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February 24, 2022

Mr. Tim Hornosky
SC Department of Health and Environmental Control
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Subject: Offsite Saturated Zone Investigation Report change pages
Former Federal Pacific Electric Company Facility (Site ID 00346)
Edgefield, South Carolina

Dear Mr. Hornosky:

On behalf of Federal Pacific Electric Company (FPE), we are submitting change pages to the Offsite Saturated Zone Investigation Report originally submitted 15DEC21, with an updated electronic version of the revised document. These changes are in response to your requests for clarification (Hornosky to Beckner 1/12/22) regarding Section 3.2 of the report. Upon review we noted necessary revisions to Table 1 and several hydrographs in Appendix C that are included herein.

We appreciate your input on this matter, and if you have questions or comments, please feel welcome to contact me at (865)691-5052.

Best regards
de maximis, inc.

Bennie L. Underwood
Trustee, FPE Liquidation Trust

cc: J. Beckner, Arcadis
Nicole Barkasi, de maximis

https://demaximisinc.sharepoint.com/sites/Projects2/Shared Documents/Active/3276 - FPE Edgefield/05 State Correspondence/2022/Off-site Report Change submittal 24FEB21.doc

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de maximis, inc.

450 Montbrook Lane
Knoxville, TN 37919
865-691-5052 phone
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December 15, 2021

Mr. Tim Hornosky
SC Department of Health and Environmental Control
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Subject: Offsite Saturated Zone Investigation Report
Former Federal Pacific Electric Company Facility (Site ID 00346)
Edgefield, South Carolina

Dear Mr. Hornosky:

On behalf of Federal Pacific Electric Company (FPE), we are submitting the Offsite Saturated Zone Investigation Report, with an electronic version. This report documents FPE's investigation of the fractured bedrock zone downgradient of the onsite former Drum Burial and Paint Bed Drying Source areas to determine the location and connectivity of fracture zones, chlorinated hydrocarbon distribution, and potential preferential mass flux zones. We appreciate your consideration on this matter, and if you have questions or comments, please feel welcome to contact me at (865)691-5052.

Best regards
de maximis, inc.

Bennie L. Underwood
Trustee, FPE Liquidation Trust

cc: J. Beckner, Arcadis

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ARCADIS

FORMER FEDERAL PACIFIC ELECTRIC CO. SITE

OFFSITE SATURATED ZONE INVESTIGATION REPORT

Site ID – 00346, Edgefield, SC

December 2021

OFFSITE SATURATED ZONE INVESTIGATION REPORT

Former Federal Pacific Electric Co. Site
Edgefield, South Carolina

Bennie L. Underwood, P.E.
Trustee, FPE Liquidation Trust

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Prepared for:

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Our Ref.:

30067293

Date:

December 2021

CONTENTS

FIGURES

TABLES

APPENDICES

1 INTRODUCTION

Arcadis U.S., Inc. (Arcadis), on behalf of Federal Pacific Electric Company (FPE), has prepared this Offsite Saturated Zone Investigation Report for the former FPE facility in Edgefield, South Carolina. This report documents FPE's offsite saturated zone hydrogeologic and contaminant mass investigation of the upper bedrock aquifer performed in accordance with the SCDHEC-approved *Off-Site Saturated Zone Investigation Workplan* (Arcadis, 11/5/19).

Arcadis performed the investigation that entailed the advancement of five borings (B-1SF through B-5SF) into competent bedrock on the Star Fibers property downgradient of the Paint Bed Drying and Drum Burial source areas (see **Figure 1**). Drilling activities were initiated in December 2019 to provide supplemental information on the subsurface lithologic, hydraulic conditions, and contaminant mass distribution in downgradient areas on the Star Fibers property. Overburden boring, surface casing installation, bedrock coring and geophysical logging were completed December 2019-February 2020. Due to shutdown of non-essential field activities due to COVID-19, depth discrete hydraulic testing and groundwater sampling was postponed for the remainder of 2020. Hydraulic testing resumed in March 2021 and was completed in April 2021. Following field work NewFields analyzed the hydraulic testing data and recalibrated the site groundwater flow model.

This report provides a summary of field activities completed, well logs/completion diagrams, geophysical logging, groundwater elevation data, groundwater sample analytical results, and hydraulic testing results.

2 WORK PERFORMED

2.1 Overburden Drilling and Surface Casing Installation

In accordance with the SCDHEC approved *Off-Site Saturated Zone Investigation Workplan* (Arcadis, 11/5/19), drilling activities were initiated in December 2019 to provide supplemental information on the subsurface lithologic, hydraulic conditions, and contaminant mass distribution in downgradient areas on the Star Fibers property. The investigation entailed the advancement of five borings (B-1SF through B-5SF) into competent bedrock on the Star Fibers property downgradient of the Paint Bed Drying and Drum Burial source areas (**Figure 1**). Each boring was advanced through the saprolite and partially weathered rock (PWR) until refusal at the top of competent bedrock. Each borehole was then advanced approximately 10 feet into competent bedrock to allow 6-inch steel surface casing to be installed and grouted. The surface casing installations were completed December 2019-February 2020.

2.2 Bedrock Coring and Geophysical Logging

Upon completion of surface casing installation, each borehole was advanced to total depths ranging from approximately 106 to 121 feet below land surface (ft bls) with 4-inch PQ core tooling. Following borehole advancement, geophysical logs were collected from the open bedrock portions of each boring. Borehole lithologic logs, SCDHEC Water Well Records, and geophysical logs of all five borings are included in **Appendix A**.

Based on observed fracture zones in the retrieved rock core and geophysical logs of each corehole, passive diffusion bag (PDB) sampling devices were initially deployed at one or more depth intervals in each corehole in April and November 2020 to identify chlorinated hydrocarbon (CHC) concentrations. These data were used to identify fracture zones for hydraulic testing and are discussed in Section 3.1 herein.

2.3 Fracture Zone Hydraulic (Packer) Testing

The packer testing was performed by Arcadis from March 9th to March 23rd, 2021. Packer testing was performed by isolating select intervals in the boreholes and performing pumping tests from the isolated interval. Prior to testing each test borehole, pressure transducers were installed in the test boring and several select surrounding monitoring wells to monitor water levels during background, pumping, and recovery phases of each packer test. Packer testing was performed on a total of nine depth discrete fracture zones. The test boreholes, depth intervals, and associated monitor wells for each test are listed in **Table 1**.

Packer testing of each depth interval consisted of initial purging of groundwater from the zone followed by the collection of an initial groundwater quality sample for CHC analysis. Each packed zone was pumped to determine yield and specific capacity of the fracture zone within the borehole. Pumping rates and duration were varied based on the yield of the packed zone, and the pumping rate for each test zone began at ≤0.5-gallons per minute (gpm). and increased in increments upon equilibration of fluid levels within the test zone. Several boreholes had such low yield that the pumping rates did not exceed 0.5 gpm and/or the test had to be truncated to less than 1-hour duration. Just prior to ceasing pumping of individual zones, a second groundwater sample was collected and submitted for CHC analysis.

Sequential shutdown and startup of select extraction wells proximal to each test well was performed just prior and just after each test to gain an understanding of the potential communication of the apparent water-bearing zones (both at the test well and the monitoring well locations) with the existing groundwater extraction system. The extraction wells were shut-down and started at 15-minute intervals to allow recording of any water level response.

2.4 Fracture Zone Water Quality Sampling and Analysis

Sampling to assess the water quality in the fracture zones at each test borehole was performed over several events. PDB samplers were deployed at a minimum of two depth intervals in test boreholes B-1SF through B-5SF and sampled in April and December 2020. The collected groundwater samples were transferred into laboratory-prepared containers, placed on ice in a cooler, and shipped to SGS under chain-of-custody protocol for analysis of Target Compound List (TCL) Volatile Organic Compounds (VOCs) by SW-846 Method 8260B. Analytical results from these samples are presented in **Table 2** and analytical data packages are included in **Appendix B**.

As described in Section 2.3, groundwater samples were collected during packer testing of each fracture zone. A sample was collected following initial purging of groundwater from the facture zone (sample ID's designated with an A identifier) and a second groundwater sample was collected at each location just prior to cessation of pumping individual zones (sample ID's designated with an B identifier). A total of 18 groundwater samples were collected. Groundwater samples were collected and analyzed as described above for the PDB samples, and results and lab reports included in Table 2 and Appendix B.

3 INVESTIGATION RESULTS

3.1 Fracture Zone Water Quality Data

Initial PDB samples collected in April 2020 from boreholes B-1SF and B-4SF contained the highest dissolved total CHCs concentrations ranging from 5,309 micrograms per liter (µg/L) to 8,882 µg/L. Similarly, PDB samples collected in November 2020 confirmed the highest CHC concentrations occur in boreholes B-1SF and B-4SF with concentrations ranging from 1,672 µg/L to 10,075 µg/L. Of the total CHC measured in the fracture zones, trichloroethylene (TCE) composed 78 to 97 percent and cis-1,2-Dichloroethylene (cis-1,2-DCE), a degradation product of TCE, composed the majority of the remaining total CHC concentration (3 to 12 percent). Detections of

Vinyl Chloride (VC), 1,1-Dichloroethylene (1,1-DCE), trans-1,2-Dichloroethylene (trans-1,2-DCE), and Tetrachloroethylene (PCE) were less than 1%. The distribution of TCE concentrations in the bedrock zone during 4Q20 are illustrated in **Figure 2**.

Samples collected during packer testing indicated test boreholes B-1SF and B-4SF contain the highest dissolved total CHCs with concentrations ranging from 6,171 µg/L to 8,371 µg/L. The analytical data in conjunction with hydraulic measurements in the productive water-bearing interval at B-4SF (80-90 ft bgs) indicate that this interval in particular has, and is, serving as a flow path for CHC migration. Of the total CHC measured in the packer intervals, TCE composed 84 to 96 percent and cis-1,2-DCE, a degradation product of TCE, composed the majority of the remaining total CHC concentration (3 to 17 percent). Detections of VC, 1,1-DCE, trans-1,2-DCE, and PCE were less than 1%. The total CHC concentration for B-2SF (95-105 ft bgs) did show an order or magnitude increase from pre-testing concentrations ranging from 532 µg/L to 723 µg/L to the end of pumping sample, which had a total CHC concentration of 4,464 µg/L. The observed notable CHC concentration increase in B-2SF (approximately 450 ft msl) from limited pumping suggests some hydraulic connection with the high CHC concentration footprint between B-4SF and B-1SF.

3.2 Fracture Zone Hydraulic Testing Data

Groundwater level monitoring during packer testing of the selected test intervals and select nearby monitoring and extraction wells were used to determine the spatial distribution of the water level response and calculated transmissivity/hydraulic conductivity. Test hydrographs of the test boreholes (**Appendix C)** illustrate the graphed water level responses during each packer test. In general, the observation wells showed limited response to pumping in the test borehole interval, but showed more robust responses to on-off cycling of groundwater extraction wells. Following are notable observations from each fracture zone packer test:

B-1SF(40-50): No response from extraction well cycling and no response in observation wells from fracture zone pumping.

B-1SF(75-85): No response from extraction well cycling and no response in observation wells from fracture zone pumping.

B-2SF(95-105): No response from extraction well cycling; observed response at observation well SMMW-6 from fracture zone pumping; observed response in observation well B-4SF from cycling of upgradient extraction well EW-5.

B-3SF(65-75): Observed response from EW-4 cycling; no response in observation wells from fracture zone pumping; observed response in observation well B-4SF from cycling of upgradient extraction well EW-5.

B-3SF(90-100): Observed response at wells MW-25 and B-3SF from extraction well EW-4 cycling; observed response in observation well B-4SF from cycling of upgradient extraction well EW-5.

B-3SF(110-120): Observed response from EW-4 cycling; no observed response in observation wells; observed response in observation well B-4SF from cycling of upgradient extraction well EW-5.

