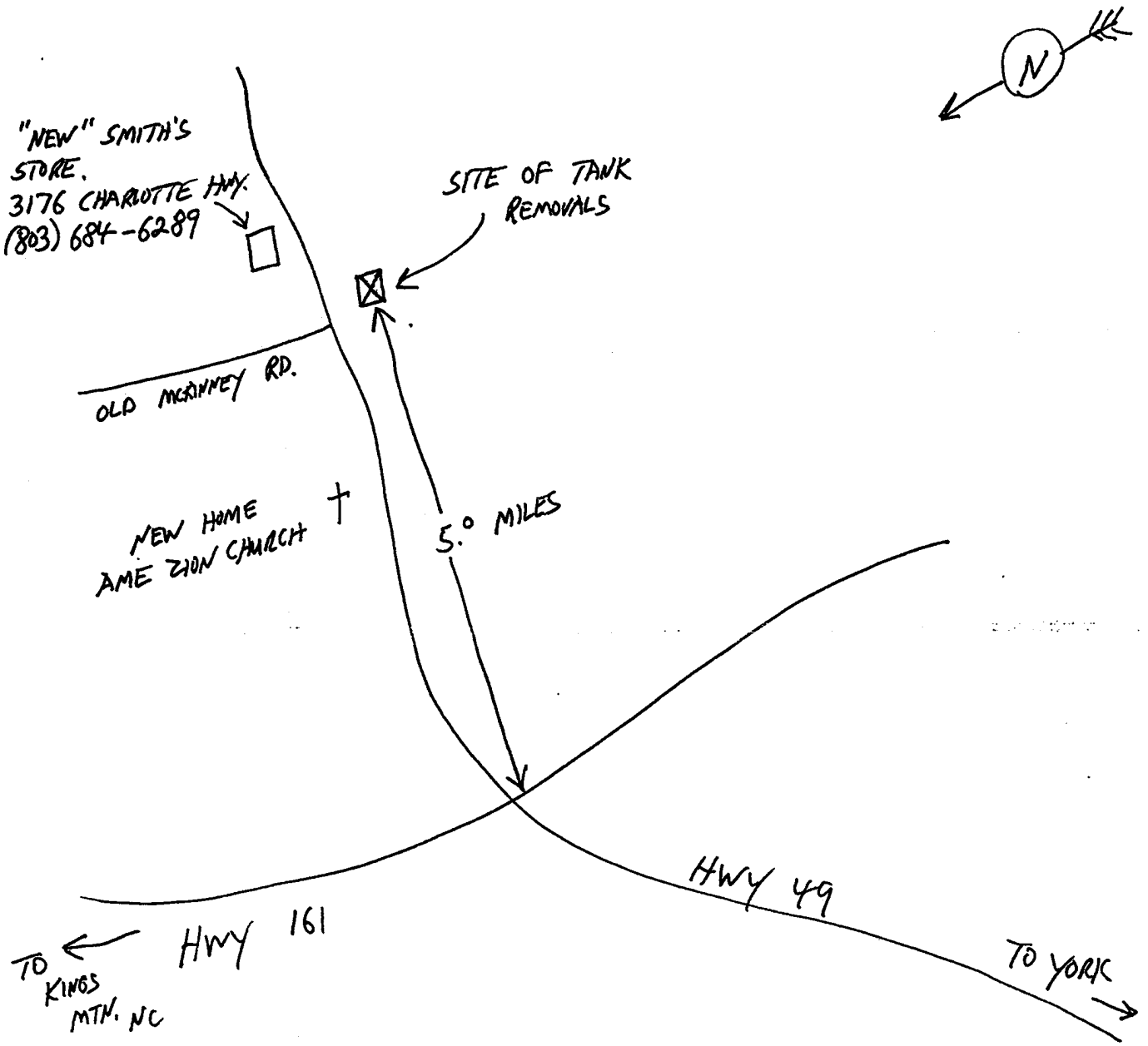
Royster Oil Company, Inc.

WHOLESALE DISTRIBUTORS OF BP AND CHEVRON PRODUCTS

Shelby/487-6344 Forest City/245-4267 Gastonia/824-4330

HOME OFFICE:
P.O. Box 1467
720 S. Lafayette St.
Shelby, N.C. 28150

AREA REFERENCE



Certificate of Disposal

SERVICES UNLIMITED
BOX 474
BOSTIC, NC 28018

Certificate No. # ROC 28679 Date: October 13, 1994

CONTRACTOR	LOCATION
Royster Oil Company, Inc.	Campbell Property (aka old Smith's store)
	Hwy 49 Charlotte Hwy
	York, SC

Type of Tank	Size	Content in Gal.	Tank ID #
UST-steel	48" x 10'-8"	1000	ROC 28679-1
UST-steel	64" x 72"	1000	ROC 28679-2

Signature: C R Wells Jr

Robert Wells, Owner

Chain of Custody Record

TESTAMERICA INC.

Page____ of ____

☐ Asheville, NC (A) (828) 254-5169	☐ Bartlett, IL (C) (630) 289-3100	☐ Cedar Falls, IA (E) (319) 277-2401	☐ Charlotte, NC (G) (704) 392-1164	☐ Dayton, OH (I) (937) 294-6856	☐ Lumberton, NC (K) (910) 738-6190	☐ Nashville, TN (M) (615) 726-0177	☐ Pontiac, MI (O) (248) 332-1940	☐ Rockford. Il (Q) (815) 874-2171
☐ Atlanta, GA (B) (770) 368-0636	☐ Brighton, CO (D) (303) 659-0497	☐ Charleston, SC (F) (843) 849-6550	☐ Columbia, SC (H) (803) 796-8989	☐ Davenport. IA (J) (319) 323-7944	☐ Indianapolis, IN (L) (317) 842-4261	☐ Macon, GA (N) (912) 757-0811	☐ Orlando, FL (P) (407) 851-2560	☐ Watertown, WI (R) (920) 261-1660

Client: SCDHEC	Project No.: 09322
Report Address: 2600 Bull	Invoice Address: Smith's Grocery of
Cola., S.C. 29201	York Co.
Attn: D. THOMA	Attn: P. DuBois
Phone No.: 803 898-4350	Sampled By: B. Faller
Fax No.: 803 898-4330	P.O. No.: 179220
TURNAROUND TIME	Quote No.
☐ Standard	State Samples Collected: S.C.
☒ Rush (surcharges may apply)	Date Needed:

165328

REQUESTED PARAMETERS

8320

4260

Is this work being conducted for regulatory compliance monitoring? Yes___ No___

Is this work being conducted for regulatory enforcement action? Yes___ No___

Which regulations apply: RCRA___ NPDES Wastewater___ UST___ Drinking Water___ Other___ None___

Sample ID	Date	Time	Comp (C) Grab (G)	Matrix	Lab Use	# and type of containers: HCl	NaOH	HNO_3	H_2SO_4	Other	None	REMARKS
STRIFE Res	10/21/99	1207	G	GW		X						24 Hr Rush
Vickery Res	10/21/99	1200	"	"	161120	X						* Priority
BEASLEY Res	"	1218	"	GW		X						
3040 Res	"	1211	"	"		X						
												BTEX 8320
Barnett Res	"	1220	"	"								

QC Deliverables: ☐ None ☐ Level 2 - Batch QC ☐ Level 3 ☐ Level 4 ☐ Other

Init Lab Temp: 4°C Rec Lab Temp

COMMENTS:

* TAKE SAMPLES TO P. Hare

FAX CHAIN TO COLUMBIA

	Date	Time		Date	Time
Relinquished By:	10/21/99	1445	Received By: Becky Wood	10/21/99	4:45
Relinquished By:			Received By:		
Relinquished By: Becky Wood	10/21/99	4:25	Received By:		
Relinquished By:	10/21	4:25	Received By:	10/22/99	0900

LAB USE ONLY:

Custody Seal: ☐ Yes ☐ No ☐ N/A

Bottles Supplied by TA: ☐ Yes ☐ No

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TESTAMERICA/HYDROLOGIC, INC 8320

9440 TWO NOTCH STE B
COLUMBIA, SC 29223

Project: 09322
Project Name: SMITH'S GROCERY
Sampler: B. FALLER

Lab Number: 99-A161120
Sample ID: VICKERY RES.
Sample Type: Water
Site ID:

Date Collected: 10/21/99
Time Collected: 12:00
Date Received: 10/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Runs Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	109.	ug/l	1.0	1.0	1	10/22/99	10:09	T.Johnson	8021B	5787
Toluene	ND	ug/l	1.0	1.0	1	10/22/99	10:09	T.Johnson	8021B	5787
Ethylbenzene	ND	ug/l	1.0	1.0	1	10/22/99	10:09	T.Johnson	8021B	5787
Xylenes, total	38.3	ug/l	1.0	1.0	1	10/22/99	10:09	T.Johnson	8021B	5787

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	95.	50. - 150.

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 10/22/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 00323

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch
Benzene	ng/l	< 0.0010	0.0211	0.0200	106	75. - 125.	5787
Toluene	ng/l	< 0.0010	0.0216	0.0200	108	70. - 125.	5787
Ethylbenzene	ng/l	< 0.0010	0.0220	0.0200	110	71. - 129.	5787
Xylenes, total	ng/l	< 0.0010	0.0444	0.0400	111	71. - 133.	5787

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Benzene	ng/l	0.0211	0.0201	4.85	20.	5787
Toluene	ng/l	0.0216	0.0206	4.74	20.	5787
Ethylbenzene	ng/l	0.0220	0.0208	5.61	20.	5787
Xylenes, total	ng/l	0.0444	0.0421	5.32	20.	5787

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Benzene	ng/l	0.0200	0.0197	98	70 - 130	5787
Toluene	ng/l	0.0200	0.0203	102	70 - 130	5787
Ethylbenzene	ng/l	0.0200	0.0204	102	70 - 130	5787
Xylenes, total	ng/l	0.0400	0.0417	104	70 - 130	5787

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
Benzene	< 0.0010	ng/l	5787
Toluene	< 0.0010	ng/l	5787
Ethylbenzene	< 0.0010	ng/l	5787
Xylenes, total	< 0.0010	ng/l	5787

TESTAMERICA INC.

Chain of Custody Record — *Page____ of ____*

☐ Asheville, NC (A) (828) 254-5169	☐ Bartlett, IL (C) (630) 289-3100	☐ Cedar Falls, IA (E) (319) 277-2401	☐ Charlotte, NC (G) (704) 392-1164	☐ Dayton, OH (I) (937) 294-6856	☐ Lumberton, NC (K) (910) 738-6190	☐ Nashville, TN (M) (615) 726-0177	☐ Pontiac, MI (O) (248) 332-1940	☐ Rockford. Il (Q) (815) 874-2171
☐ Atlanta, GA (B) (770) 368-0636	☐ Brighton, CO (D) (303) 659-0497	☐ Charleston, SC (F) (843) 849-6550	☐ Columbia, SC (H) (803) 796-8989	☐ Davenport. IA (J) (319) 323-7944	☐ Indianapolis, IN (L) (317) 842-4261	☐ Macon, GA (N) (912) 757-0811	☐ Orlando, FL (P) (407) 851-2560	☐ Watertown, WI (R) (920) 261-1660

Client: SCDHEC	Project No: 09322
Report Address: 2600 Bull	Invoice Address: Smyths Grocery
Cola, S.C. 29201	York Co.
Attn: D. THOMA	Attn: P. DuBois
Phone No: 803 898-4350	Sampled By: B. Faller
Fax No: 803 898-4330	P.O. No: 179220
TURNAROUND TIME	Quote No.
☐ Standard	State Samples Collected: S.C.
☒ Rush (surcharges may apply)	Date Needed:

165331 **REQUESTED PARAMETERS**

8320

8260

Is this work being conducted for regulatory compliance monitoring? Yes___ No___

Is this work being conducted for regulatory enforcement action? Yes___ No___

Which regulations apply:
RCRA___ NPDES Wastewater___
UST___ Drinking Water___
Other___ None___

Sample ID	Date	Time	Comp (C) Grab (G)	Matrix	Lab Use	# and type of containers						REMARKS
						HCl	NaOH	HNO_3	H_2SO_4	Other	None	
STRIFE Res	10/21/99	1207	G	GW	16127						X	24 Hr Rush
Vickery Res	10/21/99	1200	"	"	16128						X	* Priority
BEAGLEY Res	"	1218	"	"	29						X	
40 Res	"	1211	"	"	30						X	
Barnette Res	"	1220	"	"	16131							Bill 8320

QC Deliverables: ☐ None ☐ Level 2 - Batch QC ☐ Level 3 ☐ Level 4 ☐ Other

Init Lab Temp | Rec Lab Temp

COMMENTS:

* TAKE SAMPLES TO P. Hare

FAX CHAIN TO COLUMBIA

	Date	Time	Received By:	Date	Time
Relinquished By:	10/21/99	1445	Becky Wood	10/21/99	1445
Relinquished By:					
Relinquished By: Becky Wood	10/22/99	0900			
Relinquished By:	10/22	1735		10/22/99	0900

LAB USE ONLY:

Custody Seal: ☐ Yes ☐ No ☐ N/A

Bottles Supplied by TA: ☐ Yes ☐ No

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TESTAMERICA/HYDROLOGIC, INC 8320

9440 TWO NOTCH STE B
COLUMBIA, SC 29223

Project: 09322
Project Name: SMITH'S GROCERY
Sampler: B. FALLER

Lab Number: 99-A161127
Sample ID: STRIFE RES.
Sample Type: Ground water
Site ID:

Date Collected: 10/21/99
Time Collected: 12:07
Date Received: 10/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	10/25/99	1:14	C. Wani	8260B	5812
Benzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Bromobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Bromochloromethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Bromoform	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Bromomethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
2-Butanone	ND	ug/l	10	10	1	10/25/99	1:14	C. Wani	8260B	5812
n-Butylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
sec-Butylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
t-Butylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Carbon disulfide	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Carbon tetrachloride	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Chlorobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Chloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
2-Chloroethylvinylether	ND	ug/l	5	2	1	10/25/99	1:14	C. Wani	8260B	5812
Chloroform	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Chloromethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
2-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
4-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	10/25/99	1:14	C. Wani	8260B	5812
Dibromochloromethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2-Dibromoethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Dibromomethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,3-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,4-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Dichlorodifluoromethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1-Dichloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2-Dichloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1-Dichloroethene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
cis-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,3-Dichloropropane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
2,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1-Dichloropropene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161127
Sample ID: STRIFE RES.

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Ethylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Hexachlorobutadiene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
2-Hexanone	ND	ug/l	10	10	1	10/25/99	1:14	C. Wani	8260B	5812
Isopropylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
4-Isopropyltoluene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
4-Methyl-2-pentanone	ND	ug/l	10	10	1	10/25/99	1:14	C. Wani	8260B	5812
Methylene chloride	ND	ug/l	10	10	1	10/25/99	1:14	C. Wani	8260B	5812
Naphthalene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
n-Propylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Styrene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Tetrachloroethene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Toluene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1,1-Trichloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,1,2-Trichloroethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Trichloroethene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2,3-Trichloropropane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Vinyl chloride	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Xylenes	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Bromodichloromethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812
Trichlorofluoromethane	ND	ug/l	2	2	1	10/25/99	1:14	C. Wani	8260B	5812

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	85.	60. - 138.
VOA Surr, Toluene d8	87.	80. - 123.
VOA Surr, 4-BFB	93.	73. - 122.
VOA Surr, DBFM	104.	74. - 133.

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161127
Sample ID: STRIFE RES.

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 10/25/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 84009

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TESTAMERICA/HYDROLOGIC, INC 8320

9440 TWO NOTCH STE B
COLUMBIA, SC 29223

Project: 09322
Project Name: SMITH'S GROCERY
Sampler: B. FALLER

Lab Number: 99-A161128
Sample ID: VICKERY RES.
Sample Type: Ground water
Site ID:

Date Collected: 10/21/99
Time Collected: 12:00
Date Received: 10/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	10/25/99	1:54	C. Wani	8260B	5812
Benzene	99.5	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Bromobenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Bromochloromethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Bromoform	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Bromomethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
2-Butanone	ND	ug/l	10	10	1	10/25/99	1:54	C. Wani	8260B	5812
n-Butylbenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
sec-Butylbenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
t-Butylbenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Carbon disulfide	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Carbon tetrachloride	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Chlorobenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Chloroethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
2-Chloroethylvinylether	ND	ug/l	5	2	1	10/25/99	1:54	C. Wani	8260B	5812
Chloroform	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Chloromethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
2-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
4-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	10/25/99	1:54	C. Wani	8260B	5812
Dibromochloromethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,2-Dibromoethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Dibromomethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,2-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,3-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,4-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Dichlorodifluoromethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,1-Dichloroethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,2-Dichloroethane	18.2	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,1-Dichloroethene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
cis-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,3-Dichloropropane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
2,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,1-Dichloropropene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161128
Sample ID: VICKERY RES.

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Ethylbenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Hexachlorobutadiene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
2-Hexanone	ND	ug/l	10	10	1	10/25/99	1:54	C. Wani	8260B	5812
Isopropylbenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
4-Isopropyltoluene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
4-Methyl-2-pentanone	ND	ug/l	10	10	1	10/25/99	1:54	C. Wani	8260B	5812
Methylene chloride	ND	ug/l	10	10	1	10/25/99	1:54	C. Wani	8260B	5812
Naphthalene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
n-Propylbenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Styrene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Tetrachloroethene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Toluene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,1,1-Trichloroethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,1,2-Trichloroethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Trichloroethene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,2,3-Trichloropropane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,2,4-Trimethylbenzene	2.1	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Vinyl chloride	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Xylenes	17.3	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Bromodichloromethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812
Trichlorofluoromethane	ND	ug/l	2	2	1	10/25/99	1:54	C. Wani	8260B	5812

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	77.	60. - 138.
VOA Surr, Toluene d8	84.	80. - 123.
VOA Surr, 4-BFB	96.	73. - 122.
VOA Surr, DBFM	93.	74. - 133.

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161128
Sample ID: VICKERY RES.

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: Report Date: 10/25/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 84009

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TESTAMERICA/HYDROLOGIC, INC 8320

9440 TWO NOTCH STE B
COLUMBIA, SC 29223

Project: 09322
Project Name: SMITH'S GROCERY
Sampler: B. FALLER

Lab Number: 99-A161129
Sample ID: BEASLEY RES.
Sample Type: Ground water
Site ID:

Date Collected: 10/21/99
Time Collected: 12:18
Date Received: 10/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	10/25/99	2:34	C. Wani	8260B	3812
Benzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
Bromobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
Bromochloromethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
Bromoform	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
Bromomethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
2-Butanone	ND	ug/l	10	10	1	10/25/99	2:34	C. Wani	8260B	3812
n-Butylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
sec-Butylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
t-Butylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
Carbon disulfide	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
Carbon tetrachloride	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
Chlorobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
Chloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
2-Chloroethylvinylether	ND	ug/l	5	2	1	10/25/99	2:34	C. Wani	8260B	3812
Chloroform	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
Chloromethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
2-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
4-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	10/25/99	2:34	C. Wani	8260B	3812
Dibromochloromethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
1,2-Dibromoethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
Dibromomethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
1,2-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
1,3-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
1,4-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
Dichlorodifluoromethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
1,1-Dichloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
1,2-Dichloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
1,1-Dichloroethene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
cis-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
1,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
1,3-Dichloropropane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
2,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
1,1-Dichloropropene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	3812

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161129
Sample ID: BEASLEY RES.

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Ethylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Hexachlorobutadiene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
2-Hexanone	ND	ug/l	10	10	1	10/25/99	2:34	C. Wani	8260B	5812
Isopropylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
4-Isopropyltoluene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
4-Methyl-2-pentanone	ND	ug/l	10	10	1	10/25/99	2:34	C. Wani	8260B	5812
Methylene chloride	ND	ug/l	10	10	1	10/25/99	2:34	C. Wani	8260B	5812
Naphthalene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
n-Propylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Styrene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Tetrachloroethene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Toluene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,1,1-Trichloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,1,2-Trichloroethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Trichloroethene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,2,3-Trichloropropane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Vinyl chloride	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Xylenes	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Bromodichloromethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812
Trichlorofluoromethane	ND	ug/l	2	2	1	10/25/99	2:34	C. Wani	8260B	5812

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, 44	83.	60. - 138.
VOA Surr, Toluene d8	90.	80. - 123.
VOA Surr, 4-BFB	90.	73. - 122.
VOA Surr, DBFM	99.	74. - 133.

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161129
Sample ID: BEASLEY RES.

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: Report Date: 10/25/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 84009

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TESTAMERICA/HYDROLOGIC, INC 8320

9440 TWO NOTCH STE B
COLUMBIA, SC 29223

Project: 09322
Project Name: SMITH'S GROCERY
Sampler: B. FALLER

Lab Number: 99-A161130
Sample ID: 3040 RES.
Sample Type: Ground water
Site ID:

Date Collected: 10/21/99
Time Collected: 12:11
Date Received: 10/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	10/25/99	3:13	C. Wani	8260B	3812
Benzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
Bromobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
Bromochloromethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
Bromoform	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
Bromomethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
2-Butanone	ND	ug/l	10	10	1	10/25/99	3:13	C. Wani	8260B	3812
n-Butylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
sec-Butylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
t-Butylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
Carbon disulfide	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
Carbon tetrachloride	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
Chlorobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
Chloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
2-Chloroethylvinylether	ND	ug/l	5	2	1	10/25/99	3:13	C. Wani	8260B	3812
Chloroform	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
Chloromethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
2-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
4-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	10/25/99	3:13	C. Wani	8260B	3812
Dibromochloromethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
1,2-Dibromoethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
Dibromomethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
1,2-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
1,3-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
1,4-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
Dichlorodifluoromethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
1,1-Dichloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
1,2-Dichloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
1,1-Dichloroethene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
cis-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
1,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
1,3-Dichloropropane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
2,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
1,1-Dichloropropene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	3812

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161130
Sample ID: 3040 RES.

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Ethylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Hexachlorobutadiene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
2-Hexanone	ND	ug/l	10	10	1	10/25/99	3:13	C. Wani	8260B	5812
Isopropylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
4-Isopropyltoluene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
4-Methyl-2-pentanone	ND	ug/l	10	10	1	10/25/99	3:13	C. Wani	8260B	5812
Methylene chloride	ND	ug/l	10	10	1	10/25/99	3:13	C. Wani	8260B	5812
Naphthalene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
n-Propylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Styrene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Tetrachloroethene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Toluene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,1,1-Trichloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,1,2-Trichloroethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Trichloroethene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2,3-Trichloropropane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Vinyl chloride	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Xylenes	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Bromodichloromethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812
Trichlorofluoromethane	ND	ug/l	2	2	1	10/25/99	3:13	C. Wani	8260B	5812

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, 44	85.	60. - 138.
VOA Surr, Toluene d8	87.	80. - 123.
VOA Surr, 4-BFB	90.	73. - 122.
VOA Surr, DBFM	104.	74. - 133.

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161130
Sample ID: 3040 RES.

These results relate only to the items tested.
This report shall not be reproduced except in full and with
permission of the laboratory.

Report Approved By: Report Date: 10/25/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 84009

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TESTAMERICA/HYDROLOGIC, INC 8320

9440 TWO NOTCH STE B
COLUMBIA, SC 29223

Project: 09322
Project Name: SMITH'S GROCERY
Sampler: B. FALLER

Lab Number: 99-A161131
Sample ID: BARNETTE RES.
Sample Type: Ground water
Site ID:

Date Collected: 10/21/99
Time Collected: 12:20
Date Received: 10/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	10/25/99	3:53	C. Wani	8260B	5812
Benzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Bromobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Bromochloromethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Bromoform	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Bromomethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
2-Butanone	ND	ug/l	10	10	1	10/25/99	3:53	C. Wani	8260B	5812
n-Butylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
sec-Butylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
t-Butylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Carbon disulfide	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Carbon tetrachloride	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Chlorobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Chloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
2-Chloroethylvinylether	ND	ug/l	5	2	1	10/25/99	3:53	C. Wani	8260B	5812
Chloroform	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Chloromethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
2-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
4-Chlorotoluene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	10/25/99	3:53	C. Wani	8260B	5812
Dibromochloromethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2-Dibromoethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Dibromomethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,3-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,4-Dichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Dichlorodifluoromethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,1-Dichloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2-Dichloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,1-Dichloroethene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
cis-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,3-Dichloropropane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
2,2-Dichloropropane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,1-Dichloropropene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161131
Sample ID: BARNETTE RES.

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Ethylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Hexachlorobutadiene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
2-Hexanone	ND	ug/l	10	10	1	10/25/99	3:53	C. Wani	8260B	5812
Isopropylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
4-Isopropyltoluene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
4-Methyl-2-pentanone	ND	ug/l	10	10	1	10/25/99	3:53	C. Wani	8260B	5812
Methylene chloride	ND	ug/l	10	10	1	10/25/99	3:53	C. Wani	8260B	5812
Naphthalene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
n-Propylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Styrene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Tetrachloroethene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Toluene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,1,1-Trichloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,1,2-Trichloroethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Trichloroethene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2,3-Trichloropropane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Vinyl chloride	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Xylenes	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Bromodichloromethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812
Trichlorofluoromethane	ND	ug/l	2	2	1	10/25/99	3:53	C. Wani	8260B	5812

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	86.	60. - 138.
VOA Surr, Toluene d8	86.	80. - 123.
VOA Surr, 4-BFB	89.	73. - 122.
VOA Surr, DBFM	104.	74. - 133.

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A161131
Sample ID: BARNETTE RES.