B-4SF(80-90): Observed response from EW-5 cycling; no response in observation wells from fracture zone pumping; observed response in observation wells B-3SF and MW-25 from cycling of extraction well EW-4.

B-5SF(70-80): No observed response from extraction well cycling and no response in observation wells from fracture zone pumping; observed response in observation well AMW-5 from cycling of extraction well EW-12.

B-5SF(95-106.5): No observed response from extraction well cycling and no response in observation wells from fracture zone pumping; observed response in observation well AMW-5 from cycling of extraction well EW-12.

The packer test results were evaluated using Cooper-Jacob method, a solution that can be applied to variable rate pumping tests. The test data were processed using the software AQTESOLV. **Attachment C** presents the straight-line matches for the Cooper-Jacob solution. Transmissivity and hydraulic conductivity values were calculated for each of the tested intervals as follows.

$$T = \frac{2.3Q}{4n\text{-}\Delta s}$$

where T = transmissivity [L^2/T];
Q = flow rate [L^3/T];
s = drawdown [L].

The hydraulic conductivity was calculated as follow:

$$K_h = T/b$$

where Kh = hydraulic conductivity [L/T];
b= aquifer thickness [L].

This analysis is based on the saturated aquifer thickness of 80 feet. The packer testing data results of the calculations are summarized in **Table 3**. Two of the nine intervals tested were found to be productive water-bearing zones, B-3SF (443.6 to 433.6 ft bls) and B-4SF (470.2 to 460.2 ft bls). B-3SF and B-4SF intervals produced maximum yields of 2.9 gpm with 6.43 feet of drawdown and 1.6 gpm with 1.45 feet of drawdown, respectively. The calculated hydraulic conductivity for the lower interval at B-3SF is 0.30 feet per day (ft/day) and at B-4SF is 0.33 ft/day. The other intervals tested (B-1SFs, B-2SF, upper B-3SFs, and B-5SFs) had low hydraulic conductivities, ranging from 0.003 to 0.047 ft/day.

The site numerical groundwater flow model was recalibrated using the short-term hydraulic testing data discussed herein. Following calibration, a particle tracking post-processing package (MODPATH) was used to assess the effectiveness of the current groundwater recovery system. **Figure 3** illustrates the capture zone of the current groundwater extraction system.

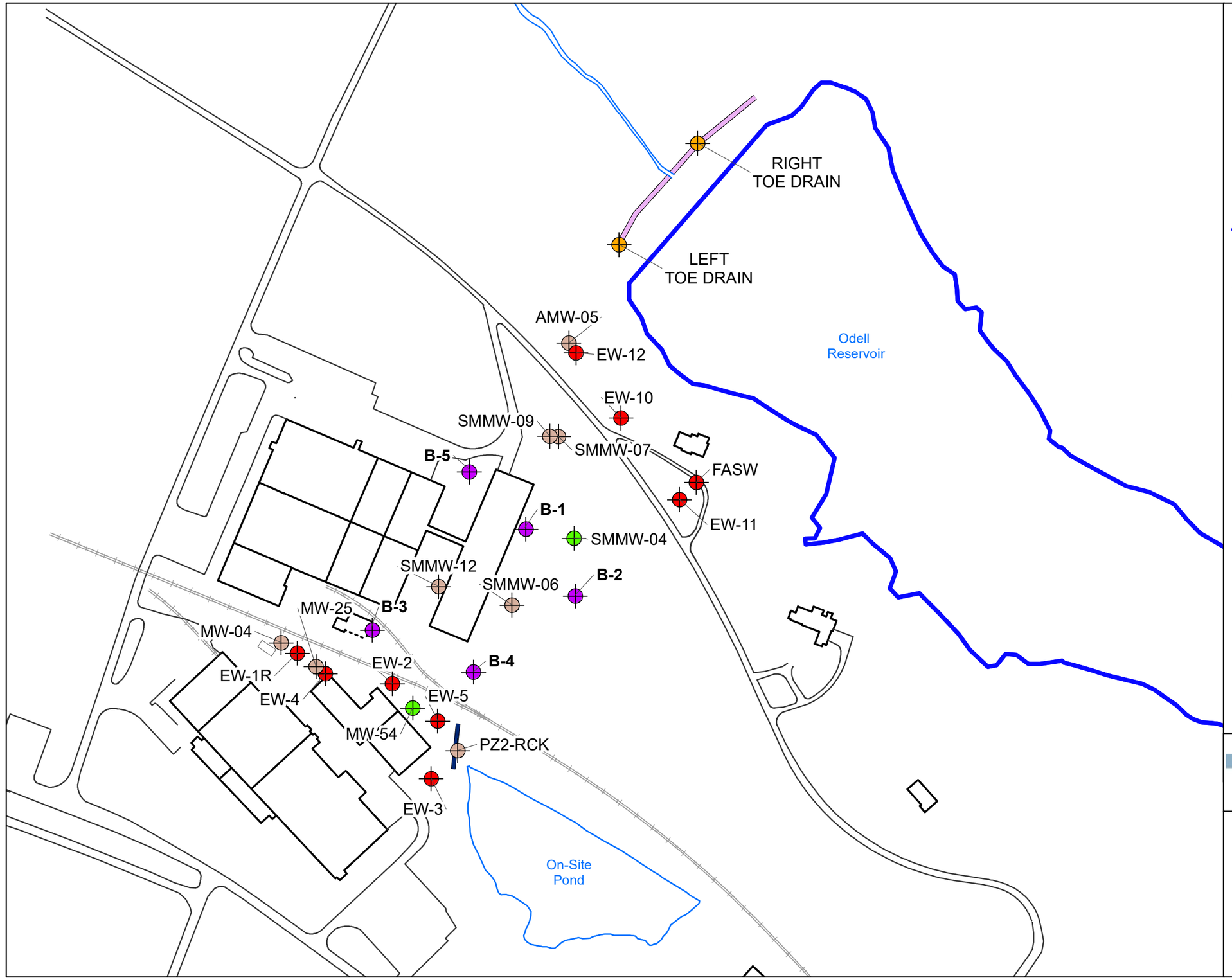
4 SUMMARY AND CONCLUSIONS

The investigation successfully advanced five borings (B-1SF through B-5SF) into competent bedrock on the Star Fibers property downgradient of the Paint Bed Drying and Drum Burial source areas (**Figure 1**). Packer testing was successfully conducted in all five boreholes, each with one or more intervals isolated for the test period with a total of nine tested intervals. The hydraulic packer testing confirms low permeability and limited water-bearing zones at locations B-1SF, B-2SF, upper B-3SF, and B-5SF. However, lower B-3SF and B-4SF zones illustrated somewhat elevated permeability.

There appears to be a strong hydraulic connection between B-4SF and extraction well EW-5. Well B-4 SF (80-90 ft bgs) also has some of the highest CHC concentrations detected in this investigation. Well B-1SF analytical data indicate groundwater in this location does have elevated CHC concentrations, however, it does not appear to be readily influenced by off-site extraction wells EW-10, EW-11, and FASW, extraction well EW-12 was not cycled during the B-1SF packer tests. In addition, although no hydraulic response was observed at downgradient bedrock wells SMMW-7 and SMMW-9 (where the highest CHC concentrations occur between on-site, Star Fibers, and off-site properties) during the short-term test of B-1SF, the reported TCE concentrations during 4Q21 (see Figure 2) suggest some hydraulic connection between the former Drum Burial source area and downgradient wells B-1SF, SMMW-7, and SMMW-9.

Packer testing of B-2SF (95-105 ft bgs) illustrated hydraulic connection with SMMW-6, located approximately 125 ft east of B-2SF and within the high CHC concentration footprint between B-4SF and B-1SF. The reported order of magnitude increase in CHC concentrations from pumping of B-2SF indicates some hydraulic connection with the high CHC concentration footprint between B-4SF and B-1SF. It must be noted that the duration (140 minutes) and pumping rate (maximum 3 gpm) of the B-2SF packer test were the highest of all nine tests.

FIGURES



Legend

- TOE DRAIN
- EXTRACTION WELL
- PARTIALLY WEATHERED ROCK WELL
- BEDROCK WELL
- PACKER TESTED WELL
- ODELL RESERVOIR
- WATER FEATURE
- TOE DRAIN
- ROADS
- RAILROADS
- BUILDINGS
- TRENCH

N
W E
S

Feet
0 100 200 400

Notes:
1. All locations and dimensions are approximate.
2. PWR - Partially weathered rock

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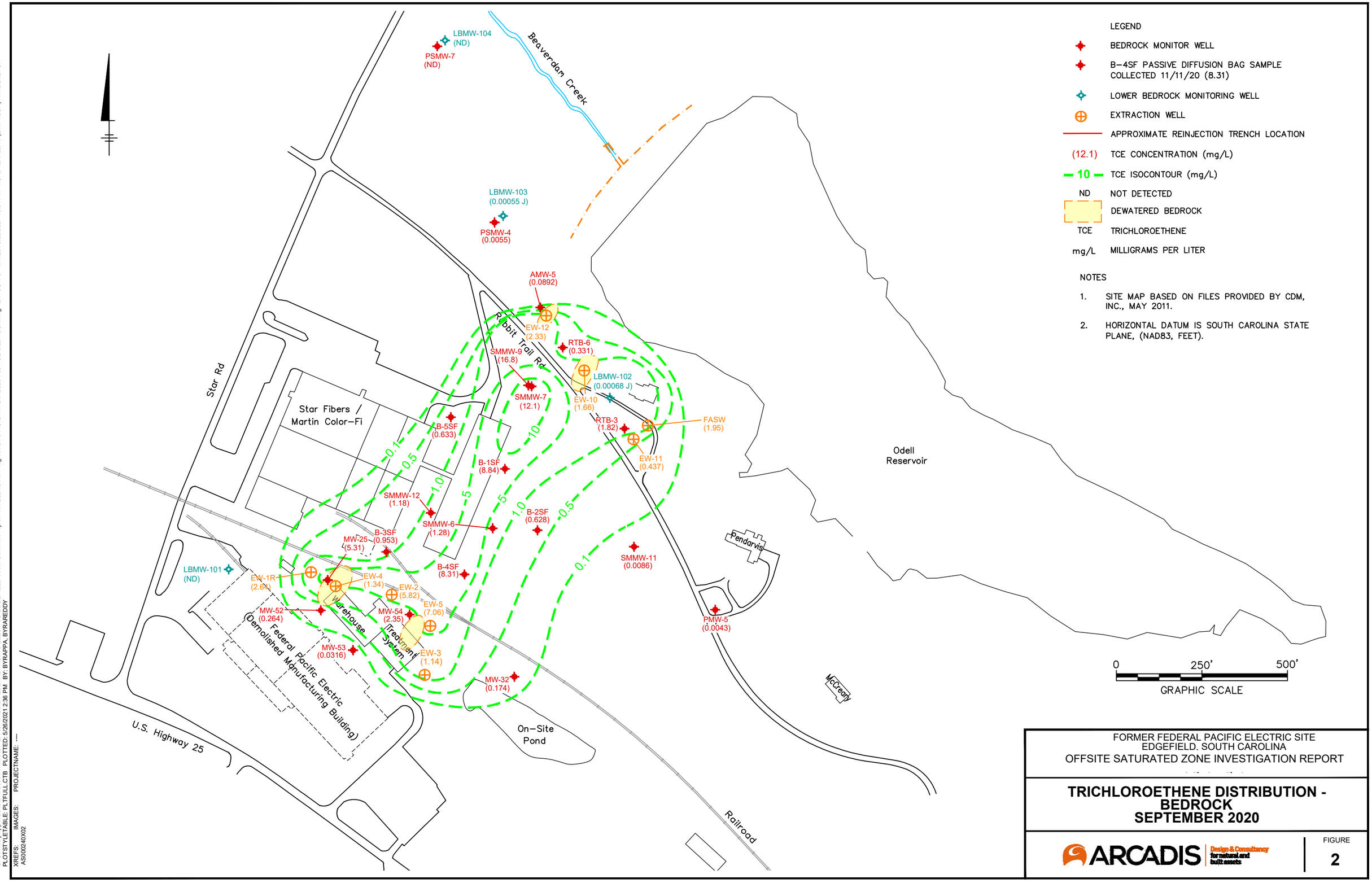
FIGURE 1
EXTRACTION WELL, MONITORING WELL, AND OFFSITE TEST BORING LOCATIONS