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 10/25/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 84009

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch
Benzene	ng/l	< 0.0020	0.0507	0.0500	101	66. - 135.	5812
Chlorobenzene	ng/l	< 0.0020	0.0510	0.0500	102	68. - 134.	5812
1,1-Dichloroethene	ng/l	< 0.0020	0.0561	0.0500	112	59. - 144.	5812
Toluene	ng/l	< 0.0020	0.0505	0.0500	101	55. - 151.	5812
Trichloroethene	ng/l	< 0.0020	0.0462	0.0500	92	54. - 153.	5812

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Benzene	ng/l	0.0507	0.0528	4.06	18.	5812
Chlorobenzene	ng/l	0.0510	0.0534	4.60	20.	5812
1,1-Dichloroethene	ng/l	0.0561	0.0547	2.53	52.	5812
Toluene	ng/l	0.0505	0.0519	2.73	22.	5812
Trichloroethene	ng/l	0.0462	0.0500	7.90	18.	5812

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Acetone	ng/l	0.2500	0.2350	94	70 - 130	5812
Benzene	ng/l	0.0500	0.0497	99	70 - 130	5812
Bromobenzene	ng/l	0.0500	0.0516	103	70 - 130	5812
Bromochloromethane	ng/l	0.0500	0.0483	97	70 - 130	5812
Bromoform	ng/l	0.0500	0.0440	88	70 - 130	5812
Bromomethane	ng/l	0.0500	0.0530	106	70 - 130	5812
2-Butanone	ng/l	0.2500	0.2490	100	70 - 130	5812
n-Butylbenzene	ng/l	0.0500	0.0448	90	70 - 130	5812
sec-Butylbenzene	ng/l	0.0500	0.0461	92	70 - 130	5812
t-Butylbenzene	ng/l	0.0500	0.0459	92	70 - 130	5812
Carbon disulfide	ng/l	0.0500	0.0558	112	70 - 130	5812
Carbon tetrachloride	ng/l	0.05000	0.04170	83	70 - 130	5812
Chlorobenzene	ng/l	0.0500	0.0504	101	70 - 130	5812
Chloroethane	ng/l	0.0500	0.0562	112	70 - 130	5812
2-Chloroethylvinylether	ng/l	0.2500	0.2550	102	70 - 130	5812
Chloroform	ng/l	0.0500	0.0464	93	70 - 130	5812
Chloromethane	ng/l	0.0500	0.0542	108	70 - 130	5812
2-Chlorotoluene	ng/l	0.0500	0.0488	98	70 - 130	5812
4-Chlorotoluene	ng/l	0.0500	0.0488	98	70 - 130	5812
1,2-Dibromo-3-chloropropane	ng/l	0.0500	0.0446	89	70 - 130	5812
Dibromochloromethane	ng/l	0.0500	0.0486	97	70 - 130	5812
1,2-Dibromoethane	ng/l	0.0500	0.0496	99	70 - 130	5812
Dibromomethane	ng/l	0.0500	0.0433	87	70 - 130	5812
1,2-Dichlorobenzene	ng/l	0.0500	0.0471	94	70 - 130	5812
1,3-Dichlorobenzene	ng/l	0.0500	0.0466	93	70 - 130	5812
1,4-Dichlorobenzene	ng/l	0.0500	0.0454	91	70 - 130	5812

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Dichlorodifluoromethane	ng/l	0.0500	0.0425	85	70 - 130	5812
1,1-Dichloroethane	ng/l	0.0500	0.0537	107	70 - 130	5812
1,2-Dichloroethane	ng/l	0.0500	0.0464	93	70 - 130	5812
1,1-Dichloroethene	ng/l	0.0500	0.0522	104	70 - 130	5812
cis-1,2-Dichloroethene	ng/l	0.0500	0.0541	108	70 - 130	5812
trans-1,2-Dichloroethene	ng/l	0.0500	0.0516	103	70 - 130	5812
1,2-Dichloropropane	ng/l	0.0500	0.0509	102	70 - 130	5812
1,3-Dichloropropane	ng/l	0.0500	0.0470	94	70 - 130	5812
2,2-Dichloropropane	ng/l	0.0500	0.0530	106	70 - 130	5812
1,1-Dichloropropene	ng/l	0.0500	0.0521	104	70 - 130	5812
cis-1,3-Dichloropropene	ng/l	0.0500	0.0425	85	70 - 130	5812
trans-1,3-Dichloropropene	ng/l	0.0500	0.0432	86	70 - 130	5812
Ethylbenzene	ng/l	0.0500	0.0514	103	70 - 130	5812
Hexachlorobutadiene	ng/l	0.0500	0.0416	83	70 - 130	5812
2-Hexanone	ng/l	0.2500	0.2230	89	70 - 130	5812
Isopropylbenzene	ng/l	0.0500	0.0480	96	70 - 130	5812
4-Isopropyltoluene	ng/l	0.0500	0.0431	86	70 - 130	5812
4-Methyl-2-pentanone	ng/l	0.2500	0.2320	93	70 - 130	5812
Methylene chloride	ng/l	0.0500	0.0544	109	70 - 130	5812
Naphthalene	ng/l	0.0500	0.0480	96	70 - 130	5812
n-Propylbenzene	ng/l	0.0500	0.0477	95	70 - 130	5812
Styrene	ng/l	0.0500	0.0508	102	70 - 130	5812
1,1,1,2-Tetrachloroethane	ng/l	0.0500	0.0484	97	70 - 130	5812
1,1,2,2-Tetrachloroethane	ng/l	0.0500	0.0510	102	70 - 130	5812
Tetrachloroethene	ng/l	0.0500	0.0460	92	70 - 130	5812
Toluene	ng/l	0.0500	0.0494	99	70 - 130	5812
1,2,3-Trichlorobenzene	ng/l	0.0500	0.0506	101	70 - 130	5812
1,2,4-Trichlorobenzene	ng/l	0.0500	0.0424	85	70 - 130	5812
1,1,1-Trichloroethane	ng/l	0.0500	0.0474	95	70 - 130	5812
1,1,2-Trichloroethane	ng/l	0.0500	0.0479	96	70 - 130	5812
Trichloroethene	ng/l	0.0500	0.0447	89	70 - 130	5812
1,2,3-Trichloropropane	ng/l	0.0500	0.0483	97	70 - 130	5812
1,2,4-Trimethylbenzene	ng/l	0.0500	0.0475	95	70 - 130	5812
1,3,5-Trimethylbenzene	ng/l	0.0500	0.0475	95	70 - 130	5812
Vinyl chloride	ng/l	0.0500	0.0564	113	70 - 130	5812
Xylenes	ng/l	0.1500	0.1518	101	70 - 130	5812
Bromodichloromethane	ng/l	0.0500	0.0466	93	70 - 130	5812
Trichlorofluoromethane	ng/l	0.0500	0.0455	91	70 - 130	5812

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
Acetone	< 0.0100	ng/l	5812
Benzene	< 0.0020	ng/l	5812
Bromobenzene	< 0.0020	ng/l	5812

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	A.C. Batch
Bromochloromethane	< 0.0020	ug/l	5812
Bromoform	< 0.0020	ug/l	5812
Bromomethane	< 0.0020	ug/l	5812
2-Butanone	< 0.0100	ug/l	5812
n-Butylbenzene	< 0.0020	ug/l	5812
sec-Butylbenzene	< 0.0020	ug/l	5812
t-Butylbenzene	< 0.0020	ug/l	5812
Carbon disulfide	< 0.0020	ug/l	5812
Carbon tetrachloride	< 0.00200	ug/l	5812
Chlorobenzene	< 0.0020	ug/l	5812
Chloroethane	< 0.0020	ug/l	5812
2-Chloroethylvinylether	< 0.0050	ug/l	5812
Chloroform	< 0.0020	ug/l	5812
Chloromethane	< 0.0020	ug/l	5812
2-Chlorotoluene	< 0.0020	ug/l	5812
4-Chlorotoluene	< 0.0020	ug/l	5812
1,2-Dibromo-3-chloropropane	< 0.0100	ug/l	5812
Dibromochloromethane	< 0.0020	ug/l	5812
1,2-Dibromoethane	< 0.0020	ug/l	5812
Dibromomethane	< 0.0020	ug/l	5812
1,2-Dichlorobenzene	< 0.0020	ug/l	5812
1,3-Dichlorobenzene	< 0.0020	ug/l	5812
1,4-Dichlorobenzene	< 0.0020	ug/l	5812
Dichlorodifluoromethane	< 0.0020	ug/l	5812
1,1-Dichloroethane	< 0.0020	ug/l	5812
1,2-Dichloroethane	< 0.0020	ug/l	5812
1,1-Dichloroethene	< 0.0020	ug/l	5812
cis-1,2-Dichloroethene	< 0.0020	ug/l	5812
trans-1,2-Dichloroethene	< 0.0020	ug/l	5812
1,2-Dichloropropane	< 0.0020	ug/l	5812
1,3-Dichloropropane	< 0.0020	ug/l	5812
2,2-Dichloropropane	< 0.0020	ug/l	5812
1,1-Dichloropropene	< 0.0020	ug/l	5812
cis-1,3-Dichloropropene	< 0.0020	ug/l	5812
trans-1,3-Dichloropropene	< 0.0020	ug/l	5812
Ethylbenzene	< 0.0020	ug/l	5812
Hexachlorobutadiene	< 0.0020	ug/l	5812
2-Hexanone	< 0.0100	ug/l	5812
Isopropylbenzene	< 0.0020	ug/l	5812
4-Isopropyltoluene	< 0.0020	ug/l	5812
4-Methyl-2-pentanone	< 0.0100	ug/l	5812
Methylene chloride	< 0.0020	ug/l	5812
Naphthalene	< 0.0020	ug/l	5812
n-Propylbenzene	< 0.0020	ug/l	5812
Styrene	< 0.0020	ug/l	5812
1,1,1,2-Tetrachloroethane	< 0.0020	ug/l	5812

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	S.C. Batch
1,1,2,2-Tetrachloroethane	< 0.0020	ug/l	5812
Tetrachloroethene	< 0.0020	ug/l	5812
Toluene	< 0.0020	ug/l	5812
1,2,3-Trichlorobenzene	< 0.0020	ug/l	5812
1,2,4-Trichlorobenzene	< 0.0020	ug/l	5812
1,1,1-Trichloroethane	< 0.0020	ug/l	5812
1,1,2-Trichloroethane	< 0.0020	ug/l	5812
Trichloroethene	< 0.0020	ug/l	5812
1,2,3-Trichloropropane	< 0.0020	ug/l	5812
1,2,4-Trimethylbenzene	< 0.0020	ug/l	5812
1,3,5-Trimethylbenzene	< 0.0020	ug/l	5812
Vinyl chloride	< 0.0020	ug/l	5812
Xylenes	< 0.0020	ug/l	5812
Bromodichloromethane	< 0.0020	ug/l	5812
Trichlorofluoromethane	< 0.0020	ug/l	5812

CBM ENVIRONMENTAL SERVICES, INC.

RECEIVED
NOV 0 8 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

FAX COVER SHEET

To: Pam DuBois

From: Scott Ball

Company: SCDHEC

Date:

Fax No.:

No. Pages: 8 (Including Cover)

Phone No.:

Regarding: Smiths Grocery

____Urgent ✓For Review ____Please Comment ____Please Call Me

Notes/Comments:

P. O. Box 411387, Charlotte NC 28241
Fax Number: 803 548-5892 377 Carowinds Boulevard, Suite 118, Fort Mill SC 29708 Phone Number: 803 548-5989

Lab Report

BEFORE GAC INSTALL

RECEIVED

NOV 0 8 1999

DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

10/21/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: WSW-1
Prism Sample ID: AB45462
Login Group: PGO19F1
Sample Collection Date/Time: 10/18/99 13:35
Lab Submittal Date/Time: 10/18/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP METHOD 3510	Completed				10/19/99	PEL
EDB	Not detected	ug/L	0.020	8011	10/20/99 10:05	PEL
BENZENE	64.6	ug/L	1.00	8260	10/20/99 09:45	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	10/20/99 09:45	PEL
NAPHTHALENE	5.41	ug/L	1.00	8260	10/20/99 09:45	PEL
TOLUENE	Not detected	ug/L	1.00	8260	10/20/99 09:45	PEL
XYLENES	39.82	ug/L	2.00	8260	10/20/99 09:45	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	10/20/99 09:45	PEL
SURR: TOLUENE d8	102.75	%		8260	10/20/99 09:45	PEL
SURR: 1,4-DCB-D4	104.25	%		8260	10/20/99 09:45	PEL
SURR: DIBROMOFLUOROMETHANE	112.75	%		8260	10/20/99 09:45	PEL
NAPHTHALENE	Not detected	ug/L	5.00	8270	10/20/99 11:36	PEL
ACENAPHTHENE	Not detected	ug/L	3.00	8270	10/20/99 11:36	PEL
ANTHRACENE	Not detected	ug/L	0.30	8270	10/20/99 11:36	PEL
FLUORANTHENE	Not detected	ug/L	0.00	8270	10/20/99 11:36	PEL
FLUORENE	Not detected	ug/L	5.00	8270	10/20/99 11:36	PEL
PYRENE	Not detected	ug/L	0.30	8270	10/20/99 11:36	PEL
BENZO(a)ANTHRACENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
BENZO(a)PYRENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
BENZO(b)FLUORANTHENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
BENZO(k)FLUORANTHENE	Not detected	ug/L	0.50	8270	10/20/99 11:36	PEL
CHRYSENE	Not detected	ug/L	1.00	8270	10/20/99 11:36	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
ACENAPTHYLENE	Not detected	ug/L	3.00	8270	10/20/99 11:36	PEL
BENZO(g,h,i)PERYLENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
PHENANTHRENE	Not detected	ug/L	5.00	8270	10/20/99 11:36	PEL
SURR: Db-NITROBENZENE	51.70	%		8270	10/20/99 11:36	PEL

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

10/21/99

CBM Environmental Services
Scott Ball
P. O. Box 411307
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: WSW-1
Prism Sample ID: AB45482
Login Group: PGO19F1
Sample Collection Date/Time: 10/18/99 13:35
Lab Submittal Date/Time: 10/18/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SURR: 2-FLUOROBIPHENYL	64.00	%		8270	10/20/99 11:36	PEL
SURR: 4-TERPHENYL, D14	60.30	%		8270	10/20/99 11:36	PEL
LEAD, TOTAL	Less than	mg/L	0.005	EPA 200.7	10/19/99 16:27	MSP
METALS DIGESTION	Completed			EPA 200.7	10/18/99 16:00	GHH

Sample Comments:

Sample for organics was subcontracted to SC certified laboratory # 96023

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

Full Service Analytical & Environmental Solutions

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	NA
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 7.0	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd WOUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client: CBM Environmental Services Inc
Physical Address: 370 UNCWINDS BLVD
Suite 118 FORT MILL, SC 29708
Phone: (803) 548-9989 Fax: (803) 548-5892
P.O.#/Billing Reference: 10074
Project Name: Smith's Grocery
Job # 10629

REPORT TO: Name: Scott Ball
Address:
BILL TO: Name: CBM
Address:
Requested Due Date: 24 hour turnaround

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ___ NA ✓
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED: BTEX + MTBE by 8260	PAH's by 8270	EDB	Lead	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
WSW-1	10-18-99	1335	Water	VOA	3	40 ml	HCl	✓	✓	✓	✓			45182

Sampler's Signature: Sonya Rench Sampled By (Print Name): SONYA RUNCH Affiliation: CBM

Relinquished By: (Signature)	Received By: (Signature)	Date	Military Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) Sonya Rench	Received for Prism Laboratories By: Michelle King	Date 10/18/99	1430
Method of Shipment:		Lot # Group No. PG019F1	

Additional Comments
* 24-hour Turnaround *
on BTEX + MTBE - $260
PAH's by $270
EDB
Lead

NPDES NC ___ UST: NC ___ GROUNDWATER: NC ___ DRINKING WATER: NC ___ SOLID WASTE: NC ___ OTHER: NC ___
SC ___ SC ___ SC ___ SC ___ SC ___ SC ___
OTHER OTHER OTHER ___ OTHER ___ OTHER ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear T = Glass P = Plastic T = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

CBM ENVIRONMENTAL TEL:8035485892 Nov 08'99 12:17 No.005 P.04

Lab Report

AFTER GAC INSTALL

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

10/29/99

CBM Environmental Services
Scott Bell
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: WSW
Prism Sample ID: AB46575
Login Group: PGO29F1
Sample Collection Date/Time: 10/27/99 15:35
Lab Submittal Date/Time: 10/27/99 16:20

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
TOLUENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
XYLENES	Not detected	ug/L	2.00	8260	10/28/99 21:16	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
SURR: TOLUENE d8	104.25	%		8260	10/28/99 21:16	PEL
SURR: 1,4-DCB-D4	110.75	%		8260	10/28/99 21:16	PEL
SURR: DIBROMOFLUOROMETHANE	95.00	%		8260	10/28/99 21:16	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 99023.

Angela D. Overcash, V.P. Laboratory Services

RESULTS FOR VICKERY WELL.
ALL RESULTS WERE NONDETECT.

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 5.4°	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd WOUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client CBM
Physical Address 327 Commerce Blvd Suite 1F&G
Fountain SC 29708
Phone Fax 548-5892
P.O.#/Billing Reference 1111 2
Project Name Smith's Grocery/10629

REPORT TO: Name Scott Ball
Address
BILL TO: Name CBM
Address
Requested Due Date 24 hour Turnaround

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT ID NO.	PRISM LAB ID NO.
MSW	10-27-99	1535	WATER	VOA	3	40mL	HCL	624 BTEX NAPHTHALENE			46576

Sampler's Signature Chip Clough Sampled By (Print Name) Chip Clough Affiliation CBM

Relinquished By (Signature)	Received By: (Signature)	Date	Military Hours
Chip Clough			
Relinquished By (Signature)	Received By (Signature)	Date	
Relinquished By (Signature)	Received For Prism Laboratories By:	Date 10/27/99	1630
Method of Shipment		Lab Group No. 10629F1	

Additional Comments

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ✓ OTHER ___ GROUNDWATER: NC ___ SC ✓ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

CBM_ENVIRONMENTAL TEL:8035485892 Nov 00'99 12:18 No.005 P.06

Lab Report

AFTER GAC INSTALL

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/5/99

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery Job#10629
Customer Sample ID: VICKERY'S WSW
Prism Sample ID: AB47247
Login Group: PGN4F1
Sample Collection Date/Time: 11/2/99 14:24
Lab Submittal Date/Time: 11/3/99 10:25

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory.

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/4/99 08:58	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/4/99 08:58	PEL
NAPHTHALENE	25.5	ug/l	1.00	8260	11/4/99 08:58	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/4/99 08:58	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/4/99 08:58	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/4/99 08:58	PEL
SURR: TOLUENE d8	101.75	%		8260	11/4/99 08:58	PEL
SURR: 1,4-DCB-D4	104.75	%		8260	11/4/99 08:58	PEL
SURR: DIBROMOFLUOROMETHANE	84.75	%		8260	11/4/99 08:58	PEL

Sample Comments:

Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival? 4	✓		
Received ON WET ICE? Temp	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd WOUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client: CBM ENVIRONMENTAL SERVICES, LLC
Physical Address: 377 CAROLINA BLVD., SUITE 118
FOLT MILL, SC 29208
Phone: (803) 548-5989 Fax: (803) 548-5092
P.O./Billing Reference: 11176
Project Name: SMITH'S GROCERY - SOUTH CONWAY

REPORT TO: Name: SCOTT BALL
Address:
BILL TO: Name: CBM
Address:
Requested Due Date: 24 HOUR OR NAD
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested: NC ___ SC ✓ Other ___ NA ___
Water Chlorinated: Yes ___ No ✓ NA ___
Sample Iced Upon Collection: Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	*MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: BTEX BY EPA 602	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
VICKERS (WS1)	11/02/99	1424	WATER	VOA	3	40ml	HCl	✓			47287

Sampler's Signature: Shannon L. Cottrill
Sampled By (Print Name): SHANNON L COTTRILL Affiliation: CBM ENVIRONMENTAL

Relinquished By: (Signature)	Received By: (Signature)	Date / Military Hours
Shannon L. Cottrill		11/03/99 1000
Relinquished By: (Signature)	Received By: (Signature)	Date
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date
Method of Shipment		11/3/99 1000

Log In Group No. PGN4F1

Additional Comments:

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ✓ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

CBM ENVIRONMENTAL SERVICES, LLC TEL 8035485892 Nov 03 99 12:19 No.005 P.08

09322

CBM
ENVIRONMENTAL SERVICES, INC.

RECEIVED
NOV 01 1999
DIVISION OF UNDERGROUND STORAGE TANK MGMT.

FAX COVER SHEET

To: Pam DuBois

From: Scott Ball

Company: SCDHEC

Date: 11-2-99

Fax No.:

No. Pages: 3 (Including Cover)

Phone No.:

Regarding: VICKERY WELL ~~#5~~ AT SMITHS GROCERY

_____Urgent _____For Review _____Please Comment _____Please Call Me

Notes/Comments: RESULTS FOR WATER SUPPLY WELL SAMPLED AT THE VICKERY RESIDENCE ON 10/27/99

WELL SCHEDULED TO BE SAMPLED AGAIN TODAY.

P. O. Box 411387, Charlotte NC 28241
Fax Number: 803 548-5892 377 Carowinds Boulevard, Suite 118, Fort Mill SC 29708 Phone Number: 803 548-5989

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

10/29/99

CBM Environmental Services
Scott Bell
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: WSW
Prism Sample ID: AB46575
Login Group: PGO29F1
Sample Collection Date/Time: 10/27/99 15:35
Lab Submittal Date/Time: 10/27/99 16:20

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
TOLUENE	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
XYLENES	Not detected	ug/L	2.00	8260	10/28/99 21:16	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	10/28/99 21:16	PEL
SURR: TOLUENE d8	104.25	%		8260	10/28/99 21:16	PEL
SURR: 1,4-DCB-D4	110.75	%		8260	10/28/99 21:16	PEL
SURR: DIBROMOFLUOROMETHANE	95.00	%		8260	10/28/99 21:16	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 99023.

Angela D. Overcash, V.P. Laboratory Services

RECEIVED
NOV 01 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

Full Service Analytical & Environmental Solutions

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY	YES	NO	NA
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 5.4	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd WOUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client CBM
Physical Address 227 Commonwealth Blvd Suite 115
Fayetteville SC 28308
Phone ____ Fax 548-5892
P.O.#/Billing Reference 11112
Project Name Smith's Grocery/10629

REPORT TO: Name Scott Ball
Address ____
BILL TO: Name CBM
Address ____
Requested Due Date 24 hour Turnaround

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED (BTEX by 8021B)	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
WSW	10-27-99	1535	Water	VOA	3	40mL	HCL				4675

Sampler's Signature Chip Clough Sampled By (Print Name) Chip Clough Affiliation CBM

Relinquished By: (Signature) Chip Clough	Received By: (Signature)	Date / Military Hours
Relinquished By: (Signature)	Received By: (Signature)	Date
Relinquished By: (Signature)	Received for Prism Laboratories By: Kathryn Nunez	Date 10/27/99 1620
Method of Shipment		Logged Group Id 10629-FI

Additional Comments

NPDES NC ___ UST: NC ___ GROUNDWATER: NC ___ DRINKING WATER: NC ___ SOLID WASTE: NC ___ OTHER: NC ___
SC ___ SC ✓ SC ✓ SC ___ SC ___ SC ___
OTHER ___ OTHER ___ OTHER ___ OTHER ___ OTHER ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

CBM ENVIRONMENTAL TEL:8035485892
Oct-29-99 04:13P Prism Laboratories P.01
Nov 02'99 9:36 No.001 P.03
704 529 0409

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

DIVISION OF
UNDERGROUND STORAGE TANK MANAGEMENT

Phone (803) 898-4350 Fax (803) 898-4330

OCT 25 1999

Ms. Lois B Smith
3176 Charlotte Highway
York, South Carolina 29745

Re: Smith's Grocery; SC Highway 49, York
UST Permit #09322, CP #09690
GAC Bids received October 22, 1999
York County

Dear Ms. Smith:

The Division of Underground Storage Tank Management of the South Carolina Department of Health and Environmental Control (SCDHEC) recognizes your commitment to continue work at this site utilizing your own contractor. The Division has reviewed the referenced bids submitted by CBM Environmental Services.

Installation of the GAC filter should begin immediately upon receipt of this letter. Cost Proposal #09690 has been approved for the amount shown on the enclosed cost proposal form.

CBM Environmental can submit an invoice for direct billing from the State Underground Petroleum Environmental Response Bank (SUPERB) Account. Please note that all applicable South Carolina certification requirements apply to the laboratory services, well installation, and report preparation. All site rehabilitation activities must be performed and submitted by a South Carolina Certified Underground Storage Tank Site Rehabilitation Contractor.

A report documenting the filter installation and the invoice is due within 45 days from the date of this letter. If the invoice and completed report are not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available. Please note that Sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that no costs will be allowed unless prior approval from the Department is obtained. If for any reason additional tasks will be completed, these additional tasks and the associated cost must be preapproved by the Department for the cost to be paid. The SCDHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, SCDHEC reserves the right to question and/or reject costs if deemed unreasonable. The SCDHEC reserves the right to audit project records at any time during the project or after completion of work.

On all correspondence concerning this site, please reference **UST Permit #09322 and CP #09690.** If there are any questions concerning this project, please contact Pamela DuBois at (803) 898-4334 or (800) 826-5435 (within South Carolina only).

Sincerely,

Kimberly A. Wilson

Kimberly A. Wilson, P. G., Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Branch
Division of Underground Storage Tank Management

enc: Approved Cost Proposal

cc: Technical/Financial Files (w/enc)
CBM, PO Box 411387, Charlotte NC 28241 (w/enc)
SCDHEC/UST/10221999/kaw

VST Permit # 09322
CP # 09690
Cert # 39

CBM ENVIRONMENTAL SERVICES, INC.

RECEIVED
OCT 22 1999
DIVISION OF UNDERGROUND STORAGE TANK MGMT.

FAX COVER SHEET

To: Bob Fuller / Scott McGinnis From: Ray Collins

Company: SCDHEC Date: 10/22/99

Fax No.: (803) 898 4330 No. Pages: 6 (Including Cover)

Phone No.: _____ Regarding: Clover, SC Point of entry system

X Urgent X For Review ____ Please Comment ____ Please Call Me

Notes/Comments: Bob / Scott attached are three quotes we quickly obtained, because of the urgency of the project. Delivery as well as price was the problem with two of the contractors We were unable to get bids from other contractor, like Ransoft, to short notice. I think Barker would be the guy you want anyway. Tuesday, 10/26 AM is his earliest date for installation. We tentatively had Monday, but DHEC took that date

Regards
Ray

P. O. Box 411387, Charlotte NC 28241
Fax Number: 803 548-5892 377 Carowinds Boulevard, Suite 118, Fort Mill SC 29708 Phone Number: 803 548-5989

Carbon System Quotes Clover, SC

	Vendor	Price	Delivery
1.	James Barker	2395 450 200 x .80 100 2945	Tues 10/26 Install
2.	Eshelman	8125 500 delivery	6-8 wks
3	Carbtrol	10,000	3-4 months

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

BID NUMBER: SB-2289-04/09/98/MJN

Please provide price quotation for the complete installation of and replacement of carbon for granular activated carbon filter systems in conjunction with remediation of Leaking Underground Storage Tank sites throughout the State of South Carolina.

REQUIREMENTS:

1. The contractor must be familiar with all types of carbon filter system units (EcoWater, Rain Soft etc.).
2. The contractor must be a certified professional plumber in the State of South Carolina. Certification must be provided with bid packages.
3. For emergency situations (i.e., GAC installations), the contractor shall mobilize within 24 hours of notification. The contractor shall complete all other items under the bidding schedule within, within 48 hours of notification. If situations arise which cause delays, DHEC must be notified within 24 hours of problem and a written justificaiton submitted within 48 hours. The justification will be reviewed by DHEC.