Former Federal Pacific Site, Edgefield, South Carolina



FORMER FEDERAL PACIFIC ELECTRIC SITE
EDGEFIELD, SOUTH CAROLINA
OFFSITE SATURATED ZONE INVESTIGATION REPORT

TRICHLOROETHENE DISTRIBUTION - BEDROCK SEPTEMBER 2020

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
C:\Users\byrappab8346\BIM 360\Arcadis\AUS-EXXON MOBIL-FEDERAL PACIFIC ELECTRIC-EDGEFIELD South Carolina\Project Files\2021101-In Progress\01-DWG\GWM-2SA2020-F09-TCE-BEDROCK.dwg LAYOUT: 9 SAVED: 5/25/2021 10:54 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---
PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 5/26/2021 2:36 PM BY: BYRAPPA, BYRAREDDY
XREFS: IMAGES: PROJECTNAME: ---
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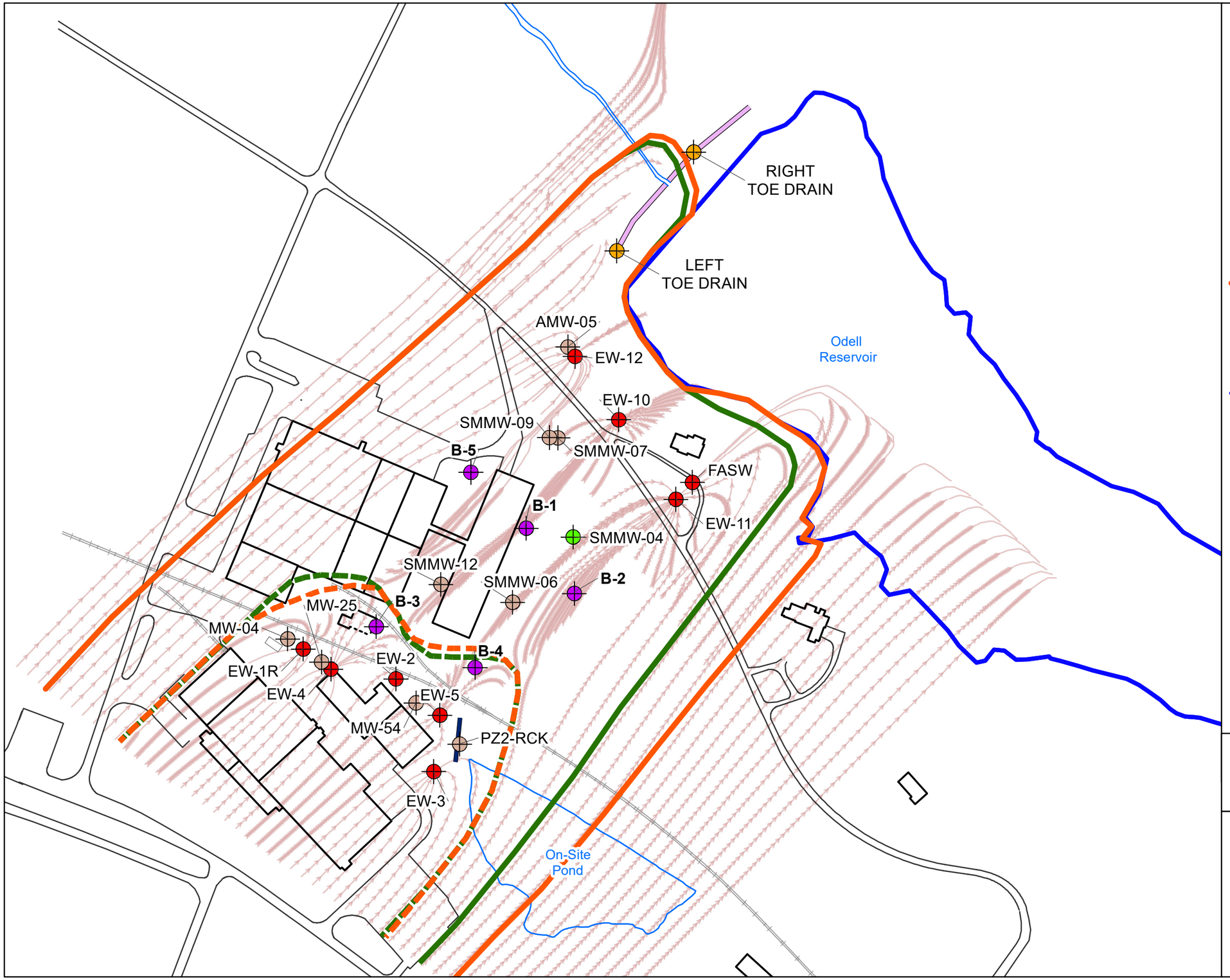

Legend

- TOE DRAIN
- EXTRACTION WELL
- PARTIALLY WEATHERED ROCK WELL
- BEDROCK WELL
- PACKER TESTED WELL

UPDATED MODEL CAPTURE ZONES

- CAPTURE ZONE ON-SITE SYSTEM
- CAPTURE ZONE OFF-SITE SYSTEM

ORIGINAL MODEL CAPTURE ZONES

- CAPTURE ZONE ON-SITE SYSTEM
- CAPTURE ZONE OFF-SITE SYSTEM
- ODELL RESERVOIR
- WATER FEATURE
- TOE DRAIN
- ROADS
- RAILROADS
- BUILDINGS
- TRENCH
- PARTICLE TRACK

N W E S

0 100 200 400 Feet

Notes:
1. All locations and dimensions are approximate.
2. PWR - Partially weathered rock

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FIGURE 3
PARTICAL TRACKING CAPTURE ANALYSIS

Former Federal Pacific Site, Edgefield, South Carolina

TABLES

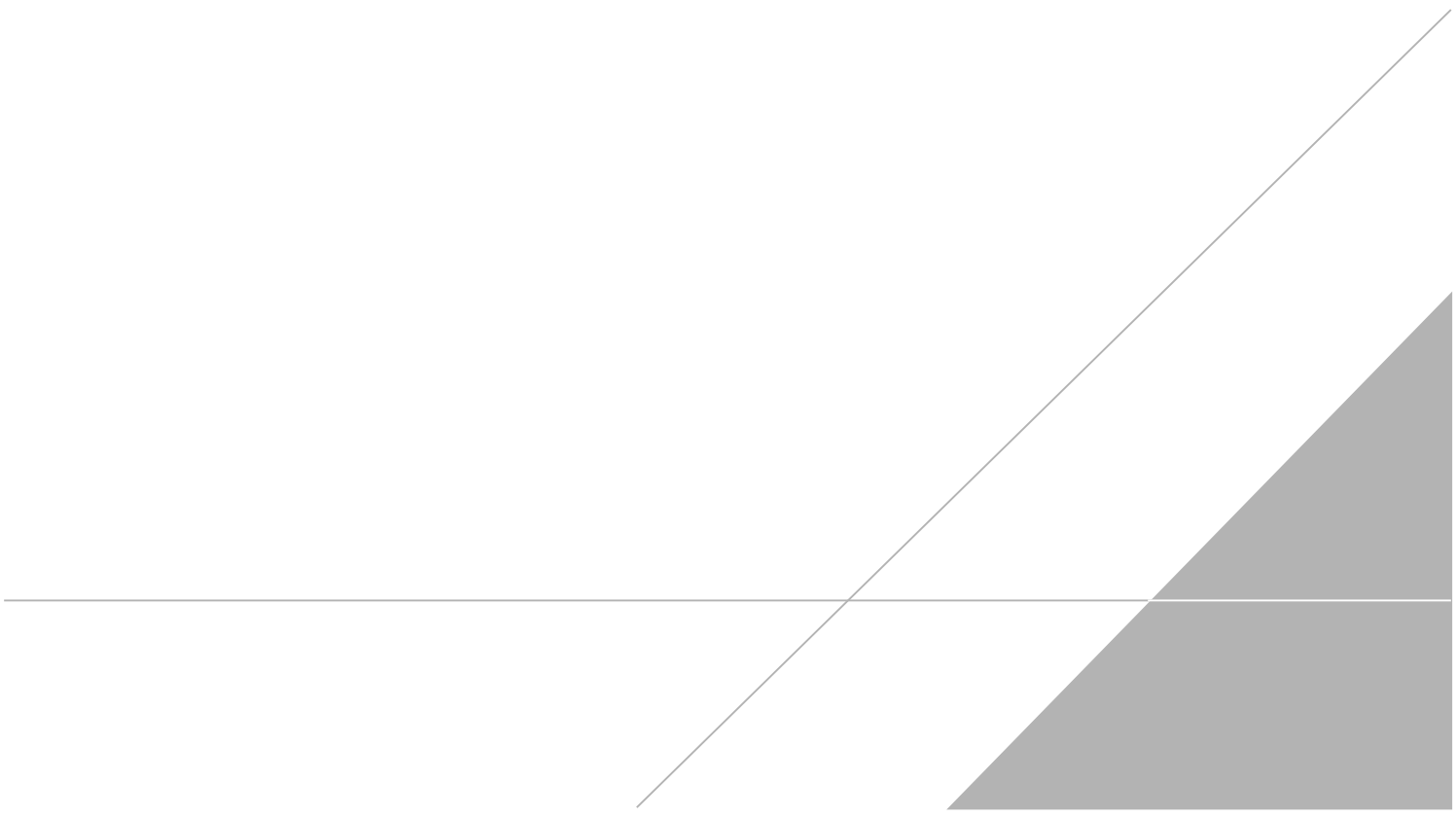


Table 1
Fracture Zone Hydraulic Testing Intervals and Monitoring
Former Federal Pacific Electric Co.
Edgefield, South Carolina

ARCADIS Design & Consultancy for natural and built assets

Well	Test Date	Ground Surface Elevation (ft-amsl)	Test Interval (ft-bgs)	Test Interval (ft-amsl)	Test and Observation Wells
B-1SF	3/9/2021	553	40-50	512.7-502.7	B-2SF, B-5SF, SMMW-9, SMMW-7, SMMW-4, SMMW-6
	3/10/2021	553	75-85	477.7-467.7	
B-2SF	3/10/2021	550.8	95-105	455.8-445.8	SMMW-4, SMMW-11, B-1SF, SMMW-6, B-4SF
B-3SF	3/12/2021	554	65-75	488.6-478.6	B-1SF, B-4SF, SMMW-12, MW-25, MW-4, MW-54, SMMW-6, EW-4
	3/22/2021	554	90-100	463.6-453.6	
	3/22/2021	554	110-120	443.6-433.6	
B-4SF	3/23/2021	550	80-90	470.2-460.2	B-2SF, B-3SF, SMMW-12, SMMW-6, MW-54, PZ2-RCK, MW-25
B-5SF	3/11/2021	548	70-80	478.2-468.2	B-1SF, SMMW-9, SMMW-7, SMMW-4, AMW-5, SMMW-12, PSMW-4
	3/11/2021	548	95-106.5	453.2-441.7	

Notes:

ft-amsl= feet above mean sea level

ft-bgs= feet below ground surface

Table 2
Fracture Zone Groundwater Quality Analytical Data Summary
Former Federal Pacific Electric Co.
Edgefield, South Carolina

ARCADIS Design & Consultancy for natural and built assets

Monitoring Well	Sample Date	Volatile Organic Compounds (SW-846 8260B)								
		1,1-DCE (µg/L)	1,1-DCA (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	PCE (µg/L)	Vinyl Chloride (µg/L)	Chloroform (µg/L)
B-1 SF (45')	4/22/2020	<50	<50	718	<50	<50	5,800	<50	<50	<50
	11/11/2020	<100	<100	1,180.0	28.3	<100	8,450	<100	<100	<100
	3/9/2021 test start	5.4	<1.0	1,040	23.2	<1.0	6,450	0.87	11.5	<1.0
	3/9/2021 test end	4.3	<1.0	939	31.8	<1.0	5,740	0.77	10	<1.0
B-1 SF (80')	4/22/2020	<50	<50	589	<50	<50	4,720	<50	<50	<50
	11/11/2020	<50	<50	1,220	14.8	<50	8,840	<50	<50	<50
	3/10/2021 test start	<100	<100	960	26.7	<100	6,800	<100	<100	<100
	3/10/2021 test end	<100	<100	959	31.9	<100	7,190	<100	<100	<100
B-2 SF (80')	4/22/2020	7.8	<5.0	65	<5.0	<5.0	458	<5.0	<5.0	<5.0
	11/11/2020	<5.0	6.0	77.4	3.4	<5.0	607	1.5	<5.0	2.7
B-2 SF (100')	4/22/2020	7.6	<5.0	67	<5.0	<5.0	457	<5.0	<5.0	<5.0
	11/11/2020	<5.0	4.7	80.4	5.5	<5.0	628	1.5	<5.0	2.8
	3/10/2021 test start	6.3	<10	71.8	<10	<10	612	<10	<10	3.3
	3/10/2021 test end	<50	<50	374	<50	<50	4,090	<50	<50	<50
B-3 SF (68')	4/22/2020	<5.0	<5.0	121	<5.0	<5.0	437	<5.0	<5.0	<5.0
	11/11/2020	<5.0	<5.0	130	2.2	<5.0	931	<5.0	<5.0	<5.0
	3/12/2021 test start	<10	<10	98.4	7.7	<10	559	<10	<10	<10
	3/12/2021 test end	<10	<10	104	3.4	<10	604	<10	<10	<10
B-3 SF (95')	3/22/2021 test start	<5.0	<5.0	77.4	3.5	<5.0	365	<5.0	<5.0	<5.0
	3/22/2021 test end	<10	<10	107	6.5	<10	725	<10	<10	<10
B-3 SF (110')	4/22/2020	<5.0	<5.0	125	<5.0	<5.0	607	<5.0	<5.0	<5.0
	11/11/2020	<10	<10	132	<10	<10	953	<10	<10	<10
	3/22/2021 test start	<20	<20	213	12.4	<20	1,220	<20	<20	<20
	3/22/2021 test end	<5.0	<5.0	85.2	2.9	<5.0	490	<5.0	<5.0	<5.0
B-4 SF (85')	4/22/2020	<100	<100	252	<100	<100	8,630	<100	<100	<100
	11/11/2020	<100	<100	304	<100	<100	8,310	22.4	<100	<100
	3/23/2021 test start	<100	<100	271	<100	<100	5,900	<100	<100	<100
	3/23/2021 test end	<100	<100	277	<100	<100	8,070	24.1	<100	<100
B-4 SF (119')	4/22/2020	<50	<50	166	<5.0	<5.0	5,510	<50	<50	<50
	11/11/2020	<20	<20	71.6	<20	<20	1,600	<20	<20	<20
B-5 SF (75')	4/22/2020	<5.0	<5.0	39.9	<5.0	<5.0	308	<5.0	<5.0	<5.0
	11/11/2020	<5.0	<5.0	58.1	1.7	<5.0	633	<5.0	<5.0	<5.0
	3/11/2021 test start	<10	<10	55.4	3.3	<10	708	<10	<10	<10
	3/11/2021 test end	<10	<10	54.5	<10	<10	725	2.3	<10	<10
B-5 SF (98')	4/22/2020	<5.0	<5.0	38	<5.0	<5.0	293	<5.0	<5.0	<5.0
	11/11/2020	<5.0	<5.0	54.9	2.5	<5.0	633	<5.0	<5.0	<5.0
	3/11/2021 test start	<10	<10	56.2	<10	<10	638	<10	<10	<10
	3/11/2021 test end	<10	<10	55.2	<10	<10	515	<10	<10	<10

Notes:

DCE = Dichloroethene
DCA = Dichloroethane
PCE = Tetrachloroethene
ug/L=micrograms/Liter
TCA = Trichloroethane
TCE = Trichloroethene

Only those compounds that were detected in at least one sample above the Practical Quantitation Limit are included on this table.

Table 3
Fracture Zone Hydraulic Testing Data Summary
Former Federal Pacific Electric Co.
Edgefield, South Carolina

ARCADIS Design & Consultancy for natural and built assets

Well	Tested Interval (ft-bgs)	Tested Interval (ft-amsl)	Test Duration (minutes)	Discharge Rate (gpm)	Maximum Drawdown (ft)	Transmisivity (ft^2/day)	Hydraulic Conductivity (ft/day)
B-1SF	40-50	512.7-502.7	34	0.05-0.50	19.93	1.04	0.013
	75-85	477.7-467.7	79	0.17-0.60	54.20	0.41	0.005
B-2SF	95-105	455.8-445.8	140	0.50-3.00	45.90	3.80	0.047
B-3SF	65-75	488.6-478.6	81	0.40-0.75	22.59	3.25	0.041
	90-100	463.6-453.6	53	0.40-0.66	32.34	0.67	0.008
	110-120	443.6-433.6	61	0.48-2.90	6.43	24.00	0.300
B-4SF	80-90	470.2-460.2	68	0.40-1.60	1.45	26.42	0.330
B-5SF	70-80	478.2-468.2	86	0.25-0.50	47.43	0.49	0.006
	95-106.5	453.2-441.7	28	0.50	62.01	0.22	0.003

Notes:

ft-amsl= feet above mean sea level

ft-bgs= feet below ground surface

gpm =gallons per minute

ft =feet

APPENDIX A

Boring and Well Construction Logs and Geophysical Logging Report

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well B-1SF Project/No. 30006562 Page 1 of 3

Site Location FPE Edgefield Drilling Started 1/27/2020 Drilling Completed 2/5/2020

Drilling Contractor IET Driller Jon Helper Tyler/Vince

Drilling Fluid Used Water Drilling Method Rock Coring

Length and Diameter of Coring Device 5' x 4.75" Sampling Interval Continuous feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Total Depth Drilled 109.2 Feet Hole Diameter 4.75" Coring Device PQ core

Prepared By Jared Fino Hammer Weight N/A Hammer Drop N/A ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	RQD	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
36.5	41.3	4.5	78%		Biotite Micaceous schist
					37.6 - near horizontal fracture, weathering, no staining
					38.1 - ~20 degree fracture, weather, little staining
					38.5 - horizontal to 30 degree possible fracture, little weathering, no staining
					38.7-39.1 - fracture zone, gravel to small cobble sized pieces, weathering, some
					sediment deposit, no staining
					39.7 - ~30 degree fracture, weathering, little staining, some sediment deposit
					41.3 - 45 degree fracture, weathering, heavy staining
41.3	46.4	5.1	98%		Biotite schist interbedded with biotite gneiss
					43.0 - 10 degree fracture, weathered, no staining
					44.6-44.75 - fracture zone, heavily weathered rock, very weak rock, almost clay like,
					heavy sediment deposit, some staining
46.4	51.4	5.0	98%		Same as above
					47.6 - near horizontal fracture, weathering, very heavy staining
					50.2 - horizontal to 30 degree fracture, weathering, sediment deposit, no staining
					51.2 - near horizontal fracture, weathering, sediment deposit, no staining
51.4	56.4	5.0	100%		Same as above with plagioclase and chlorite inclusions
					52.8 - 20 degree fracture, weathering and sediment deposit, no staining
					55.6 - near horizontal fracture, weathering, sediment deposit, no staining
56.4	61.8	5.4	100%		59.9 - 30 degree fracture, weathering, slight sediment deposit, no staining
					Same as above
61.8	66.8	5.0	100%		Same as above
66.8	71.7	4.9	100%		Same as above
					70.6 - 45 degree fracture, weathering, sediment deposit, no staining
71.7	76.9	5.2	100%		Same as above

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well B-1 SF Project/No. 30006562 Page 2 of 3

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	RQD	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
					72.4 - horizontal fracture, heavily weathered, no staining
					72.9 - 20 degree fracture, heavily weathered, no staining
					73.7 - 30 degree fracture, heavily weathered, no staining
					75.3 - near horizontal fracture, weathered, some staining
					76.4 - 30 degree fracture, weathered, no staining
76.9	81.7	4.8	85%		Same as above
					78.85 - 20 degree fracture, weathered, weak rock, some staining
					78.95 - 30 degree fracture, weathered, some staining
					79.35 - near horizontal fracture, weathered, no staining
					81.3 - horizontal fracture, weathered, no staining
81.7	87.0	5.3	92%		Biotite/amphibolite gneiss with some chlorite
					82.0 - 10 degree fracture, weathered, no staining
					84.0 - 20 degree fracture, heavily weathered, very weak rock, heavy sediment
					deposit, little staining
					86.0 - horizontal fracture, heavy weathering, no staining
					86.7 - horizontal fracture, weathered, little sediment deposit, no staining
87.0	92.0	5.0	90%		Interbedded biotite gneiss and biotite/micaceous schist
					87.3 - 45 degree fracture, weathering, no staining
					90.5 - 90.7 - fracture zone multi angle, gravel pieces, heavy weathering, some
					staining
92.0	97.4	5.4	95%		Same as above
					95.8 - 20 degree fracture, weathered, no staining
97.4	102.1	4.7	98%		Same as above
					98.1 - near horizontal fracture, weathered, no staining
					100.1 - 20 degree fracture, weathered, no staining
					101.2 - 45 degree fracture, weathered, no staining
102.1	107.4	5.3	90%		Same as above
					102.6 - horizontal fracture, weathered, sediment deposit, no staining
					106.3 - horizontal fracture, weathered, sediment deposit, no staining
107.4	109.2	1.8	100%		Same as above
					END OF BORING AT 109.2 FEET

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Federal Pacific Electric Company (last) (first)
Address: 1500 South Greene Street
City: South Euclid State: OH Zip: 44121-1000
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:**
Name: Federal Pacific Electric
Street Address: 801 Augusta Rd
City: Edgefield, SC Zip: 29824-1521
Latitude: 1725480.384 Longitude: 706301.3996

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** B-1

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
0 to 36 feet saprolite soils	36	36
Hard granite rock	59	106
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW #12197

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 12/18/2019
106 ft. Date Completed: 1/15/2020

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 inch steel
Type: ☐ PVC ☐ Galvanized ☑ Steel ☐ Other
0.0 in. to 36.5 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface about 1 ft ft.
Weight _____ lb./ft.
Drive Shoe? ☑ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 36 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jonathan Arrington **CERT. NO.:** 2241
Address: (Print)
30 Grant Park Place
Piedmont, SC 29673
Level: A B C D (circle one)
Telephone No.: 864-288-1986 Fax No.: 864-288-2272

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 2-21-2020
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well: B-2 SF | Project/No.: 30006562 | Page: 1 of

Site Location: FPE Edgefield | Drilling Started: 2/19/2020 | Drilling Completed: 2/20/2020

Drilling Contractor: IET Drilling | Driller: Jon Arriington | Helper: Tyler/Vince

Drilling Fluid Used: Potable H2O | Drilling Method: Rock Coring

Length and Diameter of Coring Device: 5' x 4.75" | Sampling Interval: Continuous feet