SPECIFICATION:

1. The unit must filter Volatile Organic Chemicals to include (minimum two cubic foot carbon system/50 lbs. carbon).
2. Have a five year warranty on the control head unit and lifetime warranty on the tank (for new units).
3. Have an automatic counter to keep account of treated water.
4. Have a 48 hour capacitor that will react equipment for backwashing purposes in the event of electrical failure.
5. The equipment specifications must be validated by the Water Quality Association.
6. Have a 6 months warranty on the pipes, fittings, etc., for all units.
7. Have a faucet installed on the inlet line to allow sampling of the water entering the unit and on the outlet within the housing unit.
8. The unit must be in a locked housing unit. Copies of the keys to the lock must be given to the owner of the well and the State-Lead Section of the Bureau of Underground Storage Tank Management.
9. The serial # of unit, site # and locking keys must be given to the homeowner and DHEC (Scott McInnis).

Additional costs not to be included in total but which will be applied if items are needed.

SPECIFICATIONS FOR GAC HOUSING:

1. With the installation, the housing unit must be lockable, vented, insulated to prevent freezing and of sufficient size to allow access to service unit. The unit must have a lock and assemblage. Copies of the keys to the lock must be given to the owner of the well and the State-Lead Section of the Bureau of Underground Storage Tank Management.

SPECIFICATIONS FOR UV LIGHT DISINFECTION UNITS:

1. Ultraviolet light disinfection unit with pre-filter-
   a. Unit must be capable of removing bacteria in water supply well.
   b. Unit must be capable of treating 5 gallons per minute on private water supply well.
   c Minimum of 9,000 lamp hours.
   d Lamp out sensor and alarm must be included in system.
   e. A pre-fabricated housing unit should be used if no other housing is available.
   f. Unit must have a 1 year warranty.

FAX MESSAGE

DATE : 10/21/99

NUMBER OF PAGES INCLUDING COVER PAGE : 1

PLEASE DELIVER THIS FAX MESSAGE

TO : Ray Collins

Fax 803-548-5892

ph: 803-548-5989

FROM : ECO WATER SYSTEMS

(803-996-1205 (803)996-1225

FAX NUMBER PHONE NUMBER

Mr Collins;

The price for a Ecowater 3100PF12 (2 cu. ft. G.A.C.) is $2395. If a housing unit is needed, it is $450. The mileage will be 50¢ a mile. These prices include normal installation . If anything extra is required, we would call you first. Thanks for your time and consideration.

P.S. These are the same units that we have installed all over the state for DHEC. They meet all their specs.

Sincerely:

James V. Barker

James V. Barker

Barker Filtration
4884 B Sunset Blvd.
Lexington, SC 29072

CARBTROL®

ENGINEERED SYSTEMS FOR ENVIRONMENTAL CONTROL

51 RIVERSIDE AVENUE
WESTPORT, CT 06880

(203) 226-5642
(800) 242 1150
FAX: (203) 226-5322

TO: Kay Collins
FAX NUMBER: 803-548-5892
COMPANY: CBM
DATE: 10/22/99 STATE: SC
REF: Bid # SB-2289-04/09/98/MJN
TOTAL PAGES: 1

MESSAGE:

Thank you for your interest in CARBTROL remediation equipment.

We have reviewed the Specification. The equipment is not of our standard supply. Our equipment is designed for groundwater remediation and not for potable applications. Compliance with the Specification would require CARBTROL to make a substantial start-up effort. This would include engineering design, production, and any regulatory compliance issues (which would also require research). In addition, we would have to obtain properly certified carbons for potable water applications.

Since this would be a start-up situation, we estimate a budgetary price of $10,000.00 for the system with an estimated lead time of 3-4 months.

We trust this information will be helpful to you.
Please feel free to call me.

FROM: Kenneth W. Kikta

CARBTROL

ESHELMAN CAROLINAS, INC.

1127 COMMERCIAL AVE.
CHARLOTTE, N.C. 28205
Phone 704/376-6408
Fax 704/376 2439

Fax: 803/548-5892

October 22, 1999

CBM Environmental Services, Inc.
P. O. Box 411387
Charlotte, NC 28241

Attention: Mr. Ray Collins

Subject: Carbon System
RE: Bid number SB-2289-04/09/98/MJN

Dear Mr. Collins:

Eshelman Carolinas, Inc. is pleased to submit a bid for a carbon system for subject project.

- One liquid phase carbon vessel with 55 lbs virgin carbon. 4 gpm, 150 psi high pressure tank, FRP construction, NSF certifications, food grade rating for tank and internals.
- Backwash system
- Sampling ports (before and after carbon vessel)
- Lockable building or enclosure

Eshelman Carolinas, Inc will provide a licensed subcontractor to provide services in South Carolina.

Price $8,125.00

Prices are F.O.B. ship point. Terms are Net 30 days. No applicable taxes are included. Estimated delivery is three to fours weeks after accepted purchase order. Estimated delivery is $500.00

Should you have any questions, please feel free to contact us.

Your truly,

ESHELMAN CAROLINAS, INC.

Brevard S Myers

Brevard S. Myers, Jr.
Technical Coordinator
Representative

CBM
ENVIRONMENTAL SERVICES, INC.

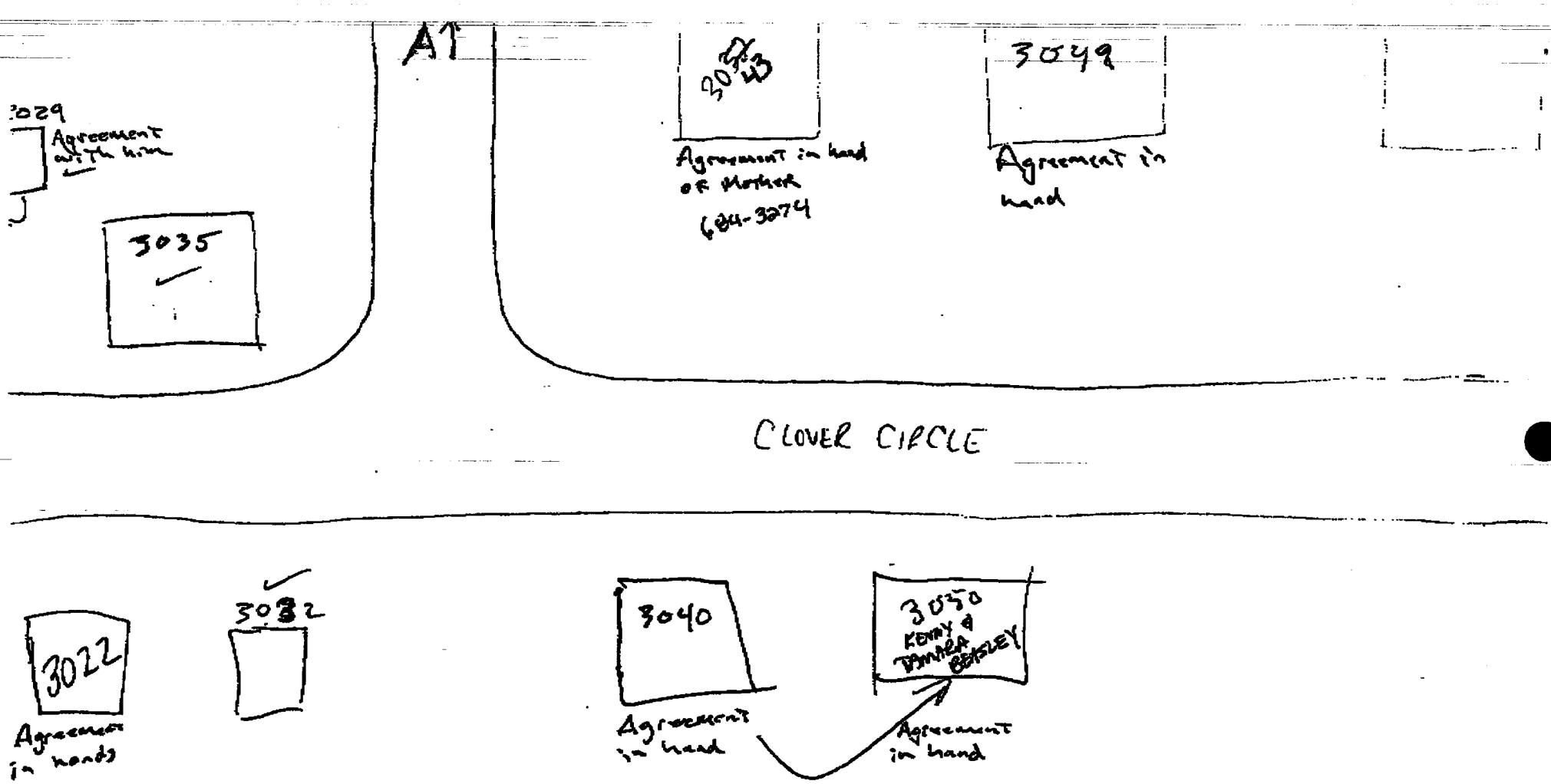
FAX COVER SHEET

To: Pam DuBois
From: Scott Ball
Company: SCDHEC
Date: CBM
Fax No.:
No. Pages: 6 (Including Cover)
Phone No.:
Regarding: Smiths Grocery

_____Urgent _____For Review _____Please Comment _____Please Call Me

Notes/Comments: Smiths Grocery / Vickery
Water Supply Well Info.

Fax Number: 803 548-5892
P. O. Box 411387, Charlotte NC 28241
377 Carowinds Boulevard, Suite 118, Fort Mill SC 29708
Phone Number: 803 548-5989



CBM ENVIRONMENTAL TEL:8035485892 Oct 21 '99 10:01 No.004 P.02

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

10/21/99

CBM Environmental Services
Scott Ball
P. O. Box 41138/
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: WSW-1
Prism Sample ID: AB45482
Login Group: PGO19F1
Sample Collection Date/Time: 10/18/99 13:35
Lab Submittal Date/Time: 10/18/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP METHOD 3510	Completed				10/19/99	PEL
EDB	Not detected	ug/L	0.020	8011	10/20/99 10:05	PEL
BENZENE	64.6	ug/L	1.00	8260	10/20/99 09:45	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	10/20/99 09:45	PEL
NAPHTHALENE	5.41	ug/L	1.00	8260	10/20/99 09:45	PEL
TOLUENE	Not detected	ug/L	1.00	8260	10/20/99 09:45	PEL
XYLENES	39.82	ug/L	2.00	8260	10/20/99 09:45	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	10/20/99 09:45	PEL
SURR: TOLUENE d8	102.75	%		8260	10/20/99 09:45	PEL
SURR: 1,4-DCB-D4	104.25	%		8260	10/20/99 09:45	PEL
SURR: DIBROMOFLUOROMETHANE	112.75	%		8260	10/20/99 09:45	PEL
NAPHTHALENE	Not detected	ug/L	5.00	8270	10/20/99 11:36	PEL
ACENAPHTHENE	Not detected	ug/L	3.00	8270	10/20/99 11:36	PEL
ANTHRACENE	Not detected	ug/L	0.30	8270	10/20/99 11:36	PEL
FLUORANTHENE	Not detected	ug/L	0.30	8270	10/20/99 11:36	PEL
FLUORENE	Not detected	ug/L	5.00	8270	10/20/99 11:36	PEL
PYRENE	Not detected	ug/L	0.30	8270	10/20/99 11:36	PEL
BENZO(a)ANTHRACENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
BENZO(a)PYRENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
BENZO(b)FLUORANTHENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
BENZO(k)FLUORANTHENE	Not detected	ug/L	0.60	8270	10/20/99 11:36	PEL
CHRYSENE	Not detected	ug/L	1.00	8270	10/20/99 11:36	PEL
DIBENZO(a,h)ANTHRACENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
INDENO(1,2,3-cd)PYRENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
ACENAPTHYLENE	Not detected	ug/L	3.00	8270	10/20/99 11:36	PEL
BENZO(g,h,i)PERYLENE	Not detected	ug/L	0.20	8270	10/20/99 11:36	PEL
PHENANTHRENE	Not detected	ug/L	5.00	8270	10/20/99 11:36	PEL
SURR: 2B-NITROBENZENE	51.70	%		8270	10/20/99 11:36	PEL

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

10/21/99

CBM Environmental Services
Scott Ball
P. O. Box 411007
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: WSW-1
Prism Sample ID: AB45482
Login Group: PGO19F1
Sample Collection Date/Time: 10/18/99 13:35
Lab Submittal Date/Time: 10/18/99 14:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
SURR: 2-FLUOROBIPHENYL	54.90	%		8270	10/20/99 11:36	PEL
SURR: 4-TERPHENYL, D14	60.30	%		8270	10/20/99 11:36	PEL
LEAD, TOTAL	Less than	mg/L	0.005	EPA 200.7	10/19/99 16:27	MSP
METALS DIGESTION	Completed			EPA 200.7	10/18/99 16:00	GHH

Sample Comments:

Sample for organics was subcontracted to SC certified laboratory # 96023

Angela D. Overcash, V.P. Laboratory Services

Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival? Temp 7.0	✓		
Received ON WET ICE?	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client: CBM Environmental Services Inc
Physical Address: 317 WAGONWINDS BLVD
Suite 113 FORT MILL, SC 29708
Phone: (803) 548-5989 Fax: (803) 548-5892
P.O.#/Billing Reference: 10174
Project Name: Smith's Grocery
Job # 10629

REPORT TO: Name: Scott Bell
Address:
BILL TO: Name: CBM
Address:
Requested Due Date: 24 hour turnaround
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ___ NA ✓
Sample Iced Upon Collection Yes ___ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: BTEX + MTBE 8260; PAH's by 8270; EDB; Lead	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
WSW-1	10-18-99	1335	Water	VOA	3	40 ml	HCl	✓ ✓ ✓ ✓			45482

Sampler's Signature: Sonya Punch Sampled By (Print Name): SONYA PUNCH Affiliation: CBM

Relinquished By: (Signature)	Received By: (Signature)	Date	Military Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) Sonya Punch	Received for Prism Laboratories By: Michelle Long	Date 10/18/99	1430
Method of Shipment:		Logged Group No. PG019F1	

Additional Comments
* 24-hour Turnaround *
on BTEX + MTBE - 8260
PAH's by 8270
EDB
Lead

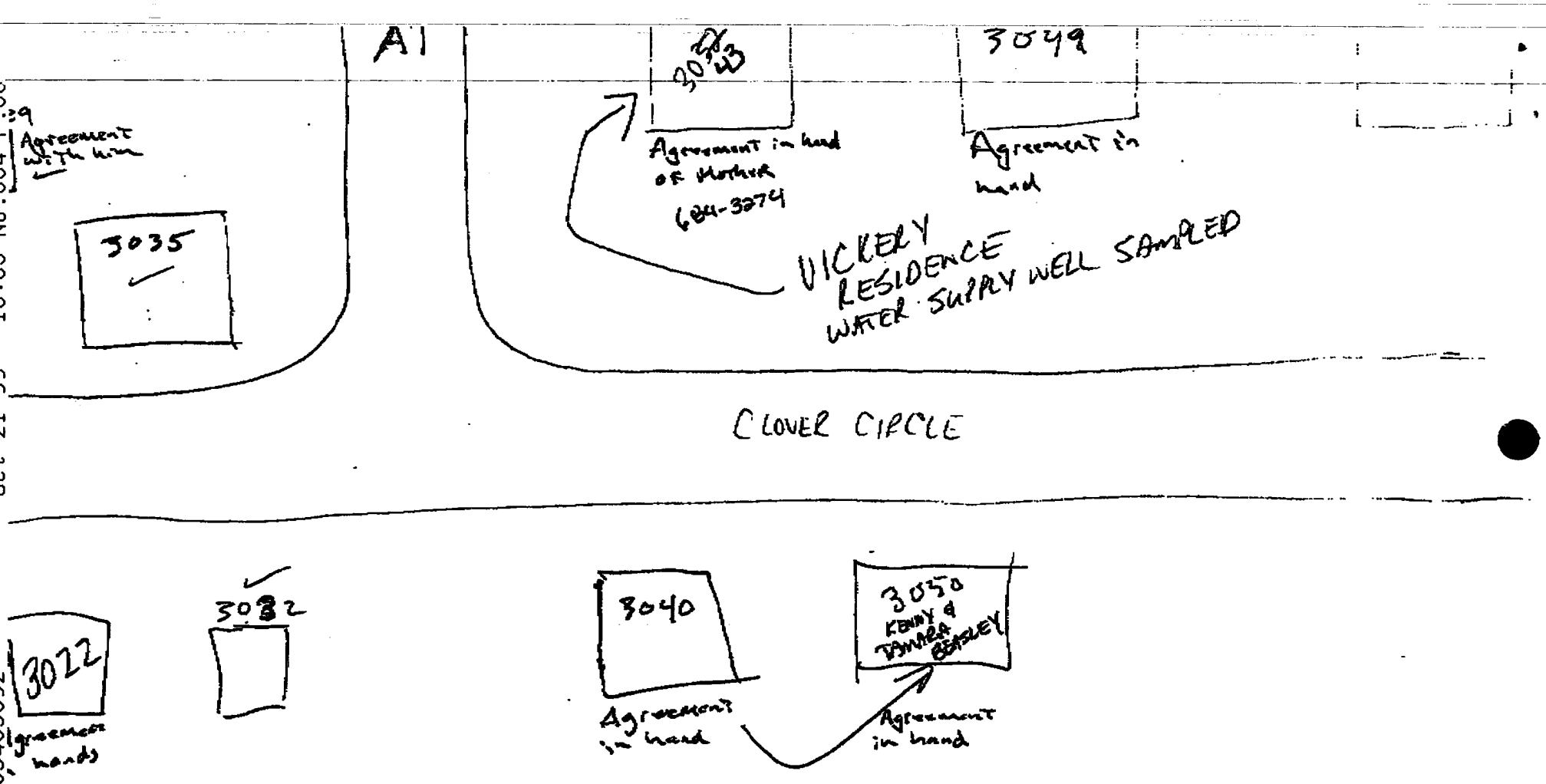
NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ✓ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

CBM ENVIRONMENTAL TEL:8035485892 Oct-21-99 10:02 No.004 P.05


A1
3053
3049
Agreement in hand of Mother 684-3274
Agreement in hand
Agreement with him
3035
VICKERY RESIDENCE WATER SUPPLY WELL SAMPLED
CLOVER CIRCLE

3022
Agreement in hands
3032
3040
Agreement in hand
3050
KENNY & TAMARA BEASLEY
Agreement in hand

N

09322 Sampling 10/21/9

- Kenny + Tamra Beasley 3050 Clover Cr.
803-684-9034

- Jeffrey Vickery 3043 Clover Cr.
803-684-3274 York, SC 29745
- well driller of Vickery's well
Robert Comer 803-927-7533

- Robert + Amy Strife 3035 Clover Cr.
803-684-0329

TestAmerica
INCORPORATED

9440 TWO NOTCH ROAD, STE. B
COLUMBIA, SC 29223

FAX ~~~ FAX~~~ FAX

FROM: CLAUDIA WHITAKER (803) 865-5503 FAX
MICHELLE RIDDLE (803) 865-5500 PHONE

COMPANY: SA

TO: Cynthia/Kathy FAX NO: 615-3404

NO. OF PAGES INCLUDING COVER SHEET: 2 DATE: 10/22

SUBJECT: DHEC --

Pls inform Paul - Run "VICKERY" 8021B, BTEX NAPH MTBE, need results this aft. Ask if he can split and run 8260 on - 3-4 day turn. Other samples needed Mon. PM
Thank you

Claire C.

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TESTAMERICA/HYDROLOGIC, INC 8320

9440 TWO NOTCH STE B
COLUMBIA, SC 29223

Lab Number: 99-A161120
Sample ID: VICKERY RES.
Sample Type: Water
Site ID:

Date Collected: 10/21/99
Time Collected: 12:00
Date Received: 10/22/99
Time Received: 9:00

Project: 09322
Project Name: SMITH'S GROCERY
Sampler: B. FALLER

Analyte	Result	Units	Report Limit	Run Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	107.	ug/l	1.0	1.0	1	10/22/99	10:09	T. Johnson	8021B	5787
Toluene	ND	ug/l	1.0	1.0	1	10/22/99	10:09	T. Johnson	8021B	5787
Ethylbenzene	ND	ug/l	1.0	1.0	1	10/22/99	10:09	T. Johnson	8021B	5787
Xylenes, total	36.5	ug/l	1.0	1.0	1	10/22/99	10:09	T. Johnson	8021B	5787

ND = Not detected at the report limit.

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	95.	50. - 150.

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 10/22/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 00323

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch
Benzene	ng/l	< 0.0010	0.0211	0.0200	106	75. - 125.	5787
Toluene	ng/l	< 0.0010	0.0216	0.0200	108	70. - 125.	5787
Ethylbenzene	ng/l	< 0.0010	0.0220	0.0200	110	71. - 129.	5787
Xylenes, total	ng/l	< 0.0010	0.0444	0.0400	111	71. - 133.	5787

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Benzene	ng/l	0.0211	0.0201	4.85	20.	5787
Toluene	ng/l	0.0216	0.0206	4.74	20.	5787
Ethylbenzene	ng/l	0.0220	0.0208	5.61	20.	5787
Xylenes, total	ng/l	0.0444	0.0421	5.32	20.	5787

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Benzene	ng/l	0.0200	0.0197	98	70 - 130	5787
Toluene	ng/l	0.0200	0.0203	102	70 - 130	5787
Ethylbenzene	ng/l	0.0200	0.0204	102	70 - 130	5787
Xylenes, total	ng/l	0.0400	0.0417	104	70 - 130	5787

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
Benzene	< 0.0010	ng/l	5787
Toluene	< 0.0010	ng/l	5787
Ethylbenzene	< 0.0010	ng/l	5787
Xylenes, total	< 0.0010	ng/l	5787

TESTAMERICA INC.

Chain of Custody Record — *Page ___ of ___*

☐ Asheville, NC (A) (828) 254-5169	☐ Bartlett, IL (C) (630) [illegible]3100	☐ Cedar Falls, IA (E) (319) 277-2401	☐ Charlotte, NC (G) (704) 392-1164	☐ Dayton, OH (I) (937) 294-6856	☐ Lumberton, NC (K) (910) 738-6190	☐ Nashville, TN (M) (615) 726-0177	☐ Pontiac, MI (O) (248) 332-1940	☐ Rockford, IL (Q) (815) 874-2171
☐ Atlanta, GA (B) (770) 368-0636	☐ [illegible] CO (D) (303) 6[illegible]0497	☐ Charleston, SC (F) (843) 849-6550	☐ Columbia, SC (H) (803) 796-8989	☐ Davenport, IA (J) (319) 323-7944	☐ Indianapolis, IN (L) (317) 842-4261	☐ Macon, GA (N) (912) 757-0811	☐ Orlando, FL (P) (407) 851-2560	☐ Watertown, WI (R) (920) 261-1660

Client: SCDHEC	Project No: 0932
Client Address: 2600 Bull	Site Address: Smith's Grocery
Cola., S.C. 29201	York Co.
Attn: D. THOMA	Attn: P. DuBois
Phone No: 803 898-4350	Sampled By: B. Fuller
Fax No: 803 898-4330	P.O. No: 179220
TURNAROUND TIME	Quote No.
☐ Standard	State Samples Collected: S.C.
☒ Rush (surcharges may apply)	Date Needed:

165328 8320 9260

REQUESTED PARAMETERS

RECEIVED
OCT 2/2 1999
DIVISION OF UNDERGROUND STORAGE TANK MGMT.

Is this work being conducted for regulatory compliance monitoring? Yes___ No___

Is this work being conducted for regulatory enforcement action? Yes___ No___

Which [illegible] apply:
RCRA___ NPDES/Wastewater___
UST___ Drinking Water___
Other___ None___

Sample ID	Date	Time	Comp (C) Grab (G)	Matrix	Lab Use	# and type of containers: HCl	NaOH	HNO3	H2SO4	Other	None	REMARKS
STRIFE Res	9/21/99	1207	G	GW		X						24 Hr Rush
Vickery Res	9/21/99	1200	"	"	16125	X						* Rush
BEAGLEY Res	"	1218	"	GW		X						
3040 Res	"	1211	"	"		X						
Barnette Res	"	1220	"	"								Bill 8320

QC Deliverables: ☐ None ☐ Level 2 - Batch QC ☐ Level 3 ☐ Level 4 ☐ Other

Initial Cooler Temp. ___ °C Receipt Cooler Temp. ___ °C

COMMENTS:

* TAKE SAMPLES TO P. Hall

FAX CHAIN TO COLUMBIA

	Date	Time		Date	Time
Relinquished By:	9/21/99	1445	Received By: Becky Wood	9/21/99	445
Relinquished By:			Received By:		
Relinquished By: Becky Wood	9/22/99	4:25	Received By:		
Relinquished By:	10/22	425	Received By:	10/22/99	0900

LAB USE ONLY:
Custody Seal: ☐ Yes ☐ No ☐ NA
Bottles Supplied by TA: ☐ Yes ☐ No

SENT BY: 18036984330 ; 10-22-99 ; 17:25 ; SPECIALIZED ASSAYS→ 1/ 4

CBM
ENVIRONMENTAL SERVICES, INC.

RECEIVED
OCT 19 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

October 14, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

David and Lucy Barnette
3032 Clover Circle
York, South Carolina 29745

Re: Right to Enter Agreement
Tax Map 489-4, Block 1, Lot 27
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. and Ms. Barnette:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of an adjacent property identified as Block 1, Lot 27 on York County Tax Map 489-4. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC ✓
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of a certain tract or parcel designated as Lot 27 on Block 1 of York County Tax Map 489-4 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____
Signature
Property Owner or Agent

_____
Date

_____
Signature
Smith's Grocery or Agent

_____
Date

CBM
ENVIRONMENTAL SERVICES, INC.

RECEIVED
OCT 19 1999
DIVISION OF UNDERGROUND
STORAGE MGMT.

October 14, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Joseph J. Galambos Joseph J
3029 Clover Circle
York, South Carolina 29745

Re: Right to Enter Agreement
Tax Map 489-4, Block 1, Lot 2
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. Galambos:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of an adjacent property identified as Block 1, Lot 2 on York County Tax Map 489-4. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of a certain tract or parcel designated as Lot 2 on Block 1 of York County Tax Map 489-4 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

CBM

ENVIRONMENTAL SERVICES, INC.

October 14, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

William and Debra Goransson
3022 Clover Circle
York, South Carolina 29745

Re: Right to Enter Agreement
Tax Map 489-4, Block 1, Lot 26
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. and Ms. Goransson:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of an adjacent property identified as Block 1, Lot 26 on York County Tax Map 489-4. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of a certain tract or parcel designated as Lot 26 on Block 1 of York County Tax Map 489-4 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____

Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

CBM
ENVIRONMENTAL SERVICES, INC.

October 14, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Frank and Catherine Woods
3040 Clover Circle
York, South Carolina 29745

Re: Right to Enter Agreement
Tax Map 489-4, Block 1, Lot 28
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. and Ms. Woods:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of an adjacent property identified as Block 1, Lot 28 on York County Tax Map 489-4. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of a certain tract or parcel designated as Lot 28 on Block 1 of York County Tax Map 489-4 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

CBM
ENVIRONMENTAL SERVICES, INC.