Land-Surface Elev.: feet ☐ Surveyed ☐ Estimated | Datum:

Total Depth Drilled: 111 Feet | Hole Diameter: 4.75" | Coring Device: PQ core

Prepared By: Charles Lawson | Hammer Weight: NA | Hammer Drop: NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	RQD	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
69.0	72.0	3	100%		Granodiorite to diorite phanerite matrix with dark minerals, quartz, hornblende,
					some banding, no fractures
72.0	79.0	6	95%		Same type of rock with quartz pegmatite about 1" to 2" in diameter
					at 78' 60 degree vertical with horizontal fracture, iron staining, minor banding of
					minerals
79.0	89.0	10	95%		Same type of rock - fracture about 80' bls, horizontal with iron staining - small
					quartz pegmatite crystals, slight banding of minerals
					fractures 84 feet near vertical
					fractures 85 feet horizontal with iron stain
89.0	99.0	10	100%		Same granodiorite to diorite some banding is noted phaneritic texture dark
					minerals - fracture about 98' bls
99.0	109.0				Lost circulation at 100', ~ 4 fractures
					99.5-110.5 - iron staining
					Same granodiorite to diorite dark minerals
					104-109 - no fractures same rock
109.0	111.0	2	95%		Same type of rock fracture at 111 with iron staining
					Boring depth drilled to 111 ft bls

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Federal Pacific Electric Company (last) (first)
Address: 1500 South Greene Street
City: South Euclid State: OH Zip: 44121-1000
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:**
Name: Federal Pacific Electric
Street Address: 801 Augusta Rd
City: Edgefield, SC Zip: 29824-1521
Latitude: 1725601.044 Longitude: 706136.69

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** B-2

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
saprolite soils	69	69
Hard rock granodiorite to granite	42	111
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW #12197

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 111 ft. Date Started: 12/12/2019 Date Completed: 2/20/2020

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 inch steel
Type: ☐ PVC ☐ Galvanized ☑ Steel ☐ Other
0.0 in. to 69 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface about 1 ft ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 59 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe _____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jonathan Arrington **CERT. NO.:** 2241
Address: (Print)
30 Grant Park Place
Piedmont, SC 29673
Level: A B C D (circle one)
Telephone No.: 864-288-1986 Fax No.: 864-288-2272

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Well Driller Date: 2-21-2020

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well B-3 SF Project/No. 30006562 Page 1 of 4

Site Location FPE Edgefield Drilling Started 1/16/2020 Drilling Completed 1/23/2020

Drilling Contractor IET Driller Jon Helper Tyler/Vince

Drilling Fluid Used Water Drilling Method Rock Coring

Length and Diameter of Coring Device 5' x 4.75" Sampling Interval Continuous feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Total Depth Drilled 123.5 Feet Hole Diameter 4.75" Coring Device PQ core

Prepared By Jared Fino Hammer Weight NA Hammer Drop NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	RQD	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
41.0	46.0	4.9	79%		Biotite Gneiss with some quartz and feldspar and mica
					43 - 20 degree fracture, weathering, little staining
					43.1 - 10 degree fracture, weather, and staining
					44.0-44.8 - vertical fracture, heavy weathering, no staining
					45-45.2' - near vertical fracture, heavy weathering, some sediment deposit, no
					staining
					45.4-45.8' - near vertical fracture, opposite angle from (45-45.2') fracture, heavy
					weathering, some sediment deposit, no staining
46.0	51.3	5.3	94%		(46.0-49.4) Same as above
					(49.4-51.3) transition to amphibolite
					47.0 - steep fracture - horizontal to vertical to horizontal, heavy staining and
					weathering
					47.4 - 25 degree fracture, very heavy staining, and weathering
					48.8 - horizontal fracture, some staining, some weathering, some sediment
					deposit
51.3	56.1	4.8	94%		Amphibolite
					51.9 - 25 degree fracture, weathering, and heavy staining
					54.1-54.7' - 75-80 degree fracture, very heavy staining, heavy weathering
56.1	61.4	5.3	94%		(56.1-60.5) - Amphibolite
					(60.5-61.4) - transition to biotic schist with some micas
					56.8 -57.9 - micro fracture - 75 degrees
					60.7 - 25 degree fracture, very heavy staining and weathering
					61.0 - 20 degree fracture, heavy staining and weathering
61.4	65.9	4.5	46%		(61.4-62.5) - biotite schist
					(62.5-65.9) - amphibolite interbedded with biotite and gneiss, increasing mica with depth

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well B-3 SF Project/No. 30006562 Page 2 of 4

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	RQD	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
					61.8 - 45 degree fracture, weathered and slight staining
					62.2 - 60 degree, weathered, no staining
65.9	67.6	1.7	88%		Biotite schist with mica
					65.9 - near horizontal fracture with little weathering and some staining
67.6	71.1	4.7	74%		68.3 - 10 degree fracture, weathered, some staining
					69.0 - 30 degree fracture, weathered, no staining
					68.6 - 20 degree fracture, weathered, sediment deposit, no staining
					69.2-69.6 - fracture zone, rock crumbles, heavy weathering, heavy sediment
					deposit, no staining
					70.2 - 30 degree fracture, weathering, sediment deposit, no staining, biotite schist
					biotite schist interbedded with amphibolite
71.1	76.2	5.1	100%		Biotite schist/biotite gneiss
					73.6 - horizontal 30 degree fracture, some weathering, no staining
					75.2 - 20 degree fracture, weathering, some sediment deposit, no staining
76.2	81.2	5.0	100%		Same as above, with plagioclase nodules
					80.1 - possible near horizontal fracture, very little weathering, no staining
					81.2 - 5 degree fracture, weathering, slight staining
81.2	86.2	5.0	98%		Same as above
					83.2 - 45 degree fracture, slight weathering and some staining
					83.6 - 75 degree fracture, some weathering, heavy staining
					84.6 - 30 degree fracture, some weathering, heave staining
					86.0 - 45 degree fracture, heavy weathering, and heavy staining
86.2	91.1	4.9	91%		Biotite gneiss to biotite schist, with some plagioclase nodules
					86.7 - near horizontal fracture, some weathering, heavy staining
					87.2 - 10 degree fracture, weathering, no staining
					88.2 - 30 degree fracture, weathering, some staining
					89.3 - horizontal fracture, heavy weathering, little staining
					89.4 - horizontal fracture, heavy weathering, some staining
					89.7 - 45 degree fracture, heavy weathering, heavy staining
91.1	96.2	5.1	100%		Biotite gneiss/biotite schist, with increasing quartz content
					93.5-94.3 - near vertical fracture, weathering, sediment deposit, and heavy
					yellow/green staining
96.2	101.1	4.9	75%		(96.2-99.1) biotite schist/biotite gneiss, with increasing quartz content
					(99.1-101.1) hard contact change to amphibolite gneiss
					96.9 - 10 degree fracture, staining and weathering
					99.2 - 45 degree fracture, heavy weathering, heavy yellow/green staining, some
					sediment deposit - fracture along contact
					100.2 - horizontal fracture, heavy weathering, very heavy staining
					101.1 - 20 degree fracture, heavy weathering, very heavy staining

Boring/Well B-3 SF Project/No. 30006562 Page 2 of 4

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	RQD	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
101.1	106.3	5.2	100%		(101.1-102.6) hard contact Amphibolite gneiss to (102.6-106.3-
					biotite/micaceous schist/biotite gneiss with high quartz and feldspar content
					102.8 - 30 degree fracture, weathering, some staining
					103.8 - horizontal fracture, little weathering, little staining
					105.3 - 30 degree fracture, little weathering, some green staining
					106.0 - horizontal fracture, some weathering, some staining
106.3	111.2	4.9	80%		Biotite/micaceous schist, with some migmatite/amphibolite
					107.2 - 60 degree fracture, weathering, staining, deposits
					110.1 - 30 degree fracture, weathering, staining
					110.3-110.9 - fracture zone, multiple angles, weak rock, some gravel size pieces
					weathering, little staining
111.2	116.6	5.4	87%		Same as above
					111.7 - 20 degree fracture, weathering, little staining
					112.0 - 30 degree fracture, weathering, staining, sediment deposit
					113.2 - horizontal fracture, heavy weathering, no staining
					113.3 Same as above
					113.5 - 10 degree fracture, heavy weathering, no staining
					114.1 - horizontal fracture, weathering, heavy sediment deposit
					115.0 - horizontal fracture, weathering, heavy sediment deposit

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Federal Pacific Electric Company (last) (first)
Address: 1500 South Greene Street
City: South Euclid State: OH Zip: 44121-1000
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:**
Name: Federal Pacific Electric
Street Address: 801 Augusta Rd
City: Edgefield, SC Zip: 29824-1521
Latitude: 1725102.113 Longitude: 706053.1999

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** B-3

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
saprolite soils	25	25
Hard rock mainly granodiorite	82.5	123.5
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW #12197

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 123.5 ft. Date Started: 1/8/2020 Date Completed: 1/23/2020

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 inch steel
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
0.0 in. to 41 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface about 1 ft ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 41 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jonathan Arrington **CERT. NO.:** 2241
Address: (Print)
30 Grant Park Place
Piedmont, SC 298673
Level: A B ✔ C D (circle one)
Telephone No.: 864-288-1986 Fax No.: 864-288-2272

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Well Driller Date: 2-21-2020

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well: B-4 SF | Project/No.: 30006562 | Page: 1 of 1

Site Location: FPE Edgefield | Drilling Started: 2/13/2020 | Drilling Completed: 2/27/2020

Drilling Contractor: IET Drilling | Driller: Jon Arriington | Helper:

Drilling Fluid Used: Potable H2O | Drilling Method: Rock Coring

Length and Diameter of Coring Device: 5' x 4.75" | Sampling Interval: Continuous feet

Land-Surface Elev.: feet ☐ Surveyed ☐ Estimated | Datum:

Total Depth Drilled: 121 Feet | Hole Diameter: 4.75" | Coring Device: PW core

Prepared By: Charles Lawson | Hammer Weight: NA | Hammer Drop: NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	RQD	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
36.5	46.5	10	90%		Banded gneiss to granite rock - matrix is phaneritic small lenses of pegmatite of
					quartz and feldspar, no sign of fractures, oxidation lenses from 36.5 to 37' bls -
					dark rock
46.5	56.5	10	90%		46.5 to 47.5 a vertical fracture
					Fracture at 52 feet almost horizontal, iron staining
53.0	56.5				More of a granddiorite - dark matrix phanertic matrix with quartz, biotite, less
					banding colors
56.5	66.5	10	100%		Same granddiorite no fractures, solid hard rock, dark matrix, phaneritic
66.5	76.5	10	100%		Same type of rock as above
					Granddiorite - small lens of gematite - phaneritic dark minerals, quartz, hornblend
					no fractures
76.5	86.5		95%		~79 feet evidence of staining, possible fracture
					still mainly a granddiorite to granite rock, still dark minerals as matrix, phaneritic
					matrix
					fracture at 86' with staining, lost water circulation - granite
86.5	96.5	10	100%		Same granite to granddiorite-dark matrix, phaneritic slight banding of minerals, no
					fractures, just mechanical break, quartz hornblende
96.5	106.5	10	100$		Granddiorite to diorite, dark matrix, phaneritic texture, quartz, hornblend, no
					fractures, all mechanical breaks
106.5	116.5	10	100%		Same rock as above, small fracture at 108 - horizontal
					Same granddiorite to diorite rock, dark minerals
116.5	121.0	5			Core stuck in barrel

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Federal Pacific Electric Company (last) (first)
Address: 1500 South Greene Street
City: South Euclid State: OH Zip: 44121-1000
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:**
Name: Federal Pacific Electric
Street Address: 801 Augusta Rd
City: Edgefield, SC Zip: 29824-1521
Latitude: 1725350.149 Longitude: 705948.9975

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** B-4

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
saprolite soils	26	26
Hard rock-grandodiorite	95	121
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW #12197

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 121 ft. Date Started: 1/6/2020 Date Completed: 2/17/2020

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6-inch steel
Type: ☐ PVC ☐ Galvanized ☑ Steel ☐ Other
0.0 in. to 36 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface about 1 ft ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 36 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jonathan Arrington **CERT. NO.:** 2241
Address: (Print)
30 Grant Park Place
Piedmont, SC 29673
Level: A B C D (circle one)
Telephone No.: 864-288-1986 Fax No.: 864-288-22732

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Well Driller Date: 2-21-2020

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well: B-5 SF | Project/No.: 30006562 | Page: 1 of 2

Site Location: FPE Edgefield | Drilling Started: 1/13/2020 | Drilling Completed: 1/14/2020

Drilling Contractor: IET | Driller: Jon | Helper: Tyler/Vince

Drilling Fluid Used: Water | Drilling Method: Rock Coring

Length and Diameter of Coring Device: 5 'x 4.75" | Sampling Interval: Continuous feet

Land-Surface Elev.: _____ feet ☐ Surveyed ☐ Estimated | Datum: _____

Total Depth Drilled: 106.4 Feet | Hole Diameter: 4.75" | Coring Device: PQ core

Prepared By: Jared Fino | Hammer Weight: NA | Hammer Drop: NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	RQD	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
42.0	46.2	4.2	99%		No fractures, interbedded amphibolite gneiss and micaceous schist, with some
					quartz
46.2	51.3	5.1	100%		47.9 - horizontal fracture, staining and some weathering
51.3	56.5	5.2	100%		Same as above
					52.7 - horizontal fracture, highly weathered, some staining
					53.2 - near horizontal fracture, some weathering, some staining
56.5	61.6	5.1	100%		Same as above with biotite gneiss and some chlorite crystals from (60.5-61.3)
					No fractures
61.1	66.2	5.1	100%		Same as above
					62.9 - horizontal fracture, staining and slight weathering
66.2	71.1	4.9	90%		Same as above with increased quartz content
					70.6 - horizontal fracture, staining, sediment deposit, slight weathering
					70.7 - horizontal fracture, staining, sediment deposit, slight weathering
71.1	76.1	5.0	90%		Same as above
					72.8 - 5 degree fracture, some staining, little weathering
					73.1 - 30 degree fracture, staining, some weathering
					73.7 - near horizontal fracture, heavy staining, some weathering
					(74.8-75.1) 75 degree fracture, heavy sediment deposit, some staining
					75.1, 75.2, 75.3, 75.7 - all near horizontal fractures, heavy sediment deposit, rock
					very weak, can break by hand, staining, heavily weathered
76.1	81.2	5.1	90%		Same as above
					77.6 - near horizontal fracture, very little staining, little sediment deposit
					77.9 - near horizontal fracture, little sediment deposit
					78.5 - near horizontal fracture, little sediment deposit
81.2	86.3	5.1	100%		Same as above - no fractures

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well B-5 SF Project/No. 30006562 Page 2 of 2

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	RQD	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
86.3	91.3	5.0	96%		Same as above
					86.3 - near horizontal fracture, staining, some sediment deposit, little weathering
91.3	96.3	5.0	93%		Same as above
					94.9 - 5 degree fracture, heavy staining, some weathering
					96.0 - 5 degree fracture, staining, some weathering
96.3	101.3	5.0	52%		Same as above
					96.5 - horizontal fracture, very little staining, sediment deposit, weathering
					(97.3-98.1) fracture zone, multiple angles in multiple directions, heavy sediment
					deposit, some staining, heavy weathering, weak rock
					98.3 - near horizontal fracture, slight staining, some weathering
					(110.4-100.8) multiple fractures, 1-60 degree fracture, 1-near vertical fracture,
					sediment deposit, staining, weathering, weak rock
					100.9 - near horizontal fracture, some staining, some sediment deposit, some
					weathering
101.3	106.4	5.1	100%		Same as above - no fractures
					END OF BORING @ 106.4 FEET

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: *Personal information provided on this document is subject to public scrutiny or release.*

1. WELL OWNER INFORMATION:
Name: Federal Pacific Electric Company (last) (first)
Address: 1500 South Greene Street
City: South Euclid State: OH Zip: 44121-1000
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:**
Name: Federal Pacific Electric
Street Address: 801 Augusta Rd
City: Edgefield, SC Zip: 29824-1521
Latitude: 1725340 Longitude: 706440.8749

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** B-5

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
saprolite soils	37	37
Hard rock-granodiorite	69	106
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☑ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW #12197

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 12/19/2019
106 ft. Date Completed: 1/15/2020

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6 inch steel
Type: ☐ PVC ☐ Galvanized ☑ Steel ☐ Other
0.0 in. to 47 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface about 1 ft ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 47 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jonathan Arrington **CERT. NO.:** 2241
Address: (Print) Level: A B C D (circle one)
30 Grant Park Place
Piedmont, SC 29673
Telephone No.: 864-288-1986 Fax No.: 864-288-2272

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 2/21/2020
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017) **COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER**

Reference: 20-107-1

March 9, 2020

ADVANCED GEOLOGICAL SERVICES
3 Mystic Lane
Malvern, PA 19355
(610) 722-5500 (ph.)
(610) 722-0250 (fax)

Mr. Jeff Beckner, P.G.
ARCADIS U.S., Inc.
1450 Greene Street, Suite 220
Augusta, GA, 30901

Subject: Geophysical Logging Results – Wells B-1-SF through B-5-SF
Edgefield FPE Site
801 Augusta Road
Edgefield, South Carolina

Dear Mr. Beckner:

Advanced Geological Services (AGS) is pleased to present this letter report summarizing the results of borehole geophysical logging performed at the above referenced site. The logging was performed on February 24 to 26.

Five newly drilled wells, B-1-SF through B-5-SF, were logged to locate and characterize water-producing fracture zones. To achieve the objective, multiple wireline tools were used to record standard logs and borehole images.

1.0 METHODOLOGY

The logs that were run for this investigation include:

- Multi-Tool Logs:
  - Natural Gamma
  - Fluid Temperature
  - Fluid Resistivity
  - Single Point Resistance
  - 16-inch Normal Resistivity
  - 64-inch Normal Resistivity
- 3-Arm Caliper
- Optical Televiewer (OPTV)
- Acoustic Televiewer (ACTV)

Multi-tool, optical televiewer and acoustic televiewer logs were acquired with a Mount Sopris Matrix logging system. The 3-arm caliper logs were acquired using a System VI Compu-Log Portable Logging System manufactured by Century Geophysical Corporation.

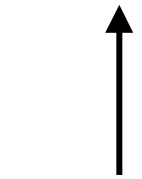
1.1. CALIPER LOGS

The caliper log measures variations in borehole size as a function of depth in a well. The log data enables (a) the detection of competent or fractured geologic units, (b) the location of washouts or tight zones, (c) the optimal placement of well screen, sand, and bentonite, and (d) the establishment of appropriate borehole correction factors to be applied to other well log curves. Further, when run in combination with other logs, the caliper log may be an indicator of lithologic makeup and degree of consolidation. The typical caliper response in a fractured, or weathered, unit is a relatively abrupt increase in borehole size.

1.2. NATURAL GAMMA RAY LOGS

The natural gamma ray log is a passive instrument that measures the amount of naturally occurring radioactivity from geologic units within the borehole. Commonly occurring radioelements include potassium, thorium, and uranium; the two former elements are predominant within a common fine-grained rock sequence. The gamma ray log is also an excellent lithologic indicator because fine-grained clays and shales contain a higher radioelement concentration than limestones or sands. Gamma ray values are often used to assess the percentage of clay materials (indurated or non-indurated) that are present within a formation by utilizing empirically derived equations and sand-shale base line information.

The natural radioactivity range for earth materials is as follows:



Radioactivity Increase

Shales Clays Marls Silts

Sand (sandstone)

Limestone Dolomite

1.3. ELECTRICAL RESISTIVITY LOGS

Resistivity is a measure of how well an electric current passes through a material. Formation resistivity is an intrinsic property of rocks and depends on the porosity and resistivity of the interstitial fluid and rock matrix.

In sedimentary rocks, the resistivity values of shales is generally lower than the resistivity of sandstone, which is lower than the resistivity of limestone. The resistivity log often shows a picture of the overall depositional sequence in sedimentary environment. Resistivity of unweathered igneous and metamorphic rocks are often extremely high when compared to resistivity in sedimentary rocks, with values that are commonly thousands of ohm-meters.

1.3.1. 16-Inch and 64-Inch Normal Resistivity Logs

The normal resistivity logs are generated by non-focused current resistivity instrumentation within the well bore. The ultimate objective of these measurements is to determine the true resistivity of the formation (matrix and fluids). The normal electrode configuration assumes a point source of current from which the voltage drop is measured by a potential electrode in the well. A second set of current and potential electrodes are positioned at a large distance (ground surface) from the downhole electrodes to complete the circuit. The distance between the downhole current electrode and the downhole voltage electrode is either 16 inches or 64 inches. The volume of material measured is approximately two times the electrode separation: 32 inches and 128 inches, respectively. The calculation of resistivity is determined by applying Ohm's Law and known electrode separations.

Since the 64-inch normal utilizes a greater electrode separation, the instrument will measure more deeply into the formation and obtain resistivity values that closely approximate the true formation resistivity. Conversely, the 16-inch normal device will record resistivities that are found in a zone that is at least partially invaded by borehole fluids. In the case where borehole mud pressures are greater than formation water pressures, a comparison of these curves gives an indication of the depth of invasion of borehole fluids and formation permeability. If formation pressures are greater, the true resistivity values are easier to attain due to the lack of influence of the borehole fluids.

1.3.2. Fluid Resistivity (Conductivity) logs

A log of fluid resistivity, which is the reciprocal of fluid conductivity, provides data related to the concentration of dissolved solids in the fluid column. Fluid resistivity is measured in units of ohm-meters, which is equivalent to 1/microsiemen/centimeter (1/µs/cm). Although the quality of the fluid column may not reflect the quality of adjacent interstitial fluids, the information can be quite useful when combined with other logs. For example, change in fluid resistivity associated with a water-producing zone that is corroborated by other logs may indicate the inflow of impacted ground water.

1.4. SINGLE-POINT RESISTANCE LOGS

Single point resistance measurements are made by passing a constant current between two electrodes and recording the voltage fluctuations as the probe is moved up the hole. The resistance variations measured in the borehole are primarily due to variations in the immediate vicinity of the downhole electrode.

The resistance log is strongly affected by the resistance of the drilling fluid and variations in borehole diameter. It is extremely useful for detecting fractures in boreholes with relatively constant diameter. In sedimentary environments, the resistance log generally follows the variations in resistivity of the formation. Shales generally exhibit low values, sandstones have intermediate values, while coal and limestone beds have high resistance values.

1.5. TEMPERATURE AND DELTA TEMPERATURE LOGS

Temperature logs measure the change in fluid temperature within the borehole as a function of depth. The utility of this log is that it can provide information on the location of water-bearing strata or fracture zones within the well. The inherent assumptions of this technique are that the fluids entering the borehole from the water zones are either cooler or warmer than the mud fluids used for drilling purposes. In this case, it is possible to relate a temperature anomaly to a depth range in which waters of different temperature are emanating from a water-bearing or fractured lithologic unit.

Differential temperature (or delta temperature) values are computed and presented on the same plot due to their greater sensitivity and improved visual clarity. Temperature anomalies are more easily recognized because differences of only a few degrees translate to large-scale deflections of the differential temperature curve.