RECEIVED
1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

October 14, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Tony and Susan Hill
3049 Clover Circle
York, South Carolina 29745

Re: Right to Enter Agreement
Tax Map 489-4, Block 1, Lot 23
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. and Ms. Hill:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of an adjacent property identified as Block 1, Lot 23 on York County Tax Map 489-4. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of a certain tract or parcel designated as Lot 23 on Block 1 of York County Tax Map 489-4 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

CBM
ENVIRONMENTAL SERVICES, INC.

RECEIVED
OCT 19 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

October 14, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Kenny L. and Tamara Lynn Beasley
3050 Clover Circle
York, South Carolina 29745

Re: Right to Enter Agreement
Tax Map 489-4, Block 1, Lot 29
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. and Ms. Beasley:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of an adjacent property identified as Block 1, Lot 29 on York County Tax Map 489-4. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of a certain tract or parcel designated as Lot 29 on Block 1 of York County Tax Map 489-4 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____

Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

CBM
ENVIRONMENTAL SERVICES, INC.

RECEIVE
OCT 19 1999
DIVISION OF UNDERGROU
STORAGE TANK MGMT.

October 14, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Jeffrey and Tonya Vickery
3043 Clover Circle
York, South Carolina 29745

Re: Right to Enter Agreement
Tax Map 489-4, Block 1, Lot 24
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. and Ms. Vickery:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of an adjacent property identified as Block 1, Lot 24 on York County Tax Map 489-4. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of a certain tract or parcel designated as Lot 24 on Block 1 of York County Tax Map 489-4 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

CBM
ENVIRONMENTAL SERVICES, INC.

RECEIVED
OCT 19 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

October 14, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Robert J. Strife
3035 Clover Circle
York, South Carolina 29745

Re: Right to Enter Agreement
Tax Map 489-4, Block 1, Lot 27
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. Strife:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of an adjacent property identified as Block 1, Lot 1 on York County Tax Map 489-4. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of a certain tract or parcel designated as Lot 1 on Block 1 of York County Tax Map 489-4 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

DIVISION OF
UNDERGROUND STORAGE TANK MANAGEMENT

Phone (803) 898-4350 Fax (803) 898-4330

SEP 22 1999

Ms. Lois Smith
3176 Charlotte Hwy.
York, SC 29745

Re: Smith's Grocery **(UST Permit #09322)**
Assessment Component Cost Proposal received August 13, 1999
York County

Dear Ms. Smith:

The Division of Underground Storage Tank Management recognizes your commitment to continue work at this site utilizing your own contractor. SCDHEC (South Carolina Department of Health and Environmental Control) has reviewed the Assessment Component Cost Proposal for a Rapid Assessment submitted by CBM Environmental, Inc.

Cost Agreement **#09123** is approved up to the amount of the enclosed cost agreement form. This amount represents the components as outlined in the attached Assessment Component Cost Proposal form. The cost proposal will be kept on file. Site activities can be initiated immediately upon receipt of this letter.

CBM Environmental, Inc. can submit an invoice for direct billing from the SUPERB (State Underground Petroleum Environmental Response Bank) Account. Please note that all applicable South Carolina certification requirements apply to the laboratory services, well installation, and report preparation. Approval for up to 870 feet for Field Screening (if technically necessary) and the installation of twelve shallow and one deep ground-water monitoring wells has been provided to your environmental consultant; a copy is enclosed for your records.

Please note that Sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that no costs will be allowed unless prior approval from the Department is obtained. If for any reason additional tasks will be completed, these additional tasks and the associated cost must be preapproved by the Department for the cost to be paid. **The SCDHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, SCDHEC reserves the right to question and/or reject costs if deemed unreasonable.** The SCDHEC reserves the right to audit project records at any time during the project or after completion of work.

Rehabilitation activities at the site should be resumed immediately upon receipt of this letter. Characterization of all exposure pathways shall be completed using field screening points. Based on the field screening results, monitoring wells shall be installed in appropriate locations to monitor the migration of chemicals of concern along these exposure pathways and for site rehabilitation. The department shall be contacted prior to well installation for concurrence regarding the final well locations.

A Report of Findings and the invoice are due within 60 days from the date of this letter. Interim invoices may not be submitted for this scope of work. If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

The Division of Underground Storage Tank Management grants preapproval for transportation of virgin petroleum contaminated groundwater/soil from the referenced site to a permitted treatment facility. The contaminated groundwater/soil must be properly stored in labeled containers or covered with plastic as appropriate. The contaminated groundwater/soil must be accepted by the approved treatment facility. There can be no spillage or leakage in transport. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the final report. If the levels of petroleum contamination based on laboratory analysis are below risk-based screening levels, please contact the project manager for approval to dispose of soil and/or ground water on site. The SUPERB account will not compensate for transportation or treatment of clean soil and/or ground water.

On all correspondence concerning this site, please reference **UST Permit #09322 and Cost Proposal #09123**. If there are any questions concerning this project, please contact me at (803) 898-4334.

Sincerely,

Pamela DuBois

Pamela DuBois, Hydrogeologist

Owner/Operator Assistance Section
Assessment and Corrective Action Branch
Division of Underground Storage Tank Management

enc: Approved Assessment Component Cost Proposal
Assessment Component Invoice
Monitoring Well Approval

cc: Financial File (with copy of Assessment Component Cost Proposal)
Technical File (with enc)
CBM Environmental, 377 Carowinds Blvd., Suite 118, Fort Mill, SC 29715
(with original MWA)

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

Monitoring Well Installation Approval Form

Date of Issue: August 20, 1999 Approval No.: 11930

Approval is hereby granted to: CBM Environmental, Inc.
(On behalf of): Lois Smith
UST Permit #: **09322**
County: York

This approval is for the construction of 13 permanent monitoring wells in accordance with the construction plans and technical specifications outlined in the **Rapid Assessment** Document. The wells are to be constructed within the surficial aquifer for the intended purpose of monitoring ground-water quality and/or water level(s) at the referenced facility. Approval is provided with the following conditions:

1. The latitude and longitude, surveyed elevations, boring and/or geologist logs and actual (as built) construction details for each well will be submitted with the technical report.

2. Each well will be labeled with an identification plate constructed of a durable material affixed to the casing or surface pad where it is readily visible. The plate will provide monitoring well I.D.#, date of construction, static water level, and driller name and state certification #.

3. Well construction and sampling derived waste including, but not necessarily limited to, drill cuttings, drilling fluids, development and purge water should be managed properly and in compliance with applicable requirements. If containerized, each vessel should be clearly labeled with regard to contents, source, and date of activity.

4. A minimum of forty-eight (48) hours prior to initiation of drilling activities, please provide notice to Pamela DuBois at (803) 898-4334 or duboispm@columb26.dhec.state.sc.us.

5. Please provide ground-water quality analytical data (chemical analysis and/or water level(s)) and associated measurements (i.e., in-situ field measurements) to Pamela DuBois with the technical report.

6. Monitoring wells will be installed by or under the direct supervision of a licensed well driller certified by the State of South Carolina.

7. Monitoring wells and temporary monitoring wells will be abandoned by or under the direct supervision of a licensed well driller certified by the State of South Carolina. Temporary monitoring wells shall not remain in place for longer than 30 days from the date of installation. Monitoring wells may be abandoned only upon concurrence by this Division.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Health and Environmental Control Regulations R.61-71. Please remember to have a copy of this approval on the site during well installation.

Approved by: Pamela DuBois

Pamela DuBois, Hydrogeologist
Owner/Operator Assistance Section
Division of UST Management

cc: Catawba District EQC
Ms. Lois Smith, 3176 Charlotte Hwy., York, SC 29745
Technical File

CBM

ENVIRONMENTAL SERVICES, INC.

RECEIVED
AUG 30 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

August 25, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

J.B. & Miranda Norris
2245 Old McKinney Road
York, South Carolina 29745

Re: Right to Enter Agreement
Tax Map 456 Lot 56 and Lot 57
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. & Mrs. Norris:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of adjacent properties identified as Lot 56 and Lot 57 on York County Tax Map 456. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of certain tracts or parcels designated as Lot 56 and Lot 57 on Tax Map 456 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

CBM

ENVIRONMENTAL SERVICES, INC.

August 25, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Lois Smith
Route 2
York, South Carolina

Re: Right to Enter Agreement
Tax Map 456 Lot 5
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. Smitb:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of adjacent properties identified as Lot 5 on York County Tax Map 456. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of certain tracts or parcels designated as Lot 5 on Tax Map 456 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

CBM

ENVIRONMENTAL SERVICES, INC.

August 25, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

J. B. Norris
Route 2
York, South Carolina 29745

Re: Right to Enter Agreement
Tax Map 456 Lot 58
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. Norris:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of adjacent properties identified as Lot 58 on York County Tax Map 456. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of certain tracts or parcels designated as Lot 58 on Tax Map 456 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

CBM

ENVIRONMENTAL SERVICES, INC.

August 25, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Frontis & Etta Hemphill
2922 Dresden Drive
Gastonia, North Carolina 28052

Re: Right to Enter Agreement
Tax Map 456 Lot 3, Lot 9 and Lot 41
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. and Mrs. Hemphill:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of adjacent properties identified as Lot 3, Lot 9 and Lot 41 on York County Tax Map 456. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of certain tracts or parcels designated as Lot 3, Lot 9 and Lot 41 on Tax Map 456 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

CBM

ENVIRONMENTAL SERVICES, INC.

August 25, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

William T. Lowery
Route 2, Box 135
York, South Carolina

Re: Right to Enter Agreement
Tax Map 456, Lot 6
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Mr. Lowery:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of adjacent properties identified as Lot 6 on York County Tax Map 456. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of certain tracts or parcels designated as Lot 6 on Tax Map 456 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____
Signature
Property Owner or Agent

_____
Date

_____
Signature
Smith's Grocery or Agent

_____
Date

CBM

ENVIRONMENTAL SERVICES, INC.

August 25, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Daisy Lowery
Route 2, Box 135
York, South Carolina

Re: Right to Enter Agreement
Tax Map 456, Lot 7
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Ms. Lowery:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of adjacent properties identified as Lot 7 on York County Tax Map 456. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of certain tracts or parcels designated as Lot 7 on Tax Map 456 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

CBM
ENVIRONMENTAL SERVICES, INC.

August 25, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Lorrain Carothers
Route 2, Box 135-A
York, South Carolina 29745

Re: Right to Enter Agreement
Tax Map 456, Lot 8
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Ms. Carothers:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of adjacent properties identified as Lot 8 on York County Tax Map 456. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of certain tracts or parcels designated as Lot 8 on Tax Map 456 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date

CBM

ENVIRONMENTAL SERVICES, INC.

August 25, 1999
CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Joyce Carpenter
c/o Walter D. Belton III
3032 Charlotte Highway
York, South Carolina 29745

Re: Right to Enter Agreement
Tax Map 454, Lot 8 and Lot 9
Smith's Grocery
York, York County
Site ID #: 09322
CBM Project #: 10629

Dear Ms. Carpenter:

CBM Environmental Services, Inc. (CBM), on behalf of Ms. Lois Smith, is currently conducting an environmental assessment at the Smith's Grocery facility located in York County, South Carolina. The assessment activities are being conducted at the direction of the South Carolina Department of Health and Environmental Control (SCDHEC). It is our understanding that you are the owner of adjacent properties identified as Lot 8 and Lot 9 on York County Tax Map 454. In order to complete the assessment, CBM, in conjunction with the SCDHEC, has determined that it may be necessary to collect one or more groundwater samples from the water table beneath this property. The samples will be collected by installing temporary monitoring wells. The wells will be removed after the samples have been collected. However, based on the results of the sampling, it may be necessary to install permanent monitoring wells on the property. CBM, in conjunction with the SCDHEC, will determine if the installation of permanent monitoring points will be necessary.

A Right to Enter Agreement for Conducting Subsurface Investigations has been enclosed for your review. Please sign it and return it in the envelope that has been provided at your earliest possible convenience. CBM will notify you approximately seven days prior to the start of the assessment activities, and will attempt to minimize any inconvenience that the activities may cause.

Your cooperation in this matter is greatly appreciated. Please do not hesitate to contact Mr. Scott Ball at (800) 743-1226 or Ms. Pam Dubois of the SCDHEC at (800) 826-5435 if you have any questions or require additional information.

Sincerely,
CBM Environmental Services, Inc.

W. Scott Ball
Senior Project Manager

cc: Ms. Lois Smith
Ms. Pam Dubois, SCDHEC
file

P. O. Box 411387 • Charlotte, NC 28241 • 704 527-4391
101 West 14th Street, Suite 107 • Greenville, NC 27834 • 252 752-0200 • Fax 252 830-9216
377 Carowinds Boulevard, Suite 118 • Fort Mill, SC 29708 • 803 548-5989 • Fax 803 548-5892

RIGHT TO ENTER AGREEMENT
FOR
CONDUCTING SUBSURFACE INVESTIGATIONS

STATE OF SOUTH CAROLINA
COUNTY OF YORK

We, the undersigned, being all of the fee simple owners of certain tracts or parcels designated as Lot 8 and Lot 9 on Tax Map 454 of York County, recognizing the benefits to said property by reason of conducting subsurface investigations, hereby grant to Smith's Grocery and its agents the right to enter said property in accordance with the requirements of the State of South Carolina. Smith's Grocery's agents may include CBM Environmental Services, Inc.

The undersigned hereby covenant and warrant that they are the sole owners of said property; that they solely have the right to grant this right to enter for conducting subsurface investigations against the lawful claims of all persons whomsoever.

It is agreed that Smith's Grocery and its agents shall have the right of future entry for the purpose of maintaining any permanent monitoring points for the duration of the monitoring period, as required by the State of South Carolina Department of Health and Environmental Control (SCDHEC).

It is further agreed that Smith's Grocery shall be responsible for restoring any damage done to the ground of said property by its employees or its agents during the subsurface investigation and monitoring period, and that Smith's Grocery shall abandon monitoring wells on said property in accordance with the SCDHEC requirements at the conclusion of the monitoring period.

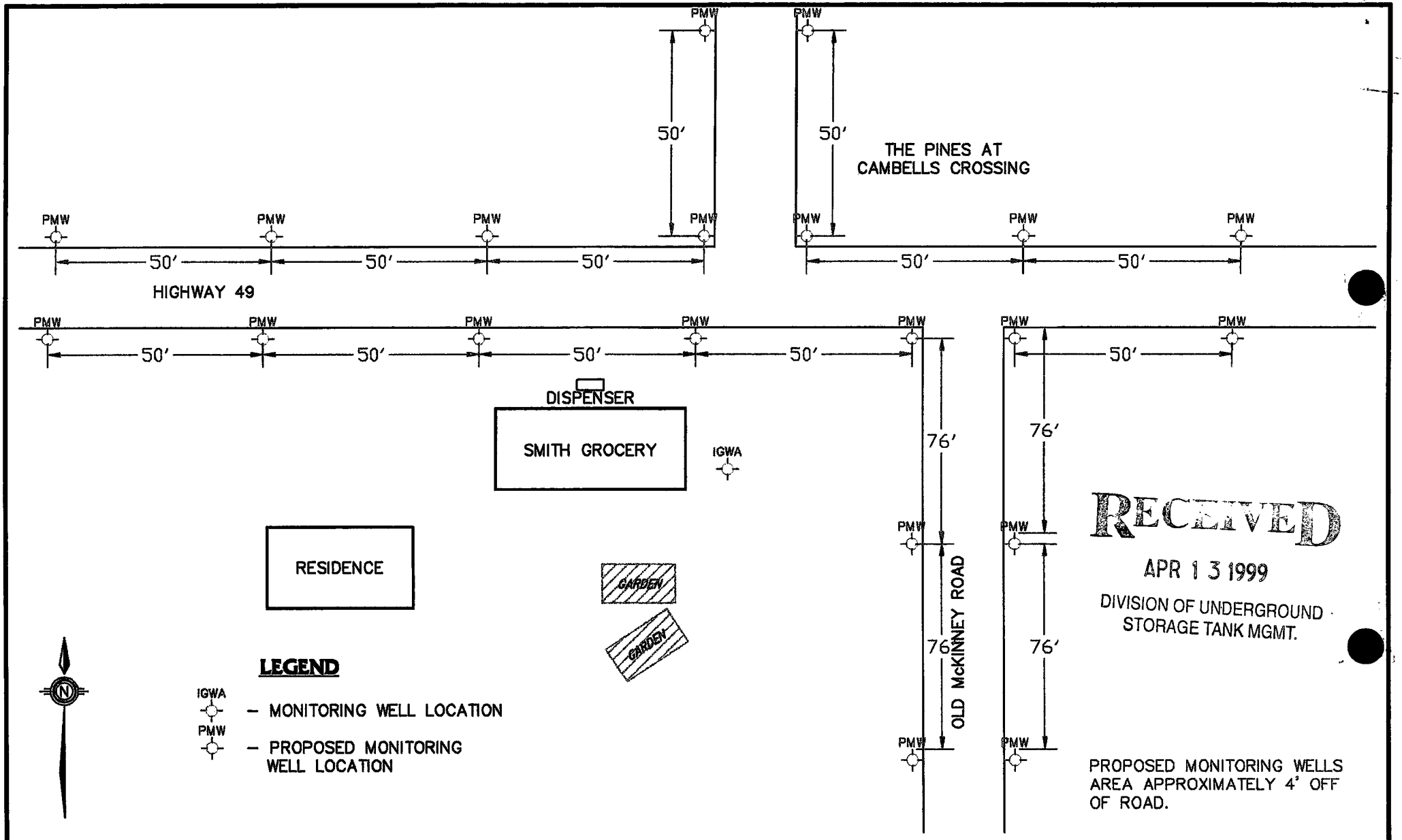
It is agreed that Smith's Grocery shall hold harmless the owner of the aforementioned property for any personal injury that might be sustained during the course of conducting, and proximately resulting from the conduct of, subsurface investigations.

☐ Right to Enter granted.

☐ Right to Enter denied.

_____
Telephone Number

_____	_____
Signature Property Owner or Agent	Signature Smith's Grocery or Agent
_____	_____
Date	Date



RECEIVED

APR 13 1999

DIVISION OF UNDERGROUND STORAGE TANK MGMT.

PROPOSED MONITORING WELLS AREA APPROXIMATELY 4' OFF OF ROAD.

SITE MAP

SHOWING

PROPOSED MONITORING WELL LOCATIONS

SMITH GROCERY
YORK, SOUTH CAROLINA
09322

DATE:	APR., 1999
SCALE:	1"=50'
DRAWN:	DWM
CHECKED:	GET
PROJ. #:	A89182

Prepared by: MARSHALL MILLER & ASSOCIATES

50' 0 50'

1" = 50'

S.C. DEPARTMENT OF TRANSPORTATION
FORM 638 (REV. 7/93)

APPLICATION FOR ENCROACHMENT PERMIT

No. _____

(ENCROACHMENT PERMIT OTHER THAN A PUBLIC UTILITY)

APPLICANT: Charles Cline
AND Marshall Miller & Associates
ADDRESS: P.O. Box 848
Bluefield, VA 24605

TELEPHONE NUMBER: 540-322-5467

COUNTY: York County
ROAD/ROUTE: Highway 49 and
Old McKinnely Road

ROAD NAME:

1. The undersigned applicant hereby applies to the South Carolina Department of Transportation (SCDOT) for a permit for encroachment on State Highway Right of Way as shown and described below:

2. **Type of Encroachment:** Soil borings and Monitoring wells

3. **Description of location:** See attached Map.
Intersection of Route 49
and Old McKinnely Road
Monitoring Wells will be installed atleast 4 feet
from the pavement and traffic control will be provided.

(Attach sketch indicating roadway features such as: pavement width, shoulder width, sidewalk and curb and gutter location, significant drainage structure, north arrow, right of way width, and location of the proposed encroachment with respect to the roadway centerline and the nearest intersecting road on the State system.)

4. The undersigned applicant hereby requests the SCDOT to permit encroachment on the Department right of way as described herein. It is expressly understood that the encroachment, if and when constructed, shall be installed in accordance with the sketch attached hereto and made a part hereof. The applicant agrees to comply with and be bound by the Department's "A Policy for Accommodating Utilities on Highways Rights of Way" and "Standard Specifications for Highway Construction" (made a part hereof by reference) on file in the Utility Office of the Department, and all general provisions on the reverse hereof and special provisions below or attached hereto during the installation, operation and maintenance of said encroachment within the Department Right of Way. The applicant hereby further agrees, and binds his heirs, successors, assigns, to assume any and all liability this Department might otherwise have in connection with accidents or injuries to persons, or damage to property, including the highway, that may be caused by the construction, maintenance, use, moving or removing, of the physical appurtenances contemplated herein and agrees to indemnify this Department for any liability incurred or injury or damage sustained by reason of the past, present, or future existence of said appurtenances.

APPLICANT NAME: _____ DATE: _____
(PLEASE PRINT OR TYPE)

APPLICANT SIGNATURE: _____ TITLE: _____

In compliance with your request and subject to all the provisions, terms, conditions and restrictions stated in the application, general provisions on the reverse hereof, and special provisions below or attached hereto, the Department approves the request. This permit shall become null and void unless the work contemplated herein shall have been completed prior to _____.

SPECIAL PROVISIONS:

DATE RECEIVED BY RES. MAINT. ENGR. _____ DATE FORWARDED _____ SCDOT APPROVAL _____ DATE _____

DATE RECEIVED BY DIST. ENGR. ADMIN. _____ DATE FORWARDED _____

☐ RESIDENT MAINTENANCE ENGINEER ☐ STATE HIGHWAY ENGINEER

☐ DISTRICT ENGINEERING ADMINISTRATOR ☐ DISTRICT MAINT./CONSTRUCTION ENGINEER

GENERAL PROVISIONS

1. NOTICE PRIOR TO STARTING WORK: Before starting the work contemplated herein within the limits of the highway right of way, the Department's Maintenance Superintendent in the county in which the proposed work is located shall be notified 24 hours in advance so that he may be present while the work is under way and this permit is subject to any further restrictions.

2. PERMIT SUBJECT TO INSPECTION: This permit shall be kept at the site of the work at all times while said work is under way and must be shown to any representative of the Department or law enforcement officer on demand.

3. PROTECTION OF HIGHWAY TRAFFIC: Adequate provisions shall be made for the protection of the highway traffic at all times. Necessary detours, barricades, warning signs and flagmen shall be provided by and at the expense of the permittee and shall be in accordance with the South Carolina Manual on Uniform Traffic Control Devices. The work shall be planned and carried out so that there will be the least possible inconvenience to the highway traffic. The permittee agrees to observe all rules and regulations of the Department while carrying on the work contemplated herein and take all other precautions that circumstances warrant.

4. STANDARDS OF CONSTRUCTION: All work shall conform to recognized standards of construction and shall be performed in a workmanlike manner. Adequate provisions shall be made for maintaining the proper drainage of the highway. All work shall be subject to the supervision and satisfaction of the Department.

5. FUTURE MOVING OF PHYSICAL APPURTENANCES: If, in the opinion of the State Highway Engineer, it should ever become necessary to move or remove the physical appurtenances, or any part thereof contemplated herein, on account of change in location of the highway, widening of the highway, or for any other sufficient reason, such moving or removing shall be done on demand of the Department at the expense of the permittee.

6. RESTORATION OF HIGHWAY FACILITIES UPON MOVING OR REMOVING OF PHYSICAL APPURTENANCES: If, and when, the physical appurtenances contemplated herein shall be moved or removed, either on the demand of the Department or at the option of the permittee, the highway and facilities shall immediately be restored to their original condition at the expense of the permittee.

7. COSTS: All work in connection with the construction, maintenance, moving or removing of the physical appurtenances contemplated herein shall be done by and at the expense of the permittee.

8. PERMITTEE: The word "Permittee" used herein shall mean the name of the person, firm, or corporation to whom this permit is addressed, his, her, its, heirs, successors and assigns.

9. PERMISSION OF ABUTTING PROPERTY OWNERS: It is distinctly understood that this permit does not in any wise grant or release any rights lawfully possessed by the abutting property owners. Any such rights necessary shall be secured from said abutting property owners by the permittee.

10. WORK PERFORMANCE:
   (a) Poles shall be placed at the distance from the centerline of the highway as specifically stipulated herein.
   (b) All crossings over the highway shall be constructed in accordance with Specifications for Overhead Crossings of Light and Power Transmission Lines and Telephone and Telegraph Lines over each other and over Highway Rights of Way in South Carolina, as approved by the Public Service Commission of South Carolina and operative as of date of this permit.
   (c) All tunnelling, boring, or jacking shall be done in such a way as not to disturb the highway surfacing.
   (d) No pavement shall be cut unless specifically authorized herein.
   (e) No excavation shall be nearer than three feet to the edge of pavement unless specifically authorized herein.
   (f) Underground facilities will be located at minimum depths as defined in the Utility Accommodations Manual for the transmittant, generally as follows: (1) Bury under pavement - 4 feet minimum for hazardous or dangerous transmittant; 3 feet minimum for other lines. (2) Bury under other surfaces - 30 inches minimum for power and communication lines and 3 feet for all other facilities. Shallower depths may be approved if adequate protection is provided.
   (g) Service and other small diameter pipes shall be jacked, driven, or otherwise forced underneath the pavements on any surfaced road without disturbing said pavement. The section under the highway pavement and within a distance of two (2) feet on either side shall be continuous without joints.
   (h) Work shall be performed in accordance with the Department's "A Policy for Accommodating Utilities on Highway Rights-of-Way", and "Standard Specifications for Highway Construction".

11. For the purpose of this permit, the word "DEPARTMENT" shall mean the South Carolina Department of Transportation.

12. The permittee shall be responsible for obtaining any other approvals or permits necessary for installation.

13. Permittee is responsible for maintaining reasonable access to private driveways during construction.

14. It is expressly provided that with respect to any limited access highway, the permittee shall not have or gain access from the main travel way of said highway or its on or off ramps to any facility authorized by this permit except upon approval by the Department.

15. DRIVEWAYS AND APPROACHES:
   (a) The existing crown of the highway shall be continued to the outside shoulder line of the highway.
   (b) If the driveway or approach is of concrete pavement, the pavement shall be constructed at least 6 inches thick, and of a mix not leaner than 1-2-4. There shall be a bituminous expansion joint, not less than ¾ inches in thickness, placed between the highway paving and the paving of the approach for the full width of the latter.

16. RAILROAD TRACKS:
   (a) The rails of railroad tracks crossing the highway at grade shall conform to the grade of the highway.
   (b) The provisions of the Code of Laws for South Carolina as amended regarding the construction and maintenance of railroad and highway grade crossings shall be complied with in all respects.
   (c) Unless specifically authorized herein, all engines, trains or cars operating over the tracks across the highway at grade shall be brought to a complete stop immediately before crossing the highway and before proceeding across the highway, flagmen carrying a red flag by day and a lantern by night shall be stationed on each side of the train to warn approaching highway traffic. Should the permittee fail to consistently operate the railroad in accordance with this section, after having received written notice from the Highway Department of such failure, this permit shall automatically become null and void insofar as the continuance of the railroad is concerned.
   (d) The railroad track contemplated herein and its appurtenances shall be completely removed from the highway right of way within 60 days if, when, and after operations across the highway on the railroad shall have been abandoned, and the highway replaced in at least as good condition as the adjacent sections of the highway may be at the time of abandonment of said operations. The cost of same shall be borne by the permittee.