1.6. OPTICAL TELEVIEWER (OPTV) LOGS

The optical televiewer log provides an oriented, high-resolution, 360-degree photographic image of the borehole in either an air-filled, or water filled borehole. The oriented image of the borehole is presented in unwrapped format on the log. Results from this tool provide location, color, and orientation information of features such as fractures, lithologic contacts and cavities. The acquired image is digitized and properly oriented with respect to borehole deviation and tool rotation. Processing of the resulting image can provide accurate strike and dip information of fractures and other structural features.

1.7. ACOUSTIC TELEVIEWER (ACTV) LOGS

The acoustic televiewer log provides an oriented high-resolution image of the borehole using high-resolution ulta-sound waves. The oriented image of the borehole is presented in both amplitude and travel time. ACTV logs cannot be collected in an air-filled borehole, but unlike the OPTV log, ACTV logs can be collected in mud filled holes, water with low or no clarity, or boreholes that have FLUTE liners installed. Results from this tool provide location and orientation information of features such as fractures, lithologic contacts, and cavities. The ACTV digitizes 256 measurements around the borehole every 0.02 feet along the length of the borehole. Since the acquired image is digitized and properly oriented with respect to borehole deviation and tool rotation, it allows data processing to provide accurate strike and dip information of structural features.

2.0 RESULTS AND DISCUSSION

Five newly completed wells situated on the Star Fiber property, B-1-SF through, B-5-SF, were logged during this investigation. All wells were 6-inch steel cased, with the open rock portion of the well being drilled using a PQ core, resulting in a borehole diameter of approximately 4.8 inches.

The well logs are attached to the end of this report. Multi-tool, 3-arm caliper, ACTV, and OPTV logs were completed in each of the boreholes. All depths shown on the logs, and discussed on the text of this report are relative to the Top of Casing (TOC). The results from each of the wells is briefly discussed below. Tables of identified orientations of structures from each well are also provided.

2.1. WELL B-1-SF

The top of casing was the depth reference point of well B-1-SF, and the casing stick-up was 1.7 feet above ground surface. The bottom of casing was 36 feet below TOC and the total depth of the well was 108 feet. Metamorphic banding appears to dip in a general southerly direction in well B-1-SF, but can vary significantly.

This well is relatively tight with few notable fractures. Accumulated sediment in the bottom of the well was encountered at a depth of 107 feet. Low water clarity was also encountered in the well because of suspended rock flour. The low water clarity degraded the OPTV log, despite logging on two separate runs with a 24 hour period between runs to allow additional sediment settlement.

The zone between the bottom of casing (36 feet) and a depth of 45 feet appears to be slightly weathered based on the combined caliper, ACTV, and OPTV responses. A nearly horizontal fracture was noted in near the bottom of this zone, at a depth of 44.6 feet in the ACTV and caliper logs. Based on the fluid resistivity log, this zone, and in particular the noted fracture may be the primary water producer within this well.

Two additional minor fractures are located at depths of 78.5 and 83.4 feet. Both of theses minor fractures can be observed in the ACTV log, but are not readily apparent on either the caliper or OPTV logs. These potential fractures are likely tight. There is no noticeable deflection in the temperature log, but the fluid resistivity log does indicate a very subtle slope change corresponding to 83.4 feet.

Table 1 provides the orientation of representative foliation planes and fractures encountered in the well B-1-SF.

Table 1: Well B-1-SF Structure Orientations

Depth (ft)	Dip Azimuth (deg)	Dip Angle (deg)	Comments
44.6	269.0	6.8	Fracture (water bearing)
60.2	163.7	46.0	Representative foliation
69.9	141.7	52.9	Representative foliation
71.5	173.5	66.3	Representative foliation
75.3	170.3	60.7	Representative foliation
78.5	199.2	31.0	Minor fracture (tight; poss. water bearing)
83.4	61.6	35.4	Minor fracture (tight; poss. water bearing)
85.5	145.1	42.0	Representative foliation

Depth (ft)	Dip Azimuth (deg)	Dip Angle (deg)	Comments
89.5	319.8	35.8	Representative foliation
100.4	10.7	31.3	Representative foliation

2.2. WELL B-2-SF

Well B-2-SF is cased to a depth of 68.5 feet below TOC, with the casing stick-up being approximately 2.2 feet above ground surface. The total depth of B-1-SF is 111 feet below TOC. The primary foliations in this well generally dip in a southerly direction. Dark minerals predominate the majority of this well, with lighter bands noted between 74-75 and 82-85 feet.

Horizontal bands of reddish staining present at 77-78, 84.5, and 97-98 feet suggest weathering from potential groundwater interaction. The bands of reddish staining cut across foliations. Comparison of subtle changes in the temperature and fluid resistivity logs suggest that potential horizontal partings observed in the ACTV log within the reddish stained zones are the main water producing locations within well B-2-SF.

The zone situated between 97-98 feet shows multiple horizontal partings and the only notable increase in borehole diameter noted in the caliper response. This zone also exhibits a lower resistivity response than the portions of the borehole directly above and below this zone. Immediately beneath this zone, at a depth of 99 feet, the ACTV log shows a low amplitude response represented by the dark features is present that could indicate slightly softer lithology. This feature was observed during the downward run of the ACTV sonde and the upward repeat run of the ACTV log. If this does indicate slightly softer rock at this depth, that could also influence groundwater.

Table 2 provides the orientation of representative foliation planes and fractures encountered in B-2-SF.

Table 2: Well B-2-SF Structure Orientations

Depth (ft)	Dip Azimuth (deg)	Dip Angle (deg)	Comments
73.4	165.6	50.5	Representative foliation
76.6	177.0	10.2	Minor fracture (poss. water bearing)
77.7	123.4	26.3	Minor fracture (water bearing; red staining)
82.3	151.3	56.0	Representative foliation (top of light band)
83.8	0.0	0.0	Minor fracture (water bearing; red staining)
85.1	174.5	65.3	Representative foliation (bottom of light band)
86.2	170.4	54.1	Representative foliation
86.8	165.6	79.3	Representative foliation
89.6	165.6	38.0	Representative foliation
94.4	204.9	42.0	Representative foliation

Depth (ft)	Dip Azimuth (deg)	Dip Angle (deg)	Comments
97.4	106.7	9.1	Fracture (water bearing; red staining)
97.6	164.8	22.8	Fracture (water bearing; red staining
98.1	173.9	16.7	Fracture (water bearing; red staining
103.9	192.5	22.8	Representative foliation

2.3. WELL B-3-SF

Well B-3-SF is cased to a depth of 41.5 feet below TOC, and the casing stick-up is 1.15 feet above the ground surface. The total depth of the well is 123.5 feet below TOC. At the time geophysical logging was completed the water level was 53.9 feet below TOC.

Several potential water producing fractures were noted in B-3-SF at depths of 55, 58, 70, 72, 111, and 120 feet. The features at 55 and 58 feet are tight joints in a weathered zone within a rock consisting of a fine grained matrix. The fractures at 70, 72, and 111 are likely the primary water producers in this well, and the fracture at 120 feet also has water producing capability. The character of the ACTV response between the fractures at 111 and 120 feet indicates that the well sidewall is slightly rougher, and possibly a softer rock zone than most of the rest of the well.

A band of dark mineralogy is present between 100-103 feet. This band has a low gamma response and a low resistivity. Similarly, a thinner band of dark mineralogy is also between 114-115 feet. Neither of these zones appear to have any water producing potential. The orientations of the upper and lower contacts of these zones are also consistent with foliation orientations adjacent to theses zones. Orientations of select identified features are summarized below in Table 3.

Table 3: Well B-3-SF Structure Orientations

Depth (ft)	Dip Azimuth (deg)	Dip Angle (deg)	Comments
55.0	109.2	79.0	Joint (tight, in weathered zone, poss. minor water bearing)
57.6	8.2	82.8	Joint (tight)
68.6	171.9	42.0	Fracture (water bearing)
70.0	167.4	40.2	Fracture (water bearing)
72.4	160.9	67.4	Representative foliation
94.7	253.4	81.0	Joint (tight)
99.3	345.8	37.9	Joint (tight)
99.8	154.2	66.0	Foliation (top of dark band)
102.7	120.3	51.9	Foliation (bottom of dark band)
111.1	347.3	52.4	Fracture (water bearing)
114.4	156.1	47.2	Foliation (top of dark band)
115.5	145.5	58.6	Foliation (bottom of dark band)
120.0	353.9	51.5	Fracture (poss. water bearing)

2.4. WELL B-4-SF

Well B-4-SF is steel cased to a depth of 37 feet below TOC, and the casing stick-up is 2.3 feet above ground surface. The total depth of B-4-SF is 121.5 feet below TOC. Foliations within this well are irregular, but tend primarily dip in a general southward direction.

Only one significant fracture is visible in the caliper, ACTV and OPTV logs at a depth of 86.8 feet. This horizontal fracture cuts across rock foliations and is situated within a reddish stain zone that is between 86-87.5. The fluid resistivity log indicates that this fracture is water bearing. The combined ACTV and OPTV logs do indicate a shallower horizontal weathered zone at 42.1 feet. The ACTV character of this shallower zone suggests that the rock at 42.1 feet may be slightly weathered.

The light colored minerals between the bottom of casing ad a depth of approximately 83 feet are stained slightly reddish, suggesting although no fractures are present, ground water may still be able to migrate through this zone. The fluid resistivity curve shows slight deviation near the bottom of that zone where more prominent reddish band between 80-83 feet is present.

Orientations of select identified features in well B-4-SF are summarized below in Table 4.

Table 4: Well B-4-SF Structure Orientations

Depth (ft)	Dip Azimuth (deg)	Dip Angle (deg)	Comments
42.1	61.7	6.8	Weathered zone/poss. fracture
45.4	114.9	50.2	Representative foliation
60.1	314.4	65.5	Representative foliation
68.1	178.1	66.3	Representative foliation
70.9	175.8	62.5	Representative foliation
86.8	93.9	14.9	Fracture (water bearing, within horizontal reddish stain zone)
88.7	146.5	72.5	Representative foliation
103.2	75.5	61.0	Representative foliation
110.1	330.3	61.7	Representative foliation
119.6	177.1	77.8	Representative foliation

2.5. WELL B-5-SF

Well B-5-SF is steel cased to a depth of 42 feet below TOC, and the casing stick-up is 1.1 feet above ground surface. The total depth of B-4-SF is 106 feet below TOC. The combined temperature, fluid resistivity,ACV and OPTV logs indicate minor water bearing fractures at depths of 71.4, 71.8, 75.7, and 76.3 feet. Each of these minor fractures are nearly horizontal except for the fracture at 75.7 feet, which is a joint that dips to the southeast, cross-cutting foliations. The light colored minerals near these fractures show a slight reddish tint, likely related to groundwater movement and rock weathering.

A larger fracture that occurs along an east dipping joint is present at a depth of 98.2 feet. This joint also cuts across the foliations. The caliper response at this fracture indicates a slight increase borehole diameter, and the ACTV log also shows that this fracture is slightly open. Inflections of the temperature and fluid resistivity logs also suggest that this is the primary water bearing fracture within this. Minor reddish staining of the light colored minerals is also present below this fracture.

Orientations of select identified features in well B-5-SF are summarized below in Table 5.

Table 5: Well B-5-SF Structure Orientations

Depth (ft)	Dip Azimuth (deg)	Dip Angle (deg)	Comments
46.0	25.6	41.8	Representative foliation
66.4	325.5	64.5	Representative foliation
71.4	264.6	10.1	Fracture (water bearing, within horizontal reddish stain zone)
71.8	303.4	10.2	Fracture (water bearing, within horizontal reddish stain zone)
75.7	126.2	68.6	Joint/Fracture (water bearing, within horizontal reddish stain zone)
76.4	0.0	0.0	Fracture (water bearing, within horizontal reddish stain zone)
81.1	160.9	72.5	Representative foliation
88.1	165.6	10.2	Representative foliation
95.6	318.1	60.8	Representative foliation
98.2	92.1	66.4	Fracture/Joint (primary water bearing zone; cross-cutting foliations)

3.0 SUMMARY AND CLOSING

Geophysical well logs were completed at recently drilled wells B-1-SF, B-2-SF, B-3-SF, B-4-SF, and B-5-SF. Wells depths varied between 160 to 123 feet below TOC. Steel casing was 6-inch diameter and the open rock portions of the wells was PQ core diameter. Orientations of the bedrock foliations were variable, but predominantly dipped in a southerly direction in most portions of the wells. Water bearing zones within the wells were a combination of partings or fractures parallel to foliations, cross-cutting joints, and horizontal fractures.