17. BEAUTIFICATION WORK:
   (a) All trees, plants, flowers, etc., shall be placed in accordance with the provisions specifically stipulated herein.
   (b) All trees, plants, flowers, etc., shall be taken care of by and at the expense of the permittee and the provisions of this letter shall become null and void if and when said permittee ceases to take care of said trees, plants, flowers, etc.

18. There shall be no excavation of soil nearer than two feet of any public utility line or appurtenant facility except with the consent of the owner thereof, or except upon special permission of this Department after an opportunity to be heard is given the owner of such line or appurtenant facility.

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

DIVISION OF
UNDERGROUND STORAGE TANK MANAGEMENT

Phone (803) 898-4350 Fax (803) 898-4330

JUL 27 1999

Ms. Lois Smith
3176 Charlotte Hwy.
York, SC 29745

Re: Smith's Grocery **(UST Permit #09322)**
Initial Ground Water Assessment Report received February 16, 1999
York County

Dear Ms. Smith:

The Division of Underground Storage Tank Management has reviewed the referenced Initial Ground Water Assessment Report. Currently, the release reported on June 30, 1993 at the referenced site has a priority classification of 2B. Therefore, SUPERB (State Underground Petroleum Environmental Response Bank) funds are available to implement the next necessary scope of work. The scope of work to be implemented is a **Rapid Assessment**.

Our records show that you have selected CBM Environmental Services, Inc. as the contractor to perform assessment activities at the site. Please have your contractor complete and submit the enclosed Assessment Component Cost Proposal form and Rapid Assessment Plan form within thirty days of the date of this letter. Every component may not be necessary to complete the above scope of work. The SUPERB allowable cost for each component is included on the Assessment Component Cost Proposal form.

On all correspondence or inquiries regarding this project, please reference **UST Permit #09322**. If you have any questions, please feel free to contact Pamela DuBois at (803) 898-4334 or 1 (800) 826-5435 (within South Carolina only).

Sincerely,

Owner/Operator Assisstance Section
Assessment and Corrective Action Branch

Pamela DuBois, Hydrogeologist

Lee A. Monts, Manager

enc: Rapid Assessment Plan
Assessment Component Cost Proposal

cc: CBM Environmental, 377 Carowinds Blvd., Suite 118, Fort Mill, SC 29715 (with enclosures)
Technical File

SCDHEC/UST/PMD/072099

CBM

ENVIRONMENTAL SERVICES, INC.

February 24, 1999

FAXED

RECEIVED

JUL 0 6 1999

DIVISION OF UNDERGROUND STORAGE TANK MGMT.

Christopher Doll
DHEC-Assessment and Corrective Action Division
2600 Bull Street
Columbia, SC 29701-1708

Re: Site ID # 09322
Smiths Grocery
3176 Charlotte Hwy
York, SC

Dubois
need to request
RAPID
PLAN

Dear Mr. Doll,

Please find the following Owner/Operator contractor of choice letter selecting CBM Environmental Services as contractor of choice for the above referenced facility.

If you should have any questions, please feel free to contact me.

Sincerely,

Kurt Blevins

Kurt Blevins
Environmental Compliance Services

Div.
Storage Tank Mgmt.

P.O. Box 411387 • Charlotte, NC 28241 • 803 548-5989 • Fax 803 548-5892
730 East Main Street • Frankfort, KY 40601 • 502 223-2701 • Fax 502 223-9851
101 W. 14th Street • Greenville, NC 27834 • 919 752-0200 • Fax 919 830-9216

UNDERGROUND STORAGE TANK (UST) OWNER/OPERATOR LEAD (Option 1) INFORMATION SHEET

1. CHOICE OF CONTRACTOR

As the UST Owner/Operator of Site # 09322 , I would like to proceed with the scope of All Future Assessment Activities using the contractor or person(s)* listed below.

Name of Contractor/Person(s) CBM ENVIRONMENTAL SERVICES INC.

Address 377 CAROWINDS BLVD. SUITE 118

FT. MILL, SC 29715

KENNETH CZOER

Telephone Number 803 548-5989

*indicate if the person listed is your own employee

2. FINANCIAL OR FAMILIAL RELATIONSHIP

Does a financial or familial relationship, as defined below, exist between you and the contractor/person that you listed above? _____ Yes __XX__ No

Financial Relationship: A connection or association through a material interest of sources of income which exceed five percent of annual gross income from a business entity.

Familial Relationship: A connection or association by family or relatives, in which a family member or relative has a material interest. Family or relatives include: father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, grandchild, great grandchild, step grandparent, step great grandparent, step grandchild, step great grandchild, or fiancee.

3. PAYMENT

You can pay the contractor and, upon the submittal of the cancelled check (or a notarized statement from the contractor), be compensated from the SUPERB Account, or have payment issued directly from us to the contractor.

I request that payment be made to me after I have paid the contractor. _____ Yes __XX__ No

I request that payment be made directly to the contractor. __XX__ Yes _____ No

(Note: all costs must receive prior financial approval from the Department regardless of payment option.)

Underground Storage Tank Owner/Operator Signature Lou Smith

Date 2-23-99

D H E C

PROMOTE PROTECT PROSPER

2600 Bull Street
Columbia, SC 29201-1708

DIVISION
UNDERGROUND STORAGE TANK MANAGEMENT

Phone (800) 826-5435 Fax (803) 898-4330

MAR 03 1999

Lois B. Smith
3176 Charlotte Highway
York, South Carolina 29745-9802

Re: Smith's Grocery
UST Permit #09322
Initial Ground-Water Assessment Report received February 16, 1999
York County

Dear Ms. Smith:

The results of the Initial Ground-Water Assessment (copy enclosed for your records) confirm the presence of impacted ground water and the need for a Tier 2 Assessment.

As authorized by your Permission Form (received September 16, 1998), the SCDHEC will directly procure the services of an environmental contractor on your behalf for the Tier 2 Assessment. The associated cost will be paid by the State Underground Petroleum Environmental Response Bank (SUPERB) Account. You will be informed of the results upon completion.

On all correspondence regarding this site, please reference UST Permit #09322. Please feel free to call Read S. Miner, at (803) 898-4349 or (800) 826-5435 (within SC only) if you have questions or need additional information.

Sincerely,

State Lead and Field Services Section
Assessment and Corrective Action Branch
Division of Underground Storage Tank Management

Read S. Miner, P.G., Hydrologist

Christopher S. Doll, P.G., Manager

enc: Initial Ground-Water Assessment Report

cc: Technical File (without enclosure)

SCDHEC/UST/RSM/022599

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

MAR 03 1999

March 3, 1999

Marshall Miller & Associates, Inc.
Attn: Chuck Cline
Post Office Box 848
Bluefield, Virginia 24605

Re: Tier 2 Assessments
Contract SB-4815-09/29/98/REB
Purchase Order #148159
Notice to Proceed

Dear Mr. Cline:

The Division of Underground Storage Tank Management of the South Carolina Department of Health and Environmental Control (SCDHEC) is requesting the submittal of Tier 2 Assessment Plans for various Tier 2 assessment component tasks for eight facilities.

Roddey Store	UST Permit # 02147	Chester County	Class 1
Leroy Springs	UST Permit # 02067	Chester County	Class 3BD
Smiths Grocery	UST Permit # 09322	York County	Class 2BB
Handy Pantry #44	UST Permit # 09372	York County	Class 2AB
Country Chevron	UST Permit # 09449	York County	Class 3BE
Alexander Auto & Tire	UST Permit # 14507	York County	Class 2BB
Randy Sims Exxon	UST Permit # 05663	Laurens County	Class 3AA
Farmers Texaco	UST Permit # 11293	Laurens County	Class 3AA

The Department understands that you intend to distribute these facilities between two offices of Marshall Miller & Associates, Inc. Please inform Read Miner via facsimile (803) 898-4330 which office will be addressing which projects and the order in which you intend to address the listed facilities on or before March 19, 1999. The following implementation schedule must be followed:

		Plan due date	Report due date
Office #1	Facility #1	March 19, 1999	June 4, 1999
	Facility #2	March 24, 1999	June 10, 1999
	Facility #3	March 29, 1999	June 15, 1999
	Facility #4	April 2, 1999	June 21, 1999
Office #2	Facility #5	March 19, 1999	June 4, 1999
	Facility #6	March 24, 1999	June 10, 1999
	Facility #7	March 29, 1999	June 15, 1999
	Facility #8	April 2, 1999	June 21, 1999

Tier 2 Assessment Plans, Implementation, and Reports submittal shall be performed in accordance with the referenced contract. Per Section 12, Special Conditions, "a late fee of $100.00/day may be levied for each report submitted after the deadline established in the Notice to Proceed.

On all correspondence regarding these sites, please reference the UST Permit number. The Tier 2 Assessment Reports shall be submitted to the attention of Read Miner.

Sincerely,

State Lead and Field Services Section
Assessment and Corrective Action Branch
Division of Underground Storage Tank Management

Read S. Miner, P.G., Hydrologist

Christopher S. Doll, P.G., Manager

mmarapid.1

Enc: Permission and Right-of-Entry forms
Cost Proposal Form
Invoice Form
Letter of Introduction

cc: Technical/Read Files (without enclosures)
Greg Tieman, Marshall Miller & Assoc., Inc., PO Box 848, Bluefield, VA 24605

INITIAL GROUNDWATER ASSESSMENT REPORT

RECEIVED
FEB 22 1999
DIVISION OF UNDERGROUND STORAGE TANK MGMT.

Facility Name: Smith's Grocery Site ID Number: 09322

Owner's Name: Lois B. Smith

Address: 3176 Charlotte Highway, York, South Carolina 29745

Phone Number: (803) 684-6289

Contractor: CBM Environmental Services, Inc. Cert. #: 39

Address: 377 Carowinds Boulevard, Suite 118, Fort Mill, South Carolina 29715

Phone Number: (803) 548-5989

Well Driller: Thomas W. Burke Cert. #: 1260

Receptor and Site Data

Please place a check in the appropriate answer block for each question:

Receptor Survey Questions	No	Yes*
Is there a drinking water supply well (public or private) or surface water supply intake within 1000 feet of the UST?		X
Are irrigation or other non-drinking water wells located within 1000 feet of the UST?	X	
Are there other potential receptors (i.e., utilities, surface waters, wetlands) less than 500 feet from the UST?		X

*If "yes" provide additional information:
One water supply well, designated WSW-1, is located approximately 150 feet east of the UST. Natural gas lines run parallel to SC Highway 49 and from the structure on-site to Old McKinney Road.

Were any water wells within a 250 foot radius sampled? X Yes _____ No

Is the current use of the site and surrounding properties commercial, residential, agricultural or industrial?
Site: Commercial Adjacent Properties: Residential

Soil and Monitoring Well Data

Primary Soil Type: Backfill/silty clay

Well Installation Method and Date: Hollow stem auger on 1/16/99

Development Method: Disposable polyethylene bailer

Soil Sample Depth: NA

CDHEC Site ID #: 09322

SOIL ANALYTICAL DATA

Soil Boring	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Naphthalene (mg/kg)
---	---	---	---	---	---

Soil Boring	Benzo(a)-anthracene (mg/kg)	Benzo(b)-fluoranthene (mg/kg)	Benzo(k)-fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo(a,h)-anthracene (mg/kg)
---	---	---	---	---	---

Groundwater Data

Depth to Groundwater: 27.32 feet

Well Purging/Sampling Method: Disposable polyethylene bailer

Date Sampled: 2/2/99

Feet Product Thickness: NA

Soil/Water Disposal Method: Soil and purge water were placed in a 55-gallon drum for transportation to a licensed disposal facility.

GROUNDWATER ANALYTICAL DATA

Well No.	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	EDB (µg/l)
MW-1	885	13,400	14,200	20,170	97.3	ND

Well No.	Naphthalene (µg/l)	Benzo(a)-anthracene (µg/l)	Benzo(b)-fluoranthene (µg/l)	Benzo(k)-fluoranthene (µg/l)	Chrysene (µg/l)	Dibenzo(a,h)-anthracene (µg/l)
MW-1	7.1	ND	ND	ND	ND	ND

Well No.	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	EDB (µg/l)
WSW-1	ND	ND	ND	ND	ND	ND

Well No.	Naphthalene (µg/l)	Benzo(a)-anthracene (µg/l)	Benzo(b)-fluoranthene (µg/l)	Benzo(k)-fluoranthene (µg/l)	Chrysene (µg/l)	Dibenzo(a,h)-anthracene (µg/l)
WSW-1	ND	ND	ND	ND	ND	ND

Appendices

The appendices required for this report are as follows:

Appendix A: Well Construction Record
Appendix B: Boring Log
Appendix C: Field Sampling Log
Appendix D: Topographic Map
Appendix E: Site Base Map
Appendix F: Laboratory Report - Groundwater Samples
Appendix G: Disposal Manifest

Report Completed By: _____ Cert. # 11070
(signature)

JOHN F. HESS, JR. REGISTERED NO. 11070 SOUTH CAROLINA PROFESSIONAL GEOLOGIST

Date: 2/19/99

DHEC

PROMOTE PROTECT PROSPER

Water Well Record

Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:

County: York | System Name: Smith's Grocery

Latitude: 35° 03' 36" N | Longitude: 81° 07' 25" W

Distance and Direction from Road Intersections: Charlotte Hwy. & Old McKinney Rd.

Street Address & City of Well Location: 3176 Charlotte Hwy., York, SC

Sketch Map: See Attached

2. CUTTING SAMPLES: ☐ Yes ☒ No

Geophysical Logs: ☐ Yes (please enclose) ☒ No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Red clay w/silt and some backfill	35'	35'
material consisting of trees, etc.		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

3. REMARKS: MW-1 Bentonite Seal 23' to 24'

4. OWNER OF WELL: Lois B. Smith
Address: 3176 Charlotte Hwy., York, SC 29745
Telephone No: (803) 684-6289

Engineer: CBM Environmental Services, Inc.
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29715
Telephone No: (803) 548-5989

5. WELL DEPTH (completed) 35 ft. Date Started: 1/16/99 Date Completed: 1/16/99

6. ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☒ Monitor Well ☐

8. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 25 ft. depth
in. to ft. depth
Height: Above/Below
Surface 0 ft.
Weight Sch 40 lb./ft.
Drive Shoe? ☐ Yes ☒ No

9. SCREEN
Type: PVC Diam.: 2"
Slot/Gauge: 0.010" Length: 10'
Set Between: 25 ft. and 35 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

10. STATIC WATER LEVEL 27.32 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

12. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

13. ARTIFICIAL FILTER (gravel pack) ☒ Yes ☐ No
Installed from 24 ft. to 35 ft.
Effective size FX 60 Uniformity Coefficient NA

14. WELL GROUTED ? ☒ Yes ☐ No
☒ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
Depth: From 0 ft. to 23 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. direction
Hydrocarbon Type well disinfected upon completion ☐ Yes ☒ No Type: Amount: 0

16. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Registered Business Name: CBM Environmental Services Date: 2/19/99
Address: 377 Carowinds Blvd., Ste 118, Fort Mill, SC 29715
Signed: Thomas Burke/mm Cert. No.: 1260
Authorized Representative

DHEC 1903 (10/96) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

SOIL BORING LOG
SMITH'S GROCERY

Borehole – MW-1 Sampling Date – NA Sampling Depth – NA

Field Screening Interval (feet)	Field Screening Results (ppm)	Lithology	Soil Conditions
5	0	Red silty clay/backfill	High organics
10	10	Red silty clay/backfill	High organics
15	110	Red silty clay	Dry, stiff
20	150	Red silty clay	Dry, stiff
25	400	Red silty clay	Moist

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Page _ of _

Field Data Information Sheet for Ground Water Sampling

Date(mm/dd/yy) 2/2/99
Field Personnel R. Minger
General Weather Conditions Overcast
Ambient Air Temperature 15 °C

Facility Name Smith's Grocery Site ID# _____

Quality Assurance:

pH Meter:
serial no. _____
pH=4.0 4.00
pH=7.0 7.00
pH=10.0 _____

Conductivity Meter
serial no. 45233
Standard _____ Red Line
Standard _____
Standard _____

Chain of Custody

Relinquished by	Date /Time	Received by	Date/Time

Well # 1

Well Diameter(D) 2 inch or ____ feet
conversion factor(C): 3.143*(D/2)^2
for a 2 inch well C=0.163
4 inch well C=0.652
Total Well Depth(TWD) 35 ft.
Depth to GW (DGW) 27.32 ft.

Length of Water Column(LWC=TWD-DGW) 7.58 ft.

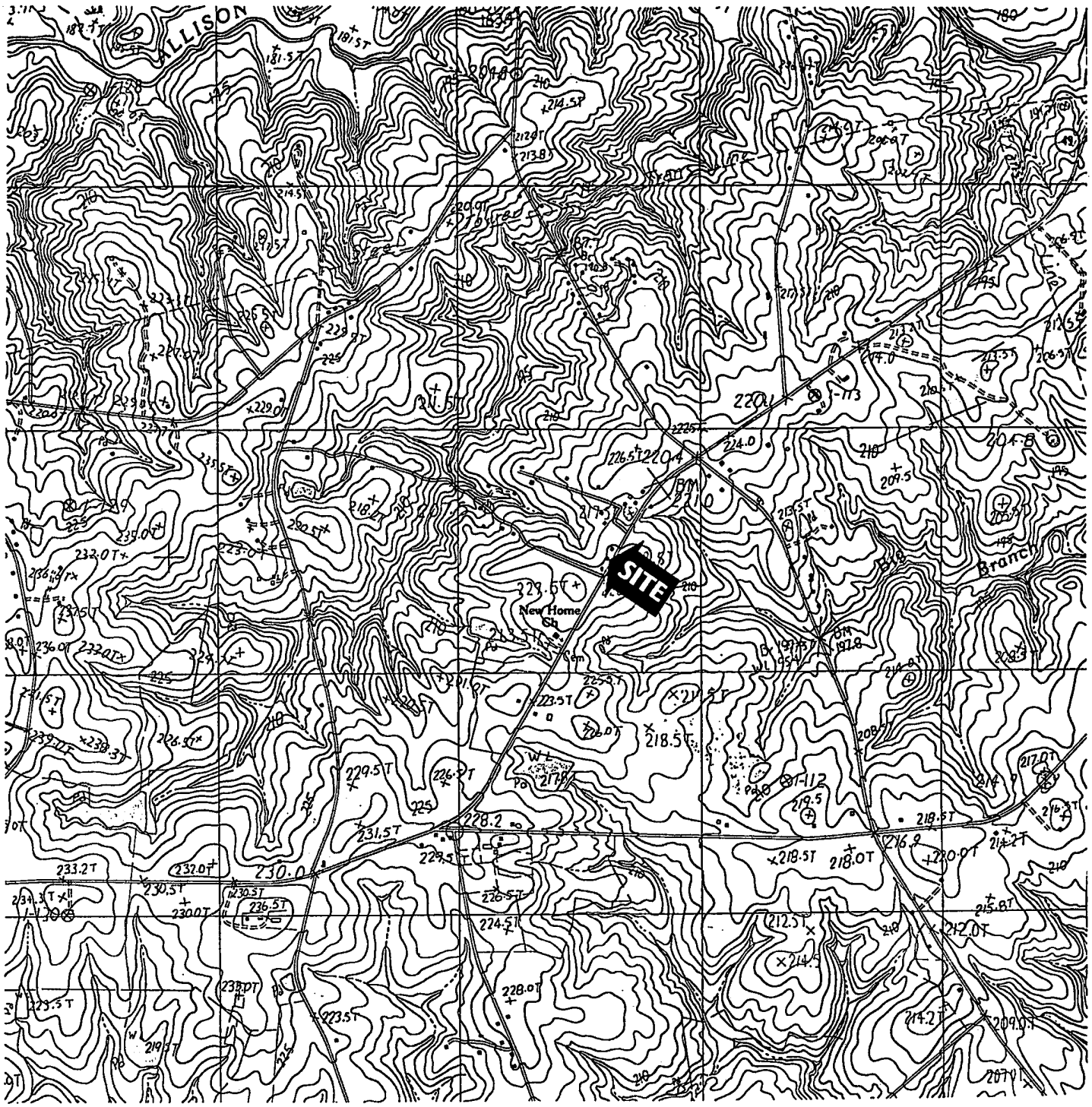
1 Csg. Volume(LWC * C) = 7.58 X .163 = 1.24 gals.
3 Csg. Volumes = 3 X 1.24 = 3.72 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.75 gals.

	Initial	1st vol.	2nd vol.	3rd vol.	4th vol.	5th vol.	Post	Sampling
Volume Purged (gallons)	0	1.25	2.50	3.75				
Time (military)	1535	1540	1545	1550				
pH (s.u.)	5.41	5.07	4.97	4.95				
Specific Cond. (umhos/cm)	69	59	55	52				
Water Temp (°C)	15.5	17.1	17.2	17.3				
Turbidity (*)								
PID Readings								

* subjective (1) None (2) Faint (3) Moderate (4) Strong

Remarks _____



SCALE 1:24,000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

CONTOUR INTERVAL 3 METERS

QUADRANGLE LOCATION

CLOVER, SC QUADRANGLE

CBM ENVIRONMENTAL SERVICES, INC.

LATITUDE: 35° 02' 30" N	
LONGITUDE: 81° 08' 48" W	
DATE: 02/11/99	
DRAWN BY: AWB	
CHECKED BY: JFH	

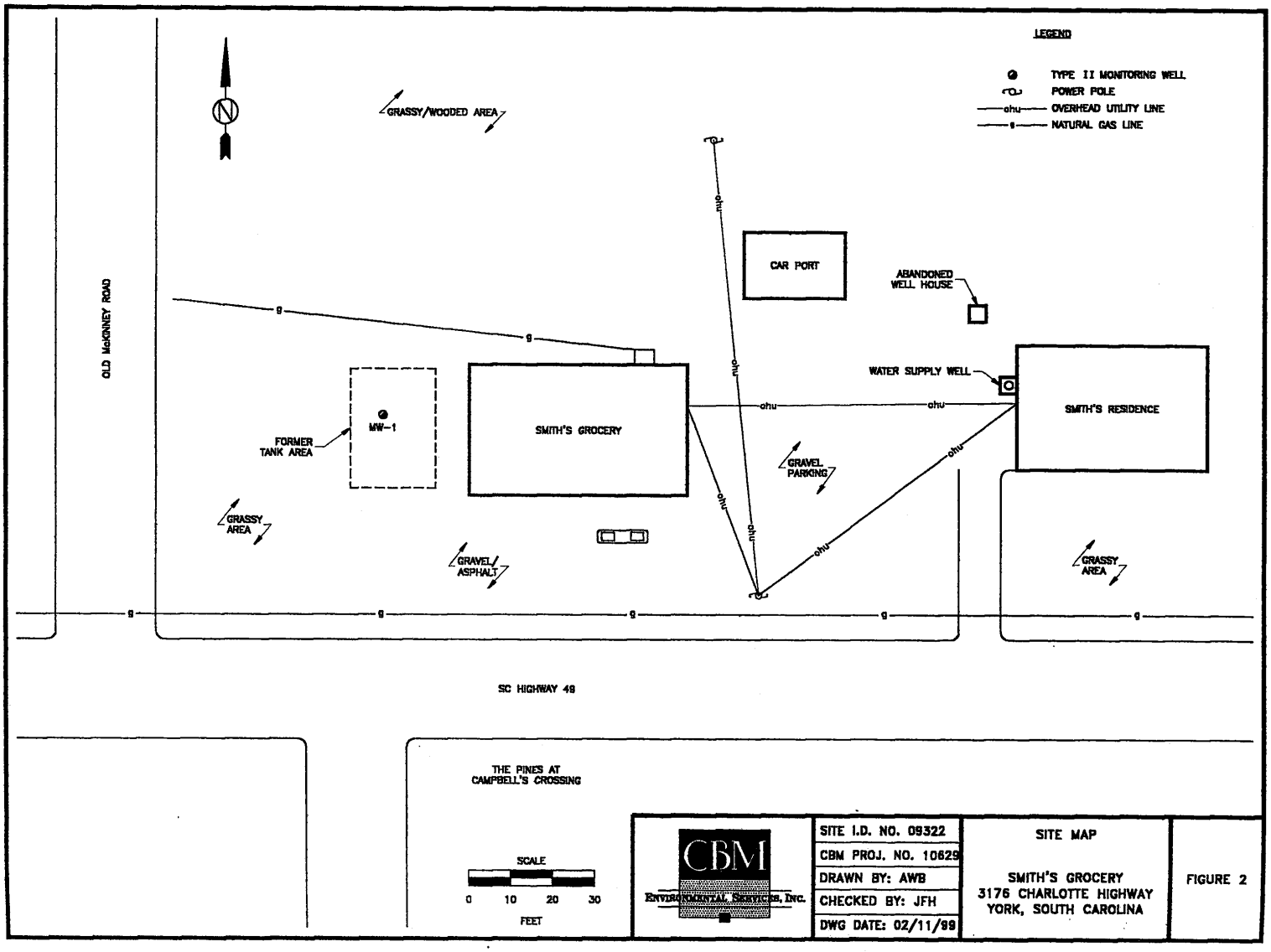
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SOUTH CAROLINA

SITE I.D. NO. 09322

FIGURE 1

USGS TOPOGRAPHIC MAP

CBM PROJECT NO. 10629


LEGEND
TYPE II MONITORING WELL
POWER POLE
ohu OVERHEAD UTILITY LINE
g NATURAL GAS LINE
GRASSY/WOODED AREA
OLD McKINNEY ROAD
CAR PORT
ABANDONED WELL HOUSE
WATER SUPPLY WELL
SMITH'S RESIDENCE
SMITH'S GROCERY
MW-1
FORMER TANK AREA
GRAVEL PARKING
GRASSY AREA
GRAVEL ASPHALT
GRASSY AREA
SC HIGHWAY 49
THE PINES AT CAMPBELL'S CROSSING
SCALE
0 10 20 30
FEET
CBM
ENVIRONMENTAL SERVICES, INC.
SITE I.D. NO. 09322
CBM PROJ. NO. 10629
DRAWN BY: AWB
CHECKED BY: JFH
DWG DATE: 02/11/99
SITE MAP
SMITH'S GROCERY
3176 CHARLOTTE HIGHWAY
YORK, SOUTH CAROLINA
FIGURE 2

Lab Report

From: NC Certificati● No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

Full Service Analytical & Environmental Solutions

February 11, 1999

RECEIVED
FEB 12 1998
FILE COPY

To: John Hess
CBM Environmental Services
P. O. Box 411387
Charlotte, NC 28241
Proj: Smiths Grocery

#10629

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AB18575	Customer Code: CBM
Login Group #: 3536E2	Customer Reference: CBM
Phone Number: (800)743-1226 FAX(803)548-5892	
Customer Sample I.D#: MW 1	
Sample collection date: 02/02/99	Time: 16:00
Lab submittal date: 02/03/99	Time: 17:30
Received by: KJE	Validated by: ADO

Parameter: METALS DIGESTION	
Method reference: EPA 200.7	Unit:
Result: Completed	MDL or sensitivity:
Date started: 02/05/99	Date finished: 02/05/99
Time started: 10:00	Analyst: MSP
Parameter: LEAD, TOTAL	
Method reference: EPA 200.7	Unit: mg/L
Result: Less than	MDL or sensitivity: 0.005
Date started: 02/06/99	Date finished: 02/06/99
Time started: 14:00	Analyst: DR2
Parameter: METHOD 8260	
Method reference: SW846 8260	Unit: ug/L
Result: see below	
Date started: 02/07/99	Date finished: 02/07/99
Time started: 09:44	Analyst: PEL
Parameter: PREP. METHOD 3510	
Method reference:	Unit:
Result: Completed	MDL or sensitivity:
Date started: 02/08/99	Date finished: 02/08/99
Time started:	Analyst: PEL
Parameter: METHOD 8270	
Method reference: 8270	Unit: ug/L
Result: see below	
Date started: 02/08/99	Date finished: 02/08/99
Time started: 14:40	Analyst: PEL

Lab Report

Full Service Analytical & Environmental Solutions

Data for METHOD 8260 ug/L:

Component Name	Result	Component MDL
BENZENE	855	10.00
TOLUENE	13400	10.00
ETHYLBENZENE	14200	10.00
XYLENES	20170	20.00
MTBE	97.3	10.00
EDB	Not detected	10.00
NAPHTHALENE	Not detected	10.00
SURR: TOLUENE D8	106.50	
SURR: 1,4-DCB-D4	112.00	
SURR: DIBROMOFLUOROMETHANE	100.00	

Data for METHOD 8270 ug/L:

Component Name	Result	Component MDL
NAPHTHALENE	7.1	5.00
ACENAPHTHENE	Not detected	3.00
ANTHRACENE	Not detected	0.30
FLUORANTHENE	Not detected	0.30
FLUORENE	Not detected	5.00
PYRENE	Not detected	0.30
BENZO(a)ANTHRACENE	Not detected	0.20
BENZO(a)PYRENE	Not detected	0.20
BENZO(b)FLUORANTHENE	Not detected	0.20
BENZO(k)FLUORANTHENE	Not detected	0.50
CHRYSENE	Not detected	5.00
DIBENZO(a,h)ANTHRACENE	Not detected	0.20
INDENO(1,2,3-cd)PYRENE	Not detected	0.20
ACENAPTHYLENE	Not detected	3.00
BENZO(g,h,i)PERYLENE	Not detected	0.20
PHENANTHRENE	Not detected	5.00
SURR: D5-NITROBENZENE	57.40	
SURR: 2-FLUOROBIPHENYL	57.40	
SURR: 4-TERPHENYL, D14	59.60	

Sample comments:

Project: Smiths Grocery
PO#9494
Organics were subcontracted to SC certified laboratory #96023.

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

Full Service Analytical & Environmental Solutions

February 11, 1999

To: John Hess
CBM Environmental Services
P. O. Box 411387
Charlotte, NC 28241
Proj: Smiths Grocery

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AB18576 Customer Code: CBM
Login Group #: 3536E2 Customer Reference: CBM
Phone Number: (800)743-1226 FAX(803)548-5892
Customer Sample I.D#: WSW 1
Sample collection date: 02/02/99 Time: 16:20
Lab submittal date: 02/03/99 Time: 17:20
Received by: KJE Validated by: ADO

Parameter: METALS DIGESTION
Method reference: EPA 200.7
Result: Completed
Date started: 02/05/99
Time started: 10:00
Unit:
MDL or sensitivity:
Date finished: 02/05/99
Analyst: MSP

Parameter: LEAD, TOTAL
Method reference: EPA 200.7
Result: 0.022 mg/L
Date started: 02/06/99
Time started: 14:00
MDL or sensitivity: 0.005
Date finished: 02/06/99
Analyst: DR2

Parameter: METHOD 8260
Method reference: SW846 8260
Result: see below
Date started: 02/07/99
Time started: 09:58
Unit: ug/L
Date finished: 02/07/99
Analyst: PEL

Parameter: PREP. METHOD 3510
Method reference:
Result: Completed
Date started: 02/08/99
Time started:
Unit:
MDL or sensitivity:
Date finished: 02/08/99
Analyst: PEL

Parameter: METHOD 8270
Method reference: 8270
Result: see below
Date started: 02/09/99
Time started: 14:40
Unit: ug/L
Date finished: 02/09/99
Analyst: PEL

Lab Report

Full Service Analytical & Environmental Solutions

Data for METHOD 8260 ug/L:

Component Name	Result	Component MDL
BENZENE	Not detected	1.00
TOLUENE	Not detected	1.00
ETHYLBENZENE	Not detected	1.00
XYLENES	Not detected	2.00
MTBE	Not detected	1.00
EDB	Not detected	1.00
NAPHTHALENE	Not detected	1.00
SURR: TOLUENE D8	102.00	
SURR: 1,4-DCB-D4	106.25	
SURR: DIBROMOFLUOROMETHANE	99.75	

Data for METHOD 8270 ug/L:

Component Name	Result	Component MDL
NAPHTHALENE	Not detected	5.00
ACENAPHTHENE	Not detected	3.00
ANTHRACENE	Not detected	0.30
FLUORANTHENE	Not detected	0.30
FLUORENE	Not detected	5.00
PYRENE	Not detected	0.30
BENZO(a)ANTHRACENE	Not detected	0.20
BENZO(a)PYRENE	Not detected	0.20
BENZO(b)FLUORANTHENE	Not detected	0.20
BENZO(k)FLUORANTHENE	Not detected	0.50
CHRYSENE	Not detected	5.00
DIBENZO(a,h)ANTHRACENE	Not detected	0.20
INDENO(1,2,3-cd)PYRENE	Not detected	0.20
ACENAPTHYLENE	Not detected	3.00
BENZO(g,h,i)PERYLENE	Not detected	0.20
PHENANTHRENE	Not detected	5.00
SURR: D5-NITROBENZENE	54.00	
SURR: 2-FLUOROBIPHENYL	43.00	
SURR: 4-TERPHENYL, D14	52.90	

Sample comments:

Project: Smiths Grocery
PO#9494
Organics were subcontracted to SC certified laboratory #96023.

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC.

PAGE ____ OF ____ QUOTE # ____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp 1.3	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client CBM
Physical Address 377 Grounds Blvd - Ste 118
Phone (803)578-5486 Fax ____
P.O.#/Billing Reference 9494
Project Name Smith's Grocery JH 10629

REPORT TO: Name John Hess
Address ____
BILL TO: Name CBM
Address ____
Requested Due Date normal

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested NC ____ SC ____ Other ✓ NA ____
Water Chlorinated Yes ____ No ✓ NA ____
Sample Iced Upon Collection Yes ____ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED (VOCs BTEX, EDB, NAP; 8270 PAHs; Pb)	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
MW1	2/2	1600	H2O	VOA/AG	3/2/1	40ml/1L	HCl/-/HNO3	✓ ✓ ✓	-		18575
WSW1	"	1620	"	"	"	"	"	✓ ✓ ✓			18576

Sampler's Signature Rodney Mingo Sampled By (Print Name) Rodney Mingo Affiliation CBM

Relinquished By: (Signature) Rodney Mingo	Received By: (Signature) [illegible]	Date 2/3	Military/Hours 0830
Relinquished By: (Signature)	Received By: (Signature)	Date 2/3/99	1215
Relinquished By: (Signature) [illegible]	Received For Prism Laboratories By: [illegible]	Date 2/3/99	1730
Method of Shipment		Log-In Group No.	55362

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ✓ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

GARCO, Inc.

Environmental, Industrial & Recycling Services

Certificate of Disposal

GENERATOR:

Smith's Grocery
3176 Charlotte Hwy.
York, SC

MATERIAL ACCEPTED:

2 drums of non-hazardous petroleum contaminated soil

DISPOSAL METHOD:

Bio-Remediation

GARCO Inc. accepted the above listed materials on 2/12/99. The material has been assigned the following GARCO Identification number(s).

GARCO ID No.(s) SP-1010 through SP-1011

GARCO, Inc. has accepted custody of the above referenced non-hazardous material. This material has been determined to be non-hazardous by a material profile, generator knowledge and/or analytical data provided to GARCO, Inc.

Greg Russell
President

Post Office Box 1907 / Asheboro, NC 27204-1907 / 336-683-0911 / Fax 336-683-0811

NON-HAZARDOUS WASTE MANIFEST CLIENT

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NA

Manifest Document No.: 99001

2. Page 1 of 1

3. Generator's Name and Mailing Address
Smith's Grocery
3176 Charlotte Hwy.
York, SC 24745

4. Generator's Phone (803) 548-5989

John Hess

5. Transporter 1 Company Name: GARCO, Inc.

6. US EPA ID Number: NA

A. State Transporter's ID

B. Transporter 1 Phone: 336-683-0911

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
GARCO, Inc.
2503 n. Fayetteville St.
Asheboro, NC 27203

10. US EPA ID Number: NA

E. State Facility's ID

F. Facility's Phone: 336-683-0911

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non-hazardous Material	2	DM	001,400	P
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above
11a). Soil SP1010-SP1011

H. Handling Codes for Wastes Listed Above
None

15. Special Handling Instructions and Additional Information
24 Hour ER# 800-814-1204

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Greg Russell (for CBM) | Signature | Date: Month 02 Day 12 Year 99

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Carl Ruggason | Signature | Date: Month 02 Day 12 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: Lori Boyd | Signature | Date: Month 2 Day 15 Year 99

GENERATOR

TRANSPORTER

FACILITY

NON-HAZARDOUS WASTE

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

DIVISION OF
UNDERGROUND STORAGE TANK MANAGEMENT
2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-4350
Fax (803) 898-4330

MEMORANDUM

Date: February 17, 1999

To: Technical File

From: Read S. Miner, P.G., Hydrologist
State Lead and Field Services Section

Re: Smith's Grocery
Facility #09322
SB-1752 - 01/15/98/MJN
Initial Ground-Water Assessment Report received February 16, 1999
York County

The referenced report contains the following defficiencies pertaining to the referenced contract requirements:

- Special Condition #5 - Two copies of the report are required.
- Specification #13 - Appendix B should be analytical data.
- Specification #13 - Appendix C. should be topographic map.
- Specification 13. - Appendix D. should be Site Base Map. Base map did not include property lines, private underground utilities on or adjacent to the site, previous soil sample locations.
- Specification #13 - Appendix E should be disposal manifests.
- Specification #13 - Appendix F. should be additional data.

cc: Reed Corley
State Lead and Field Services Section

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

FOI

DIVISION OF
UNDERGROUND STORAGE TANK MANAGEMENT

Phone (800) 826-5435 Fax (803) 898-4330

JAN 06 1999

CBM Environmental Services
Attn: John Hess
377 Carowinds Blvd., Suite 118
Fort Mill, SC 29715

Re: IGWA Bid Package #SB-1752-01/15/98/MJN

Dear Mr. Hess:

Based on the award of the referenced bid package, information packets for fifteen (15) underground storage tank facilities were provided to you on December 23, 1998. The packets contained all necessary approvals for work to begin. The facilities have been assigned an individual Cost Proposal (CP) number as listed below. Please reference the CP number and Purchase Order #108844 on the appropriate invoices submitted for payment against each facility. Invoice forms are enclosed for your convenience. As specified in the referenced bid, **the completed invoice forms and associated IGWA reports (include contract certification number) are expected on or before the designated due date associated with each site (see below).**

Facility ID#	County	Report Due Date	CP#
12890	Union	02/16/98	06855
09322	York	02/16/98	06856
14507	York	02/16/98	06857
12152	Aiken	02/18/98	06858
13219	Aiken	02/18/98	06859
00128	Aiken	02/18/98	06860
14276	Aiken	02/22/98	06861
12180	Aiken	02/22/98	06862
15758	Spartanburg	02/22/98	06863
15866	Spartanburg	02/24/98	06864
09945	Spartanburg	02/24/98	06865
12635	Spartanburg	02/24/98	06866
08588	Spartanburg	02/26/98	06867
08268	Spartanburg	02/26/98	06868
15985	Spartanburg	02/26/98	06869

CBM will perform services at the site on behalf of the sites' responsible parties (RP); however, payments will be made from the SUPERB and TRUST Accounts as appropriate. The site RP has no obligation for payment for this scope of work.

The Division grants preapproval for transportation of drums of virgin petroleum contaminated soil and drums of groundwater from the referenced site to a permitted treatment facility. The contaminated soil and/or groundwater must be properly stored in labeled 55 gallon drums or equivalent containers. The contaminated soil and/or groundwater must be accepted by the approved treatment facility. There can be no spillage or leakage in transport. A copy of the disposal manifest from the receiving facility that clearly designates the quantity received must be included as an appendix to the final report.

Please provide this office with a schedule of drilling dates and coordinate all work with H. Reed Corley before commencing work at the facilities. If you have any questions or need further assistance, please contact H. Reed Corley at (800) 826-5435 (within SC only) or (803) 898-4360.

Sincerely,

State Lead & Field Services Section
Assessment & Corrective Action Branch
Division of Underground Storage Tank Management

H. Reed Corley, Hydrogeologist

Christopher S. Doll, P.G., Manager

HRC/CSD/cbm_02.wpd

enc: IGWA Invoice Forms (15)

cc: Technical File (15)
Financial File (15)
Read File

DHEC/UST/122398

09/25/96 14:11:18

GWPD Site Information

SiteID N-46-NO-09322 Facil: SMITH'S GROCERY Pmgr: FANTRM

Addr : SC HWY 49 C/S/Zip YORK SC
Cnty : YORK District CATAWBA Lat/Long

Owner1 LOIS B SMITH Owner 1 Phone ..... (803) -
Street RT 2 BOX 134
C/S/Zp YORK SC 29745-9802 Own2

Contct LOIS B SMITH Title .....
Street Contact Phone ..... (803) -
C/S/Zp Facility Phone .....

Abd Tnks 002 Num Tnks 002 Bil Tnks 000 RBCA SUPERB Qual\Eleg N
Last Update 06/11/96 by OWENSDM L Comply / / Info ok / /

UNDERGROUND STORAGE TANK AND PROPERTY OWNER

RSM

PERMISSION FORM - **Facility ID #09322**

If you are the owner of the former or existing underground storage tanks and the property owner, please complete this form.

I, Lois B. Smith, certify that I am the legal owner of the underground storage tanks and property located at the facility identified below or serve as the authorized representative for the owner. I grant permission to the South Carolina Department of Health and Environmental Control (SCDHEC) to secure on my behalf contractor services to conduct assessment and corrective action activities as required, and authorize SCDHEC, or a contractor selected by SCDHEC, to enter this property at reasonable times only to accomplish these site rehabilitation tasks. The contractor(s) will be designated as my contractor for only the required site rehabilitation activities. Compensation to the contractor(s) will be from the SUPERB Account and I will have no obligation to pay the contractor(s). I understand that SCDHEC will be responsible for notifying me of all activities that are necessary prior to their initiation and will promptly provide to me a copy of each environmental report. I understand that I may choose to select my own contractor at the completion of any phase of work by notifying the Bureau of Underground Storage Tank Management in writing.

Name of Facility Smith's Groc. Phone # 684-6289

Street Address of Facility 3176 CHARLOTTE Hwy

Town, City, District, Suburb York S.C. 29745

Name of nearest intersecting street, road, highway, alley
Rd 49

Is this facility within the city limits? (yes or no) No

Is this facility serviced by a public water or sewer utility? (yes or no) NO, if no, please provide the name and phone number of a person that we can contact that can assist in the location of private water and septic tank lines _____, phone number _____

Were underground storage tanks previously removed from the ground at this facility? (yes or no) YES, if yes, please provide the name of a person we can contact that can assist in the location of the former underground storage tank excavation ALEX W. AMOS, Phone number 327-1326

Is the property currently leased or rented to someone? (yes or no) NO, if yes, please provide their name _____ and phone number _____ and let them know about the pending assessment activities. If vehicles or other mobile structures are parked over the former or existing underground storage tanks, they should be moved before SCDHEC's contractor gets to the site.

NAME of UST/property owner (Please Print): Lois B. Smith

Phone Number (home) (803) 684-6289 (work) SAME

Signature of UST/property Owner: Lois B Smith

Witness: [signature]

Date: 9 Month 16 Day 1998 Year

Call Rick Corley to agree on well location

RECEIVED
SEP 16 1998
DIVISION OF UNDERGROUND STORAGE TANK MGMT.

UNDERGROUND STORAGE TANK AND PROPERTY OWNER RSM IGWA

PERMISSION FORM - Facility ID #09322

If you are the owner of the former or existing underground storage tanks and the property owner, please complete this form.

I, Lois B. Smith, certify that I am the legal owner of the underground storage tanks and property located at the facility identified below or serve as the authorized representative for the owner. I grant permission to the South Carolina Department of Health and Environmental Control (SCDHEC) to secure on my behalf contractor services to conduct assessment and corrective action activities as required, and authorize SCDHEC, or a contractor selected by SCDHEC, to enter this property at reasonable times only to accomplish these site rehabilitation tasks. The contractor(s) will be designated as my contractor for only the required site rehabilitation activities. Compensation to the contractor(s) will be from the SUPERB Account and I will have no obligation to pay the contractor(s). I understand that SCDHEC will be responsible for notifying me of all activities that are necessary prior to their initiation and will promptly provide to me a copy of each environmental report. I understand that I may choose to select my own contractor at the completion of any phase of work by notifying the Bureau of Underground Storage Tank Management in writing.

Name of Facility Smiths Groc. Phone # 684-6289

Street Address of Facility 3176 CHARLOTTE Hwy

Town, City, District, Suburb York S.C. 29745

Name of nearest intersecting street, road, highway, alley

Is this facility within the city limits? (yes or no) No

Is this facility serviced by a public water or sewer utility? (yes or no) NO, if no, please provide the name and phone number of a person that we can contact that can assist in the location of private water and septic tank lines _____, phone number _____

Were underground storage tanks previously removed from the ground at this facility? (yes or no) YES, if yes, please provide the name of a person we can contact that can assist in the location of the former underground storage tank excavation ALEX W. AMOS, Phone number 327-1326

Is the property currently leased or rented to someone? (yes or no) NO, if yes, please provide their name _____ and phone number _____ and let them know about the pending assessment activities. If vehicles or other mobile structures are parked over the former or existing underground storage tanks, they should be moved before SCDHEC's contractor gets to the site.

NAME of UST/property owner (Please Print): Lois B. Smith

Phone Number (home) (803) 684-6289 (work) SAME

Signature of UST/property Owner: Lois B Smith

Witness: [signature]

Date: 9 Month 14 Day 1998 Year

RECEIVED
SEP 16 1998
DIVISION OF UNDERGROUND STORAGE TANK MGMT.

INSURANCE STATEMENT FORM

Facility ID #09322 is potentially eligible to receive state monies to assist you in site rehabilitation, if required. Before eligibility for State Underground Petroleum Environmental Response Bank (SUPERB) funds can be determined, written confirmation of the existence or non-existence of an environmental insurance policy for this site is required. Please complete the following information.

✓ I do not have any insurance that would cover releases from underground storage tanks.

___ I have an insurance policy that covers releases from underground storage tanks.

My provider is: _____
The policy deductible is: _____
The policy limit is: _____

If you have this type of insurance, please include a copy of the policy with this report.

Signature: Laura L Smith

Date: 9/14/98

To be Completed by Notary Public:

Sworn before me this 14th day of September, 1998

Laura L Smith

(Name)

Notary Public for the state of SC.

My commission expires 6-4-2001.

Please affix State Seal if you are commissioned outside South Carolina.

UNDERGROUND STORAGE TANK AND PROPERTY OWNER

RSM

PERMISSION FORM - Facility ID #09322

If you are the owner of the former or existing underground storage tanks and the property owner, please complete this form.

I, Lois B. Smith, certify that I am the legal owner of the underground storage tanks and property located at the facility identified below or serve as the authorized representative for the owner. I grant permission to the South Carolina Department of Health and Environmental Control (SCDHEC) to secure on my behalf contractor services to conduct assessment and corrective action activities as required, and authorize SCDHEC, or a contractor selected by SCDHEC, to enter this property at reasonable times only to accomplish these site rehabilitation tasks. The contractor(s) will be designated as my contractor for only the required site rehabilitation activities. Compensation to the contractor(s) will be from the SUPERB Account and I will have no obligation to pay the contractor(s). I understand that SCDHEC will be responsible for notifying me of all activities that are necessary prior to their initiation and will promptly provide to me a copy of each environmental report. I understand that I may choose to select my own contractor at the completion of any phase of work by notifying the Bureau of Underground Storage Tank Management in writing.

Name of Facility Smith's Groc. Phone # 684-6289

Street Address of Facility 3176 CHARLOTTE Hwy

Town, City, District, Suburb York S.C. 29745

Name of nearest intersecting street, road, highway, alley

Is this facility within the city limits? (yes or no) No

Is this facility serviced by a public water or sewer utility? (yes or no) NO, if no, please provide the name and phone number of a person that we can contact that can assist in the location of private water and septic tank lines _____, phone number _____

Were underground storage tanks previously removed from the ground at this facility? (yes or no) YES, if yes, please provide the name of a person we can contact that can assist in the location of the former underground storage tank excavation ALEX W. AMOS, Phone number 327-1326

Is the property currently leased or rented to someone? (yes or no) NO, if yes, please provide their name _____ and phone number _____ and let them know about the pending assessment activities. If vehicles or other mobile structures are parked over the former or existing underground storage tanks, they should be moved before SCDHEC's contractor gets to the site.

NAME of UST/property owner (Please Print): Lois B. Smith

Phone Number (home) (803) 684-6289 (work) SAME

Signature of UST/property Owner: Lois B Smith

Witness: [signature]

Date: 9 Month 14 Day 1998 Year

RECEIVED
SEP 16 1998
DIVISION OF UNDERGROUND STORAGE TANK MGMT.

INSURANCE STATEMENT FORM

Facility ID #09322 is potentially eligible to receive state monies to assist you in site rehabilitation, if required. Before eligibility for State Underground Petroleum Environmental Response Bank (SUPERB) funds can be determined, written confirmation of the existence or non-existence of an environmental insurance policy for this site is required. Please complete the following information.

✓ I do not have any insurance that would cover releases from underground storage tanks.

___ I have an insurance policy that covers releases from underground storage tanks.

My provider is: _____
The policy deductible is: _____
The policy limit is: _____

If you have this type of insurance, please include a copy of the policy with this report.

Signature: Laura B Smith

Date: 9/14/98

To be Completed by Notary Public:

Sworn before me this 14th day of September, 19 98

Laura A Smith

(Name)

Notary Public for the state of SC.

My commission expires 6-4-2001.

Please affix State Seal if you are commissioned outside South Carolina.

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

DIVISION OF
UNDERGROUND STORAGE TANK MANAGEMENT

Phone (803) 734-5331 Fax (803) 734-3604

Lois B. Smith
3176 Charlotte Highway
York, SC 29745-9802

SEP 08 1998

Re: Smith's Grocery
Facility ID #09322
Environmental Insurance Statement
Telepone conversation on September 4, 1998
Release Date:August 5, 1991
York County

Dear Ms. Smith:

The Underground Storage Tank Program (USTP) of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the departmental file for the referenced facility and determined that a release of petroleum hydrocarbons has occurred. To proceed with the qualification process for the State Underground Petroleum Environmental Response Bank (SUPERB) Act, the following information is required:

- **Written confirmation of the existence or non-existence of an environmental insurance policy for this site. This information must be signed by the responsible party and a notary public. For your convenience, an insurance statement form has been enclosed. If an environmental insurance policy existed at the time of the release, a copy of the policy with all endorsements must be submitted with the insurance statement.**

Currently, the release reported at the referenced site has a priority classification of 5A. In order to determine what risk the release may pose to human health and the environment, the next scope of work to be implemented is an **Initial Ground-Water Assessment**.

In the referenced telephone conversation you stated that you would prefer for SCDHEC to directly procure the services of a site rehabilitation contractor to perform the necessary site activities. As requested, I have enclosed the permission form that must be completed for SCDHEC and its contractor to access the property. Please complete the requested information to my attention on or before **September 15, 1998** with a copy of this letter. Qualification for SUPERB funds cannot occur until this information is submitted.

On all correspondence relating to this site, please reference the **Facility ID #09322.** If you have any questions, please feel free to contact Rodney Wilson at (803) 734-2844 or 1-800-826-5435 (within South Carolina only).

Sincerely,

Assessment and Corrective Action Branch
Division of Underground Storage Tank Management

Rodney L. Wilson, Hydrogeologist

Lee A. Monts, Manager

enc: Insurance Statement
Permission Form

cc: Technical File

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

DIVISION OF
UNDERGROUND STORAGE TANK MANAGEMENT

Phone (803) 734-5331 Fax (803) 734-3604

Certified Mail
Z 068 427 101

SEP 03 1998

Lois B. Smith
3176 Charlotte Highway
York, SC 29745-9802

Re: Smith's Grocery
Facility ID #09322
Notice of Violation
York County

Dear Ms. Smith:

The Division of Underground Storage Tank (UST) Management of the South Carolina Department of Health and Environmental Control directed you to complete an Initial Ground-Water Assessment (IGWA) in June 1998. To date, the required report has not been received. In accordance with Section 280.65 of the South Carolina Underground Storage Tank Regulations, the assessment must be conducted as documented chemicals of concern are above the risk-based-screening levels.

The enclosed Owner/Operator Lead Information Sheet should be completed and returned to my attention within 10 days. Upon submittal of the information sheet, a cost proposal number will be assigned under which the IGWA invoice will be submitted to the Department upon completion of work. The IGWA report will be due within 60 days after the cost proposal number is issued. **However, if the information sheet is not returned within 10 days, enforcement procedures will be initiated.**

Please reference **Facility ID #09322** in all correspondence concerning this project. If you have any questions or need additional information, please call Rodney Wilson at 1-800-826-5435 (within SC only) or (803) 734-2844. Thank you for your time and cooperation in this matter.

Sincerely,

Owner/Operator Assistance Section
Assessment & Corrective Action Branch
Division of Underground Storage Tank Management

Rodney L. Wilson, Hydrogeologist

Lee A. Monts, Manager

enc: Information Sheet

cc: Technical File

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

DIVISION OF
UNDERGROUND STORAGE TANK MANAGEMENT

Phone (803) 734-5331 Fax (803) 734-3604

JUL 24 1998

Lois B. Smith
3176 Charlotte Highway
York, SC 29745-9802

Re: Smith's Grocery
Site ID #09322
Availability of SUPERB Funding
York County

Dear Ms. Smith:

Currently, the release reported on June 30, 1993 at the referenced site has a priority classification of 5A. In order to determine what risk the release may pose to human health and the environment, SUPERB funds are being made available to implement the next necessary scope of work. The scope of work to be implemented is an **Initial Ground-Water Assessment.**

Our records do not indicate that you have selected a contractor to perform assessment activities at this site. If you wish to select your own contractor, please indicate your choice on the enclosed Information Sheet and return to my attention within 10 days in order for the necessary technical and financial approvals to be issued. All site rehabilitation activities must be performed and submitted by a South Carolina Certified Underground Storage Tank Site Rehabilitation Contractor. If you need assistance in finding a certified contractor, please let us know and we will provide you a list of companies for your consideration.

If you wish, the SCDHEC can directly procure the services of a site rehabilitation contractor on your behalf. If you would like more information on this method of implementing the necessary scope of work, please contact Rodney Wilson within 10 days of this letter. Submittal of the enclosed Information Sheet is not required if you select this method. If you choose this option, additional forms will be forwarded to you for SCDHEC and its contractor to access the property.

On all correspondence or inquiries regarding this project, please reference **Site ID #09322**. If you have any questions, please feel free to contact Rodney Wilson at (803) 734-2844 or 1-800-826-5435 (within South Carolina only).

Sincerely,

Assessment and Corrective Action Branch
Division of Underground Storage Tank Management

Rodney L. Wilson, Hydrogeologist

Lee A. Monts, Manager

enc: Information Sheet

cc: Technical File

Lois Smith
#784-6793

Full ID # N-46-NO-09322 Site Name Smith's Grocery

Person doing triage DEB Date 14 July 93

NO 1. **INVOICE ?**

14 all

If invoice is attached- SEND ENTIRE PACKAGE TO CK/PH FOR LOG-IN NOW!

Invoice number. _____ Invoice amount $_____

YES 2. **TRIAGE** (Circle report type)

CR* TofO* AR RR** MWR** TST SUPERB PERMIT OTHER _____

* = Requires a change of Data base form.

** = RR & MWR requires separate action and processing.

____ System CLOSED/tanks empty, or ✓ System operating/product in tanks

Report CLASSIFICATION

____ A Free Product, Sheen
____ B GW contaminated (<FP to >MCL)
____ C Soils contaminated (>200 TPH, >20 BTEX)
____ D Soils contaminated (<200 TPH, <20 BTEX)
✓ E No contamination or not a hazard
____ F INCOMPLETE REPORT (dates, maps, labs, description)

____ S Stockpiled soils

Release Report CLASSIFICATION

____ A Free Product
____ B GW contaminated
____ C Soils contaminated
✓ D OVA, Vapors, Unknown

NO 3. **DATABASE CHANGE** (IF NEEDED for CR or T-of-O)

Send completed Change sheet and Notification to KM/MW Initial _____ Date _____

YES 4. **DATABASE LOG-IN** (Log-in the following and initial)

If PM already assigned, DO NOT reassign, log-in task then send directly to PM.

Date Reported to DHEC (stamped in) 30 June 93

PRODUCT (circle): 1 Petroleum, 2 Other, 3 Unknown RP FINANCE (escape)

PM to be Assigned WBTURNER

TASK	REC'D DATE	CONSULTANT	Comment	Initial
RLS	30 June	RD	D	DB
AR	" "	"	F	DB
____	____	____	____	____

____ 5. **REPORT REVIEW** Send report to PM

ABATEMENT LETTER (if USTs in operation)
SUPERB QUALIFIED? (check data base (IF AVAILABLE))
PROVIDE DIRECTIVES

4R 930630

N-46-NO-09322

RECEIVED
JUN 30 1993
Groundwater Protection Division

Dear Sir,

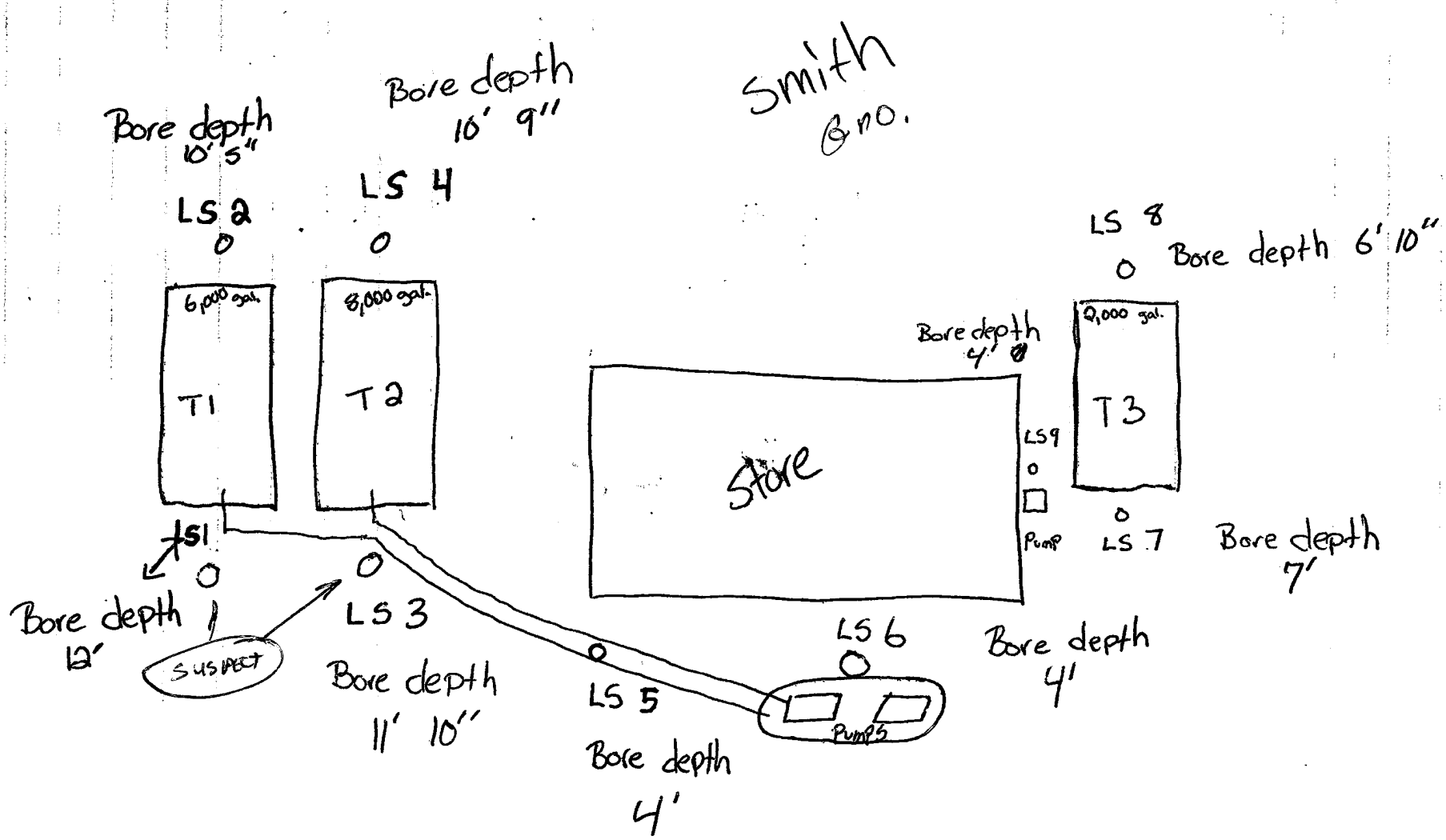
I own and operate Smith's Bro. highway 49 York, SC. I have been in the Store business 40 years. In 1978 I moved in to the Store & Presently own and Operate. That some year Mosingo oil Co. of Rock Hill SC installed 3 new tanks at the time of installation one of the new lines leaked, Mosingo Corrected the faulty line. I was unaware of the June 30 amnesty Provision until recently. I got a man to come take samples of all my tanks, Pumps, and lines. It appears to have some Contamination at Sample #1 and Sample #2 From the odor of the dirt samples. My tank registration No is N46 ND 09322001 My samples have been delivered to Prism Lab, in Spartanburg. My analysis will be forwarded to you as soon as I receive them. Thank you for your help in this Matter.

Sincerely Yours
Louis B. Smith

RECEIVED

JUN 3 0 1993

Groundwater Management
Division


Smith
Bore depth 10' 5"
LS 2
Bore depth 10' 9"
LS 4
LS 8
Bore depth 6' 10"
6,000 gal.
T1
8,000 gal.
T2
Bore depth 4' 8"
2,000 gal.
T3
Store
LS 9
Pump
LS 7
Bore depth 7'
LS1
Bore depth 12'
Suspect
LS 3
Bore depth 11' 10"
LS 6
Bore depth 4'
LS 5
Pumps
Bore depth 4'

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

DIVISION OF
UNDERGROUND STORAGE TANK MANAGEMENT

Phone (803) 734-5331 Fax (803) 734-3604

JUN 08 1998

Lois B. Smith
Route 2, Box 134
York, SC 29745-9802

Re: Smith's Grocery
Site ID #09322
Availability of SUPERB Funding
York County

Dear Ms. Smith:

Currently, the release reported on June 30, 1993 at the referenced site has a priority classification of 5A. In order to determine what risk the release may pose to human health and the environment, SUPERB funds are being made available to implement the next necessary scope of work. The scope of work to be implemented is an **Initial Ground-Water Assessment.**

Our records do not indicate that you have selected a contractor to perform assessment activities at this site. If you wish to select your own contractor, please indicate your choice on the enclosed Information Sheet and return to my attention within 10 days in order for the necessary technical and financial approvals to be issued. All site rehabilitation activities must be performed and submitted by a South Carolina Certified Underground Storage Tank Site Rehabilitation Contractor. If you need assistance in finding a certified contractor, please let us know and we will provide you a list of companies for your consideration.

If you wish, the SCDHEC can directly procure the services of a site rehabilitation contractor on your behalf. If you would like more information on this method of implementing the necessary scope of work, please contact Rodney Wilson within 10 days of this letter. Submittal of the enclosed Information Sheet is not required if you select this method. If you choose this option, additional forms will be forwarded to you for SCDHEC and its contractor to access the property.

On all correspondence or inquiries regarding this project, please reference **Site ID #09322**. If you have any questions, please feel free to contact Rodney Wilson at (803) 734-2844 or 1-800-826-5435 (within South Carolina only).

Sincerely,

Assessment and Corrective Action Branch
Division of Underground Storage Tank Management

Rodney L. Wilson, Hydrogeologist

Kimberly A. Wilson for

Lee A. Monts, Manager

enc: Information Sheet

cc: Technical File

Site ID # 0332 Facility Name John G Azar

Triage Date 8-28-96 Triaged By JME

TRIAGE (Indicate type of submittal)

*CR** X

AR ___

SC X

RLS ___

TST ___

MWR ___

*TofO** ___

Other X-muxe

Date Reported To Bureau: 8-26-96

Project Manager Assigned: Fant

REPORT RANKING

A (Free Product, Sheen on GW) ___

B (GW contamination >MCL) ___

C (Soil contamination >RBSLs) X

D (Soil contamination <RBSLs) ___

E (No contamination documented) ___

F (Incomplete submittal) ___

RELEASE REPORT CLASSIFICATION

Free Product (Forward to MBerenbrok) N/A

TST Failure (tank/line/lld) ___

SIR (Fail/2 Months Inconclusive) ___

Soil or GW Contamination ✓

TANK SYSTEM STATUS

System CIU or TOU (product in USTs) ___

System (ABD) or TOU (USTs closed/USTs are empty) ✓

DATABASE LOG-IN/CHANGE (*= Needs database change)

Submittal(s) Logged-In By: JME

Database Changes Given To: KM

South Carolina Department of Health and Environmental Control (SCDHEC)

Underground Storage Tank (UST) Assessment Report

Date Received
State Use Only

Submit Completed Form To:
UST Regulatory Section
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201
Telephone (803)734-5331

I. OWNERSHIP OF UST(S)

Owner Name (Corporation, Individual, Public Agency, Other)

Lois Smith

Mailing Address

Highway 49

City	**State**	**Zip Code**
York	SC	29745

Area Code	**Telephone Number**	**Contact Person**

II. SITE IDENTIFICATION AND LOCATION

Site I.D. #

N-46-NO-09322

Facility Name or Company Site Identifier

Smith's Grocery

Street Address or State Road (as applicable)

Hwy 49

City	**County**
York	York

RECEIVED
AUG 26 1996
B.
Storage Tank Management

III. CLOSURE INFORMATION

Closure Started	**Closure Completed**	**Number of USTs Closed**
3/27/96	3/27/96	2

Consultant Katawba Environmental, Inc. **UST Removal Contractor** Roy Sykes

IV. CERTIFICATION (Read and sign after completing entire submittal.)

I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information. I believe that the submitted information is true, accurate, and complete.

LOIS B. SMITH

Name (Type or Print)

Lois B. Smith

Signature

V. UST INFORMATION

		Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A.	Product	regular	super				
B.	Capacity	8000	6000				
C.	Age	15 years	15 years				
D.	Construction Material	steel	steel				
E.	Month/Year of Last Use	3/96	3/96				
F.	Depth (ft.) To Base of Tank	11 ft	11 ft				
G.	Spill Prevention Equipment	no	no				
H.	Overfill Prevention Equipment	no	no				
I.	Method of Closure	remove	remove				
J.	Visible Corrosion of Pitting	no	no				
K.	Visible Holes	no	no				

L. Method of disposal for any USTs removed from the ground (attach disposal manifests).

The tanks were devaporized using dry ice and were transported to Frey's Construction company for disposal. The tanks were then cut up for scrap metal.

M. Method of disposal for any liquid petroleum, sludges, or waste waters removed from the USTs (attach disposal manifests).

No product was pumped from the tanks.

N. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST.

None

VI. PIPING INFORMATION

	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 5
A. Construction Material	steel	steel				
B. Distance from UST to Dispenser	53 ft	53 ft				
C. Number of Dispensers	1	1				
D. Type of System	suction	suction				
E. Was Piping Removed from the Ground	yes	yes				
F. Visible Corrosion or Pitting	no	no				
G. Visible Holes	no	no				
H. Age	15	15				

I. If any corrosion, pitting, or holes were observed, describe the location and extent for each line.

None

VII. BRIEF SITE DESCRIPTION AND HISTORY

Smith's Grocery is located on Highway 49 in between York and Clover. This location sits on the edge of the Kings Mountain Belt. Soils here are Saprolitic with a high porosity and very low conductivity. Ground water in this area varies form 20 to 35 feet. This store installed new tanks 15 years ago. A site assessment was conducted in 1993 for participation in the Superb program.

VIII. SITE CONDITIONS

	Yes	No	Unk
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells? If yes, indicate depth and location on the site map.		x	
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells? If yes, indicate location on site map and describe the odor (strong, mild, etc.)		x	
C. Was water present in the UST excavation, soil borings, or trenches? If yes, how far below land surface (indicate location and depth? _____		x	
D. Did contaminated soils remain stockpiled on site after closure? If yes, indicate the stockpile location on the site map. Name of DHEC representative authorizing soil removal: _____		x	
E. Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness. _____		x	

IX. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 99012

B.

Sample #	Location	Sample Type (Soil/Water)	Depth*	Date/Time of Collection	Collected by	OVA #
1	tank 1	Soil	11 ft	12: 30	MC	NA
2	tank 2	Soil	11 ft	12:35	MC	NA
3	mid tank 1 and 2	Soil	11 ft	12:40	MC	NA
4	20 foot of line	Soil	3 ft	12:45	MC	NA
5	40 foot of line	Soil	3 ft	12:50	MC	NA
6	dispenser	Soil	3 ft	12:55	MC	NA
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

April 8, 1996

To: Katawba Environmental, Inc
Attn: Michelle Corley
PO Box 11228
Rock Hill, SC 29730

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA47280	Customer Code: KATAWBA
Login Group #: 4363B6	Customer Reference: SMITHSGR
Phone Number: (800)811-2266	Customer Sample I.D#: 1 TANK 1
Sample collection date: 03/27/96	Time: 12:30
Lab submittal date: 03/27/96	Time: 14:30
Received by: CP	Validated by: ADO

Parameter: AROMATIC VOLATILE ORGANICS, 8260
Method reference: 8260 Unit: mg/kg
Result: see below
Date started: 03/30/96 Date finished: 03/30/96
Time started: 22:10 Analyst: SA

Parameter: PREP. METHOD 3550
Method reference: 3550 Unit:
Result: Completed MDL or sensitivity:
Date started: 04/02/96 Date finished: 04/02/96
Time started: Analyst: SA

Parameter: METHOD 8270
Method reference: 8270 Unit: mg/kg
Result: see below
Date started: 04/04/96 Date finished: 04/04/96
Time started: 02:51 Analyst: SA

Data for AROMATIC VOLATILE ORGANICS, 8260 mg/kg:

Component Name	Result	Component MDL
BENZENE	<0.400	0.002
TOLUENE	3.00	2.00
ETHYLBENZENE	2.80	0.400
XYLENES	19.0	0.400
NAPHTHALENE	0.950	0.400
SURR: 1,2-DICHLOROETHANE, d14	98	62-147
SURR: TOLUENE, d8	100	84-117
SURR: 4-BROMOFLUOROBENZENE	104	74-117

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

Data for METHOD 8270 mg/kg:

Component Name	Result	Component MDL
NAPHTHALENE	Not detected	0.33
ACENAPHTHENE	Not detected	0.33
ANTHRACENE	Not detected	0.33
FLUORANTHENE	Not detected	0.33
FLUORENE	Not detected	0.33
PYRENE	Not detected	0.33
BENZO(a)ANTHRACENE	Not detected	0.33
BENZO(a)PYRENE	Not detected	0.33
BENZO(a)FLUORANTHENE	Not detected	0.33
BENZO(k)FLOURANTHENE	Not detected	0.33
CHRYSENE	Not detected	0.33
DIBENZO(a,h)ANTHRACENE	Not detected	0.33
INDENO(1,2,3-cd)PYRENE	Not detected	0.33
ACENAPTHYLENE	Not detected	0.33
BENZO(g,h,i)PERYLENE	Not detected	0.33
PHENANTHRENE	Not detected	0.33
SURR: NITROBENZENE	73	23-120
SURR: 2-FLUOROBIPHENYL	83	30-115
SURR: TERPHENYL, D14	96	18-140

Sample comments:

Project Name: Smith's Grocery
Analyses subcontracted to SC certified lab 84009.

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

Full Service Analytical & Environmental Solutions

April 8, 1996

To: Katawba Environmental, Inc
Attn: Michelle Corley
PO Box 11228
Rock Hill, SC 29730

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA47281	Customer Code: KATAWBA
Login Group #: 4363B6	Customer Reference: SMITHSGR
Phone Number: (800)811-2266	Customer Sample I.D#: 2 TANK 2
Sample collection date: 03/27/96	Time: 12:35
Lab submittal date: 03/27/96	Time: 14:30
Received by: CP	Validated by: ADO

Parameter: AROMATIC VOLATILE ORGANICS, 8260
Method reference: 8260 Unit: mg/kg
Result: see below
Date started: 03/30/96 Date finished: 03/30/96
Time started: 22:48 Analyst: SA

Parameter: PREP. METHOD 3550
Method reference: 3550 Unit:
Result: Completed MDL or sensitivity:
Date started: 04/02/96 Date finished: 04/02/96
Time started: Analyst: SA

Parameter: METHOD 8270
Method reference: 8270 Unit: mg/kg
Result: see below
Date started: 04/04/96 Date finished: 04/04/96
Time started: 03:28 Analyst: SA

Data for AROMATIC VOLATILE ORGANICS, 8260 mg/kg:

Component Name	Result	Component MDL
BENZENE	0.018	0.002
TOLUENE	0.044	0.010
ETHYLBENZENE	0.031	0.002
XYLENES	0.151	0.002
NAPHTHALENE	0.021	0.002
SURR: 1,2-DICHLOROETHANE, d14	99	62-147
SURR: TOLUENE, d8	102	84-117
SURR: 4-BROMOFLUOROBENZENE	99	74-117

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

Data for METHOD 8270 mg/kg:

Component Name	Result	Component MDL
NAPHTHALENE	Not detected	0.33
ACENAPHTHENE	Not detected	0.33
ANTHRACENE	Not detected	0.33
FLUORANTHENE	Not detected	0.33
FLUORENE	Not detected	0.33
PYRENE	Not detected	0.33
BENZO(a)ANTHRACENE	Not detected	0.33
BENZO(a)PYRENE	Not detected	0.33
BENZO(a)FLUORANTHENE	Not detected	0.33
BENZO(k)FLOURANTHENE	Not detected	0.33
CHRYSENE	Not detected	0.33
DIBENZO(a,h)ANTHRACENE	Not detected	0.33
INDENO(1,2,3-cd)PYRENE	Not detected	0.33
ACENAPTHYLENE	Not detected	0.33
BENZO(g,h,i)PERYLENE	Not detected	0.33
PHENANTHRENE	Not detected	0.33
SURR: NITROBENZENE	70	23-120
SURR: 2-FLUOROBIPHENYL	75	30-115
SURR: TERPHENYL, D14	94	18-140

Sample comments:

Project Name: Smith's Grocery
Analyses subcontracted to SC certified lab # 84009.

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

April 8, 1996

To: Katawba Environmental, Inc
Attn: Michelle Corley
PO Box 11228
Rock Hill, SC 29730

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA47282	Customer Code: KATAWBA
Login Group #: 4363B6	Customer Reference: SMITHSGR
Phone Number: (800)811-2266	Customer Sample I.D#: 3 MID 1&2
Sample collection date: 03/27/96	Time: 12:40
Lab submittal date: 03/27/96	Time: 14:30
Received by: CP	Validated by: ADO

Parameter: AROMATIC VOLATILE ORGANICS, 8260
Method reference: 8260 Unit: mg/kg
Result: see below
Date started: 03/30/96 Date finished: 03/30/96
Time started: 23:25 Analyst: SA

Parameter: PREP. METHOD 3550
Method reference: 3550 Unit:
Result: Completed MDL or sensitivity:
Date started: 04/02/96 Date finished: 04/02/96
Time started: Analyst: SA

Parameter: METHOD 8270
Method reference: 8270 Unit: mg/kg
Result: see below
Date started: 04/04/96 Date finished: 04/04/96
Time started: 05:00 Analyst: SA

Data for AROMATIC VOLATILE ORGANICS, 8260 mg/kg:

Component Name	Result	Component MDL
BENZENE	Not detected	0.002
TOLUENE	Not detected	0.010
ETHYLBENZENE	Not detected	0.002
XYLENES	Not detected	0.002
NAPHTHALENE	Not detected	0.002
SURR: 1,2-DICHLOROETHANE, d14	97	62-147
SURR: TOLUENE, d8	102	84-117
SURR: 4-BROMOFLUOROBENZENE	100	74-117

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

Data for METHOD 8270 mg/kg:

Component Name	Result	Component MDL
NAPHTHALENE	Not detected	0.33
ACENAPHTHENE	Not detected	0.33
ANTHRACENE	Not detected	0.33
FLUORANTHENE	Not detected	0.33
FLUORENE	Not detected	0.33
PYRENE	Not detected	0.33
BENZO(a)ANTHRACENE	Not detected	0.33
BENZO(a)PYRENE	Not detected	0.33
BENZO(a)FLUORANTHENE	Not detected	0.33
BENZO(k)FLOURANTHENE	Not detected	0.33
CHRYSENE	Not detected	0.33
DIBENZO(a,h)ANTHRACENE	Not detected	0.33
INDENO(1,2,3-cd)PYRENE	Not detected	0.33
ACENAPTHYLENE	Not detected	0.33
BENZO(g,h,i)PERYLENE	Not detected	0.33
PHENANTHRENE	Not detected	0.33
SURR: NITROBENZENE	78	23-120
SURR: 2-FLUOROBIPHENYL	91	30-115
SURR: TERPHENYL, D14	100	18-140

Sample comments:

Project Name: Smith's Grocery
Analyses subcontracted to SC certified lab #84009.

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

Full Service Analytical & Environmental Solutions

April 8, 1996

To: Katawba Environmental, Inc
Attn: Michelle Corley
PO Box 11228
Rock Hill, SC 29730

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA47283	Customer Code: KATAWBA
Login Group #: 4363B6	Customer Reference: SMITHSGR
Phone Number: (800)811-2266	Customer Sample I.D#: 4 20 LINE
Sample collection date: 03/27/96	Time: 12:45
Lab submittal date: 03/27/96	Time: 14:30
Received by: CP	Validated by: ADO

Parameter: AROMATIC VOLATILE ORGANICS, 8260
Method reference: 8260 Unit: mg/kg
Result: see below
Date started: 03/31/96 Date finished: 03/31/96
Time started: 00:02 Analyst: SA

Parameter: PREP. METHOD 3550
Method reference: 3550 Unit:
Result: Completed MDL or sensitivity:
Date started: 04/02/96 Date finished: 04/02/96
Time started: Analyst: SA

Parameter: METHOD 8270
Method reference: 8270 Unit: mg/kg
Result: see below
Date started: 04/04/96 Date finished: 04/04/96
Time started: 05:37 Analyst: SA

Data for AROMATIC VOLATILE ORGANICS, 8260 mg/kg:

Component Name	Result	Component MDL
BENZENE	Not detected	0.002
TOLUENE	Not detected	0.010
ETHYLBENZENE	Not detected	0.002
XYLENES	Not detected	0.002
NAPHTHALENE	Not detected	0.002
SURR: 1,2-DICHLOROETHANE, d14	100	62-147
SURR: TOLUENE, d8	96	84-117
SURR: 4-BROMOFLUOROBENZENE	112	74-117

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

Data for METHOD 8270 mg/kg:

Component Name	Result	Component MDL
NAPHTHALENE	Not detected	0.33
ACENAPHTHENE	Not detected	0.33
ANTHRACENE	Not detected	0.33
FLUORANTHENE	Not detected	0.33
FLUORENE	Not detected	0.33
PYRENE	Not detected	0.33
BENZO(a)ANTHRACENE	Not detected	0.33
BENZO(a)PYRENE	Not detected	0.33
BENZO(a)FLUORANTHENE	Not detected	0.33
BENZO(k)FLOURANTHENE	Not detected	0.33
CHRYSENE	Not detected	0.33
DIBENZO(a,h)ANTHRACENE	Not detected	0.33
INDENO(1,2,3-cd)PYRENE	Not detected	0.33
ACENAPTHYLENE	Not detected	0.33
BENZO(g,h,i)PERYLENE	Not detected	0.33
PHENANTHRENE	Not detected	0.33
SURR: NITROBENZENE	82	23-120
SURR: 2-FLUOROBIPHENYL	96	30-115
SURR: TERPHENYL, D14	101	18-140

Sample comments:

Project Name: Smith's Grocery
Analyses subcontracted to SC certified lab # 84009.

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

Full Service Analytical & Environmental Solutions

April 8, 1996

To: Katawba Environmental, Inc
Attn: Michelle Corley
PO Box 11228
Rock Hill, SC 29730

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA47284	Customer Code: KATAWBA
Login Group #: 4363B6	Customer Reference: SMITHSGR
Phone Number: (800)811-2266	Customer Sample I.D#: 5 40 LINE
Sample collection date: 03/27/96	Time: 12:50
Lab submittal date: 03/27/96	Time: 14:30
Received by: CP	Validated by: ADO

Parameter: AROMATIC VOLATILE ORGANICS, 8260
Method reference: 8260 Unit: mg/kg
Result: see below
Date started: 03/31/96 Date finished: 03/31/96
Time started: 00:39 Analyst: SA

Parameter: PREP. METHOD 3550
Method reference: 3550 Unit:
Result: Completed MDL or sensitivity:
Date started: 04/02/96 Date finished: 04/02/96
Time started: Analyst: SA

Parameter: METHOD 8270
Method reference: 8270 Unit: mg/kg
Result: see below
Date started: 04/04/96 Date finished: 04/04/96
Time started: 10:32 Analyst: SA

Data for AROMATIC VOLATILE ORGANICS, 8260 mg/kg:

Component Name	Result	Component MDL
BENZENE	3.00	2.00
TOLUENE	113	10.0
ETHYLBENZENE	62.0	2.00
XYLENES	340	2.00
NAPHTHALENE	15.0	2.00
SURR: 1,2-DICHLOROETHANE, d14	96	62-147
SURR: TOLUENE, d8	101	84-117
SURR: 4-BROMOFLUOROBENZENE	97	74-117

Lab Report

Full Service Analytical & Environmental Solutions

Data for METHOD 8270 mg/kg:

Component Name	Result	Component MDL
NAPHTHALENE	5.00	0.33
ACENAPHTHENE	Not detected	0.33
ANTHRACENE	Not detected	0.33
FLUORANTHENE	Not detected	0.33
FLUORENE	Not detected	0.33
PYRENE	Not detected	0.33
BENZO(a)ANTHRACENE	Not detected	0.33
BENZO(a)PYRENE	Not detected	0.33
BENZO(a)FLUORANTHENE	Not detected	0.33
BENZO(k)FLOURANTHENE	Not detected	0.33
CHRYSENE	Not detected	0.33
DIBENZO(a,h)ANTHRACENE	Not detected	0.33
INDENO(1,2,3-cd)PYRENE	Not detected	0.33
ACENAPTHYLENE	Not detected	0.33
BENZO(g,h,i)PERYLENE	Not detected	0.33
PHENANTHRENE	Not detected	0.33
SURR: NITROBENZENE	71	23-120
SURR: 2-FLUOROBIPHENYL	97	30-115
SURR: TERPHENYL, D14	53	18-140

Sample comments:

Project Name: Smith's Grocery
Analyses subcontracted to SC certified lab # 84009.

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

Full Service Analytical & Environmental Solutions

April 8, 1996

To: Katawba Environmental, Inc
Attn: Michelle Corley
PO Box 11228
Rock Hill, SC 29730

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA47285	Customer Code: KATAWBA
Login Group #: 4363B6	Customer Reference: SMITHSGR
Phone Number: (800)811-2266	Customer Sample I.D#: 6 DISPENSER
Sample collection date: 03/27/96	Time: 12:55
Lab submittal date: 03/27/96	Time: 14:30
Received by: CP	Validated by: ADO

Parameter: AROMATIC VOLATILE ORGANICS, 8260
Method reference: 8260 Unit: mg/kg
Result: see below
Date started: 03/31/96 Date finished: 03/31/96
Time started: 01:17 Analyst: SA

Parameter: PREP. METHOD 3550
Method reference: 3550 Unit:
Result: Completed MDL or sensitivity:
Date started: 04/02/96 Date finished: 04/02/96
Time started: Analyst: SA

Parameter: METHOD 8270
Method reference: 8270 Unit: mg/kg
Result: see below
Date started: 04/04/96 Date finished: 04/04/96
Time started: 06:51 Analyst: SA

Data for AROMATIC VOLATILE ORGANICS, 8260 mg/kg:

Component Name	Result	Component MDL
BENZENE	Not detected	0.002
TOLUENE	Not detected	0.010
ETHYLBENZENE	Not detected	0.002
XYLENES	Not detected	0.002
NAPHTHALENE	Not detected	0.002
SURR: 1,2-DICHLOROETHANE, d14	101	62-147
SURR: TOLUENE, d8	97	84-117
SURR: 4-BROMOFLUOROBENZENE	116	74-117

ISM INC.
Full Service Analytical & Environmental Solutions

Data for METHOD 8270 mg/kg:

Component Name	Result	Component MDL
NAPHTHALENE	Not detected	0.33
ACENAPHTHENE	Not detected	0.33
ANTHRACENE	Not detected	0.33
FLUORANTHENE	Not detected	0.33
FLUORENE	Not detected	0.33
PYRENE	Not detected	0.33
BENZO(a)ANTHRACENE	Not detected	0.33
BENZO(a)PYRENE	Not detected	0.33
BENZO(a)FLUORANTHENE	Not detected	0.33
BENZO(k)FLOURANTHENE	Not detected	0.33
CHRYSENE	Not detected	0.33
DIBENZO(a,h)ANTHRACENE	Not detected	0.33
INDENO(1,2,3-cd)PYRENE	Not detected	0.33
ACENAPTHYLENE	Not detected	0.33
BENZO(g,h,i)PERYLENE	Not detected	0.33
PHENANTHRENE	Not detected	0.33
SURR: NITROBENZENE	77	23-120
SURR: 2-FLUOROBIPHENYL	95	30-115
SURR: TERPHENYL, D14	96	18-140

Sample comments:

Project Name: Smith's Grocery
Analyses subcontracted to SC certified lab # 84009.

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

Client: Catawba Environmental
Address: P.O. Box 11228
Rock Hill, SC 29730
Phone: 800-811-2266

Report To: Michelle Corley
Bill To: Catawba Environmental
P.O.#/Billing Reference:
Project Name: Smiley's Grocery

Lab Location Requested for Certified Analysis: NC ___ SC ✓ Other ___
Water Chlorinated: Yes ___ No ___ NA ___
Sample Iced Upon Collection: Yes ___ No ●
Requested Due Date: ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED 8270	ANALYSES REQUESTED 8260	ANALYSES REQUESTED	ANALYSES REQUESTED	ANALYSES REQUESTED	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
Tank 1	3/27	12:30	soil	G	1		ice	X	X					DNH		
Tank 2	3/27	12:35	soil	G	2		ice	X	X					BTEX		
Mid 1&2	3/27	12:40	soil	G	3		ice	X	X					NNPH		
2" line	3/27	12:45	soil	G	4		ice	X	X					SC Standards		
4" line	3/27	12:50	soil	G	5		ice	X	X							
dispenser	3/27	12:55	soil	G	6		ice	X	X							
																●
																●

Sampler's Signature: Michelle Corley Sampled By (Print Name): Michelle Corley Affiliation: Consultant

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Michelle Corley			
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
		3/27/16	1430
Method of Shipment:		Date	

Additional Comments:

NPDES: NC ___ SC ___ OTHER ___
UST: NC ✓ SC ___ OTHER ___
GROUNDWATER: NC ___ SC ___ OTHER ___
DRINKING WATER: NC ___ SC ___ OTHER ___
SOLID WASTE: NC ___ SC ___ OTHER ___
OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

CUSTOMER COPY

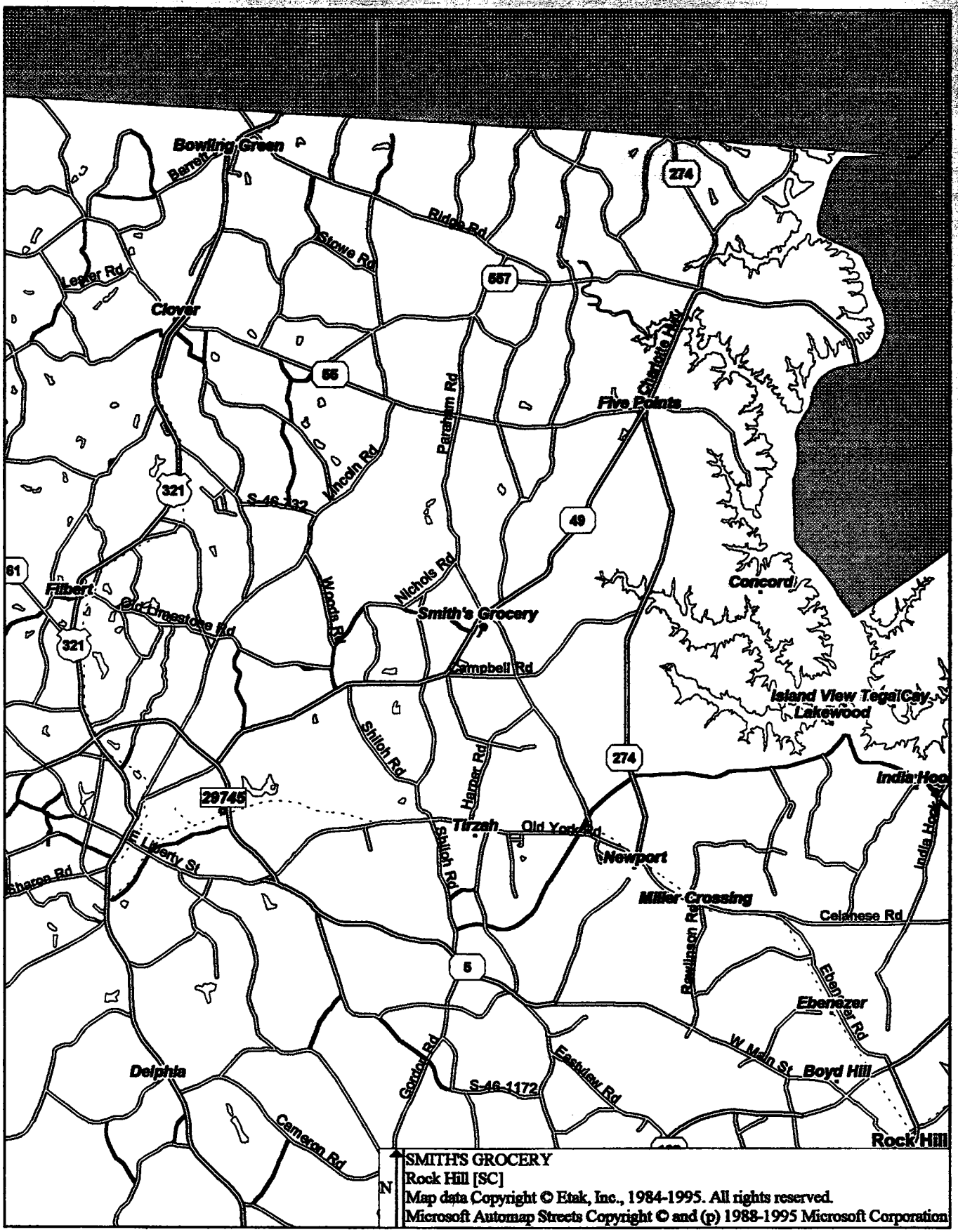
X. SAMPLING METHODOLOGY

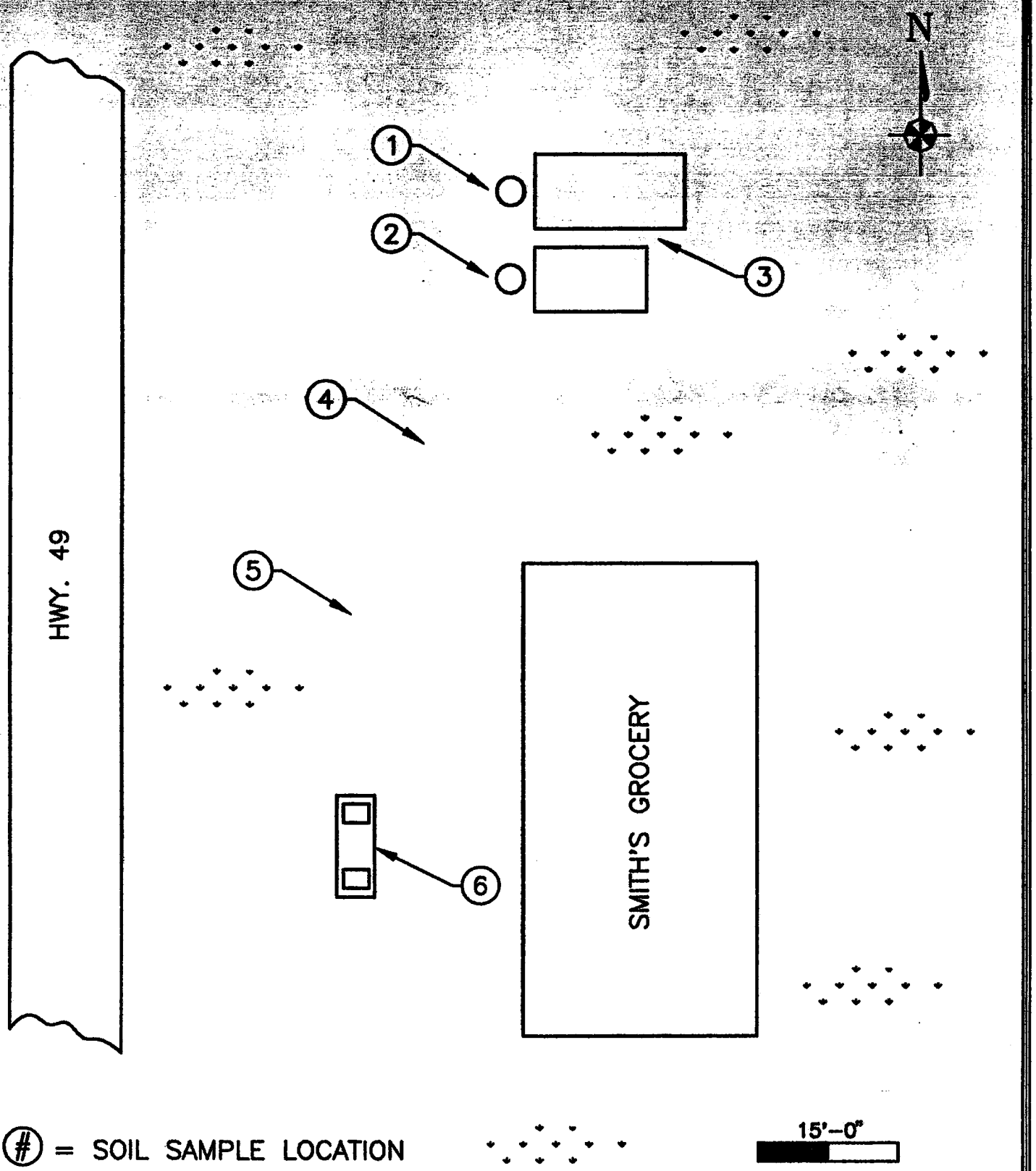
Provide a detailed description of the methods used to collect and store (preserve) the samples. Please use the space provided below.

Samples were taken by the grab method with new gloves worn for each sample. Samples were packed into laboratory approved glass containers with Teflon caps. After each sample was taken they were immediately placed on ice for direct transport to the laboratory. Chain of custody tape was placed on each jar and a chain of custody form was filled out for the sample batch.

XI. RECEPTORS

	Yes	No
A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system. If yes, indicate type of receptor, distance, and direction on site map.		x
B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system? If yes, indicate type of well, distance, and direction on site map.	x	
C. Are there any underground structures (e.g., basements) located within 100 feet of the UST system. If yes, indicate type of structure, distance, and direction on site map.		x
D. Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? If yes, indicate the type of utility, distance, and direction on the site map.	x	
E. Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete? If yes, indicate the area of contaminated soil on the site map.	x	


Bowling Green
Barrett
Ridge Rd
Stowe Rd
Lesser Rd
Clover
274
557
55
Five Points
Charlotte Hwy
Parraham Rd
Lincoln Rd
321
S-46-132
49
61
Filbert
Old Dragstone Rd
Woods Rd
Nichols Rd
Smith's Grocery
Concord
Campbell Rd
Island View
TegalCay
Lakewood
Shiloh Rd
Harper Rd
274
India Hook
29745
Tirzah
Old York Rd
Newport
Liberty St
Sharon Rd
Miller Crossing
Celanese Rd
Rawlinson Rd
5
Ebenezer
Ebenezer Rd
W Main St
Boyd Hill
Eastview Rd
Gordon Rd
S-46-1172
Delphia
Cameron Rd
Rock Hill
N
SMITH'S GROCERY
Rock Hill [SC]
Map data Copyright © Etak, Inc., 1984-1995. All rights reserved.
Microsoft Automap Streets Copyright © and (p) 1988-1995 Microsoft Corporation



KATAWBA ENVIORNMENTAL, INC.	CONFIDENTIAL THIS PRINT AND/OR SPECIFICATION CONTAINS PROPRIETARY INFORMATION OF KE, INC. AND IS NOT TO BE REPRODUCED, COPIED, OR DISCLOSED TO ANYONE WITHOUT THE EXPRESS WRITTEN PERMISSION OF KE, INC.	Date 4/25/96	Drawn SF
		Scale 1"=15'-0"	Approved
		JOB No. SMITH'S GROCERY	

Tank Disposal Certificate

ROY SYKES

dba as FRYE'S CONSTRUCTION COMPANY
1206 NORTH CANNON BOULEVARD
KANNAPOLIS, NORTH CAROLINA 28083

Address: 615 Homer Query Road
China Grove, North Carolina 28023
Phone: 1 (704) 932-5501
Digital Pager 1 (704) 792-3968

Date: 4-16-96

CERTIFICATE OF DISPOSAL

CONTRACTOR	LOCATION
Roy Sykes	Smith's Grocery
1206 North Cannon Blvd.	Highway 49
Kannapolis, NC	York, SC
28083	29745

TYPE OF TANK	DIMENSIONS	CONTENTS IN GALLONS
Steel	8' X 16'	6000
Steel	8' X 20'	8000

I Roy Sykes, certify that the above mentioned tanks have been properly disposed of and the contents and sludges handled in full Compliance with Local, State, and Federal Laws.

Note: _____

Roy Sykes
dba as Frye's Construction Company

Roy Sykes

Appendix 5 - INSURANCE STATEMENT

This site is potentially eligible to receive state monies to assist you in site rehabilitation, if required. Before eligibility for State Underground Petroleum Environmental Response Bank (SUPERB) funds can be determined, written confirmation of the existence or non-existence of an environmental insurance policy for this site is required. Please complete the following information:

X I do not have any insurance that would cover releases from underground storage tanks.

____ I have an insurance policy that covers releases from underground storage tanks.

My policy provider is: _____
The policy deductible is: _____
The policy limit is: _____

If you have this type of insurance, please include a copy of the policy with this report.

Signature: Lou B. Bruce

Date: 4.13.96

To be Completed by Notary Public:

Sworn before me this 13th day of April, 1996.

Lou M Taylor
(Name)

Notary Public for the state of South Carolina

My commission expires March 16th 2004.

Please affix State Seal if you are commissioned outside South Carolina.

CBM
ENVIRONMENTAL SERVICES, INC.

RECEIVED
NOV 2 2 1999
DIVISION OF UNDERGROUND
STORAGE TANK MGMT.

FAX COVER SHEET

To:	Pam DAVIS	**From:**	SCOTT BALL
Company:	SCDHEC	**Date:**	11/23/99
Fax No.:		**No. Pages:**	6 (Including Cover)
Phone No.:		**Regarding:**	SMITHS' GROCERY

_____Urgent ___✓___For Review _____Please Comment _____Please Call Me

Notes/Comments: ATTACHED IS THE RESULTS FOR THE MOST RECENT SAMPLING OF THE VICKERY & HILL WATER SUPPLY WELLS. TOTAL FOOTAGE FOR SOIL BORINGS, TEMPORARY WELLS & PERMANENT WELLS ARE ALSO ATTACHED FOR YOUR REVIEW AND USE IN ACCP ADDENDUM. PLEASE CALL W/ ANY QUESTIONS.

SCOTT

P. O. Box 411387, Charlotte NC 28241
377 Carowinds Boulevard, Suite 118, Fort Mill SC 29708
Fax Number: 803 548-5892 Phone Number: 803 548-5989

Lab Report

RECEIVED
NOV 2 2 1999
DIVISION OF UNDERGR[illegible]
STORAGE TANK MGMT

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/22/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: VICKERY WSW
Prism Sample ID: AB49232
Login Group: PGN19F1A
Sample Collection Date/Time: 11/16/199 17:11
Lab Submittal Date/Time: 11/18/199 11:40

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/21/1999 08:35	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
SURR: TOLUENE d8	100.00	%		8260	11/21/1999 08:35	PEL
SURR: 1,4-DCB-D4	106.50	%		8260	11/21/1999 08:35	PEL
SURR: DIBROMOFLUOROMETHANE	97.25	%		8260	11/21/1999 08:35	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

Full Service Analytical & Environmental Solutions

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp 5			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?			

PRESS DOWN FIRMLY - 3 COPIES

Client CBM ENVIRONMENTAL SERVICES, INC
Physical Address 377 CARDINALS BLVD. SUITE 18
FORT MILL SC 29708
Phone (803) 548-5189 Fax (803) 548-5892
P.O.#/Billing Reference 11299
Project Name SMITH'S GROCERY - JOB # 10629

REPORT TO: Name SCOTT BALL
Address
BILL TO: Name CBM
Address
Requested Due Date 24 HOUR TURNAROUND REQUIRED

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested NC ___ SC ✓ Other ___ NA ___
Water Chlorinated Yes ___ No ✓ NA ___
Sample Iced Upon Collection Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: EDB 8260 MTBE, MAP	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
WICKERY WELL	11/10/99	WATER	1711	VOA	3	40ml	HCl	✓			4252
		RUSH									

Sampler's Signature Shannon L. Cottrell Sampled By (Print Name) SHANNON L. COTTRELL Affiliation CBM ENVIRONMENTAL

Relinquished By: (Signature)	Received By: (Signature)	Date	Military Hours
Shannon L. Cottrell	Heidi McClure	11/17/99	1057
Relinquished By: (Signature)	Received By: (Signature)	Date	Military Hours
Heidi McClure		11/18/99	1045
Method of Shipment	Received For Prism Laboratories By:	Log-In Group No.	
		PGN1F1A	

Additional Comments

1146

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ___ SC ___ OTHER ___ DRINKING WATER: NC ✓ SC ✓ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

CBM ENVIRONMENTAL TEL:803485892 Nov 23'99 10:23 No.002 P.03

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/22/1999

CBM Environmental Services
Scott Ball
P. O. Box 411387
Charlotte, NC 28241

Customer Project ID: Smith's Grocery
Customer Sample ID: HILL WSW
Prism Sample ID: AB49231
Login Group: RGN10F1
Sample Collection Date/Time: 11/17/199 10:10
Lab Submittal Date/Time: 11/18/199 11:40

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
BENZENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
ETHYLBENZENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
NAPHTHALENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
TOLUENE	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
XYLENES	Not detected	ug/L	2.00	8260	11/21/1999 08:35	PEL
METHYL-T-BUTYL ETHER	Not detected	ug/L	1.00	8260	11/21/1999 08:35	PEL
SURR: TOLUENE d8	99.75	%		8260	11/21/1999 08:35	PEL
SURR: 1,4-DCB-D4	113.25	%		8260	11/21/1999 08:35	PEL
SURR: DIBROMOFLUOROMETHANE	95.50	%		8260	11/21/1999 08:35	PEL

Sample Comments:
Sample was subcontracted to SC certified laboratory # 96023.

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

Client: CBM ENVIRONMENTAL SERVICES, INC.
Physical Address: 337 CAROLINDS BLVD, SUITE 118
FORT MILL, SC 29708
Phone: (803) 548-5989 Fax: (803) 548-5092
P.O./Billing Reference: 11298
Project Name: SMITH'S GROCERY - JOB# 10629

REPORT TO: Name: SCOTT BALL
Address:
BILL TO: Name: CBM
Address:
Requested Due Date: 24 HOURS OR ASAP
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 3°	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?			

State Certification Requested: NC ___ SC ✓ Other ___ NA ___
Water Chlorinated: Yes ___ No ✓ NA ___
Sample Iced Upon Collection: Yes ✓ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED BTEX & MTBE 602	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
HILL WSW	11/17/99	1040	WATER	VOA	3	40ml	HCl	✓			49231

Sampler's Signature: Shannon L. Cottrill Sampled By (Print Name): SHANNON L. COTTRILL Affiliation: CBM ENVIRONMENTAL

Relinquished By: (Signature) Shannon L. Cottrill	Received By: (Signature) Terrie McClure	Date 11/18/99	Military Hours 1105
Relinquished By: (Signature) Terrie McClure	Received For Prism Laboratories By: Kathryn Stirling	Date 11/18/99	1140
Method of Shipment:		Lab Project No. PGN19F1	

Additional Comments:

NPDES NC ___ SC ___ OTHER ___ UST: NC ___ SC ___ OTHER ___ GROUNDWATER: NC ✓ SC ___ OTHER ___ DRINKING WATER: NC ___ SC ___ OTHER ___ SOLID WASTE: NC ___ SC ___ OTHER ___ OTHER: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

CBM ENVIRONMENTAL TEL:8075485892 Nov 23 10:24 No.002 P.05

SMITH'S GROCERY
JOB# 10629
TOTAL FOOTAGE

SOIL BORINGS

6 SOIL BORINGS @ 20.0 FEET = 120 FEET
6 SOIL BORINGS @ 10.0 FEET = 60 FEET
TOTAL = 180 FEET

TEMPORARY WELLS (FIELD SCREENING)

32 TEMPORARY FIELD SCREENING WELLS @ A TOTAL OF 1185 FEET.

PERMANENT WELLS

18 TYPE II WELLS @ A TOTAL OF 729 FEET

1 TYPE III WELL W/ 40 FEET OUTER CASING AND 21 FEET INNER CASING. TOTAL = 61 FEET.

TOTAL FOOTAGE = 2,155 FEET

CP#0923
orig CP = $62448.45
soil bor. = 870'
water table = 420'
telescoply = 56'

14 gws' smpl colling
BTEX, PAH, lead, edb, nitrate
Sulfate, Iron, Methane

PROJECT TRANSFER CHECKLIST

Site Name/Full ID # Smith's Grocery N-46-NO-09322

Release # 1 For UST # 1+2 Release Report Date 6/30/93

Free Product Reported? Yes / (No) Impacted Water Supply Well Reported? Yes / (No)

Worst Case Analysis / Sample # 5 Soil (mg/kg) / # 5 Water (ug/l) / #

Benzene	3.00 ppm	
Toluene	113 ppm	
Ethylbenzene	62.0 ppm	
Xylenes	340.0 ppm	
Naphthalene	15.0 ppm	
Benzo(a)anthracene	ND	
Benzo(b)flouranthene		
Benzo(k)flouranthene		
Chrysene		
Dibenz(a,h)anthracene		
MTBE (water only)		
Other Naphthalene	5.00 ppm	

REGULATORY INFORMATION

1. All USTs Registered? (Yes) / No / NA
2. Regulatory PM fantrm
3. All Applicable Annual Fees Paid? (Yes) / No / NA
4. Site In Substantial Compliance? Yes / No / (NA) (attach copy of letter/memo to file)
5. UST Status (account for all USTs in database)

   2 USTs Permanently Closed Date Closed 3/27/96

   ____ USTs CIU & Passed TT Date Tested ____

   ____ USTs TOU & Emptied Date Emptied ____

6. Project Transferred To: Technical / Federal On ____