Reddish staining of light colored minerals was common near the water bearing fractures, particularly in the vicinity of the horizontal fractures. Well B-1-SF appears to be the tightest of the wells, and at the time of logging had approximately 1 foot of sediment at the bottom of the well and rock flour suspended within the water column of the well.

The data collection and interpretation methodologies used in this investigation are consistent with standard practices applied to similar geophysical investigations. The correlation of geophysical responses with probable subsurface features is based on the past results of similar

surveys although it is possible that some variation could exist at this site.

Please contact us if you have any questions or would like to discuss the logging results. We appreciate your business and look forward to working with you again.

Sincerely,

Donald Jagel

Donald Jagel, P.G.
Principal Geophysicist

Attachment: Geophysical Well Logs

Multi-Tool& Caliper Log / Optical & Acoustic Televiewer

CO Arcadis
WELL B-1-SF
FLD FPE Edgefield
CTY Edgefield
STE SC
FILING No

CLIENT Arcadis
WELL ID B-1-SF
SITE FPE Edgefield
CITY Edgefield **STATE** SC

LOCATION

SEC TWP RGE

OTHER SERVICES

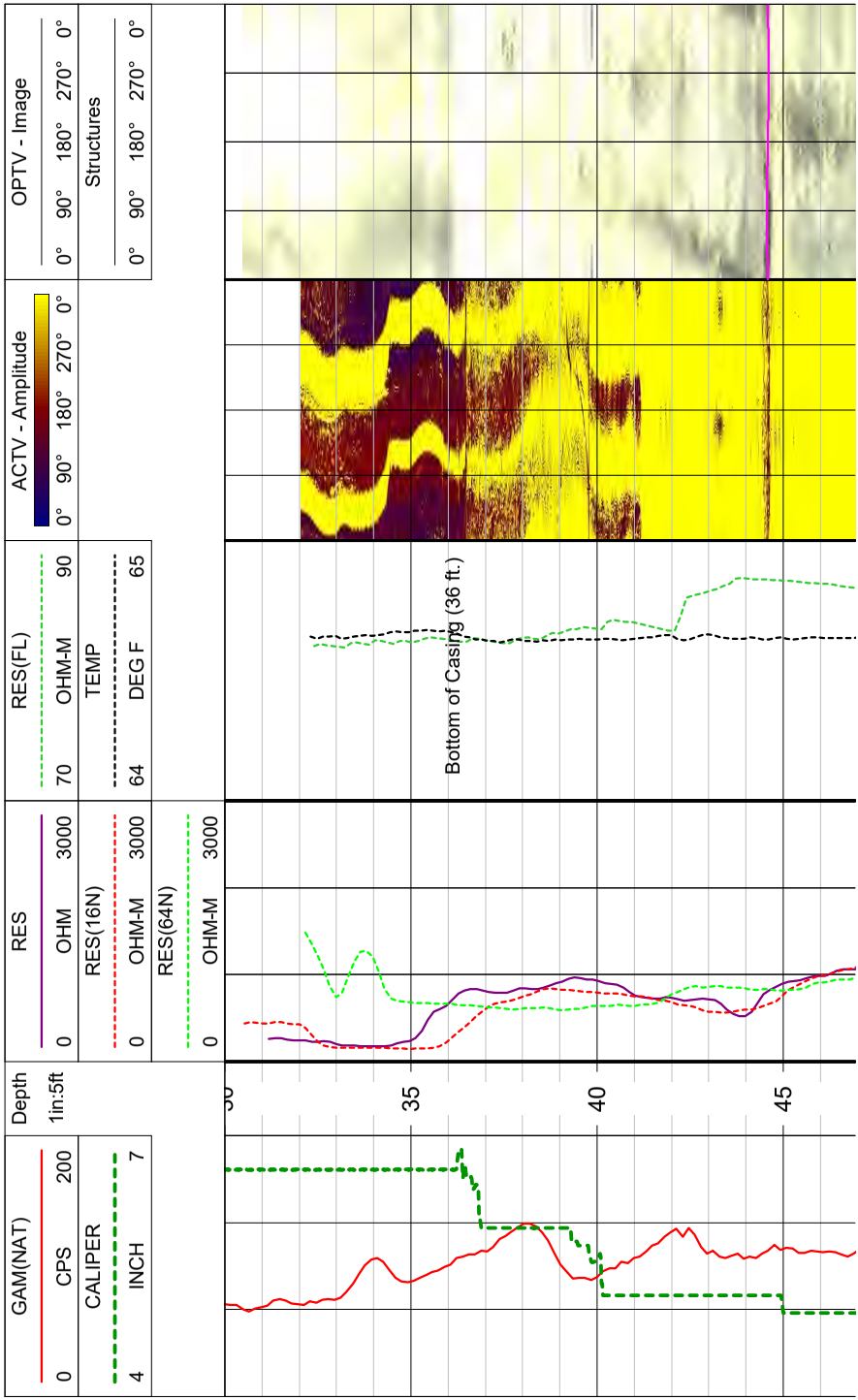
PERMANENT DATUM: ELEVATION K.B.

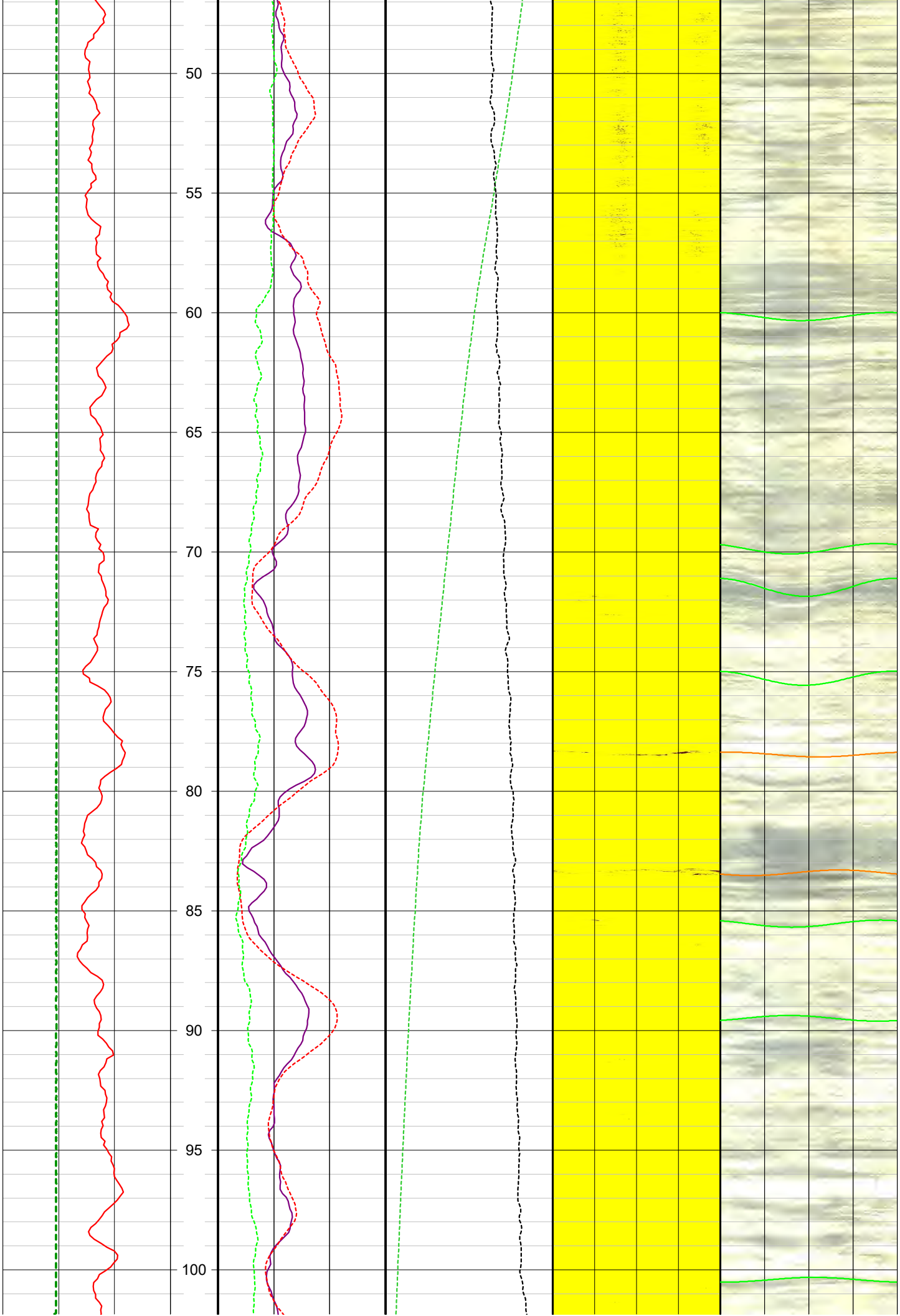
LOG MEAS. FROM: Top of Casing (TOC) ABOVE PERM. DATUM D.F.

DRILLING MEAS. FROM: G.L.

DATE	2/26/2020	TYPE FLUID IN HOLE	water
RUN No		SALINITY	
TYPE LOG	multi, cal., OPTV, ACTV	DENSITY	
DEPTH-DRILLER		LEVEL	
DEPTH-LOGGER	108 ft.	MAX. REC. TEMP.	
BTM LOGGED INTERVAL			
TOP LOGGED INTERVAL			
OPERATING RIG TIME			
RECORDED BY	DJ		
WITNESSED BY			

REMARKS:
6-inch diameter steel casing to 36 feet below TOC.
Casing Stick-up Ht.: 1.7 ft.
Open rock portion is PQ core diameter (approx. 4.8 inches)

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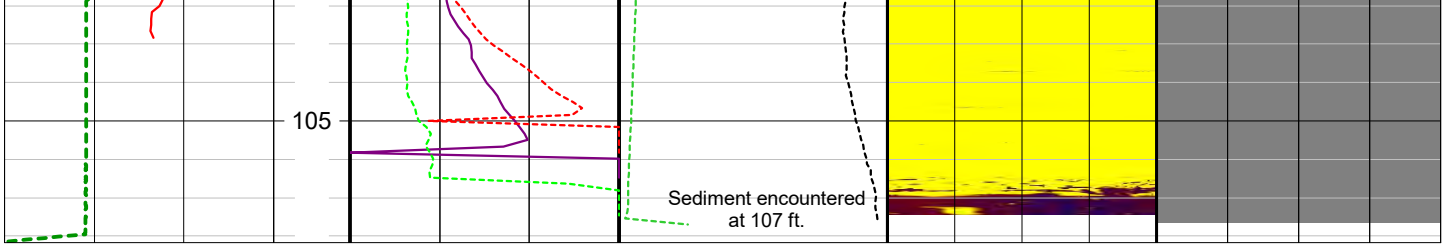
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Sediment encountered
at 107 ft.

Multi-Tool& Caliper Log / Optical & Acoustic Televiewer

CO Arcadis
WELL B-2-SF
FLD FPE Edgefield
CTY Edgefield
STE SC
FILING No

CLIENT Arcadis
WELL ID B-2-SF
SITE FPE Edgefield
CITY Edgefield **STATE** SC

LOCATION

SEC TWP RGE

OTHER SERVICES

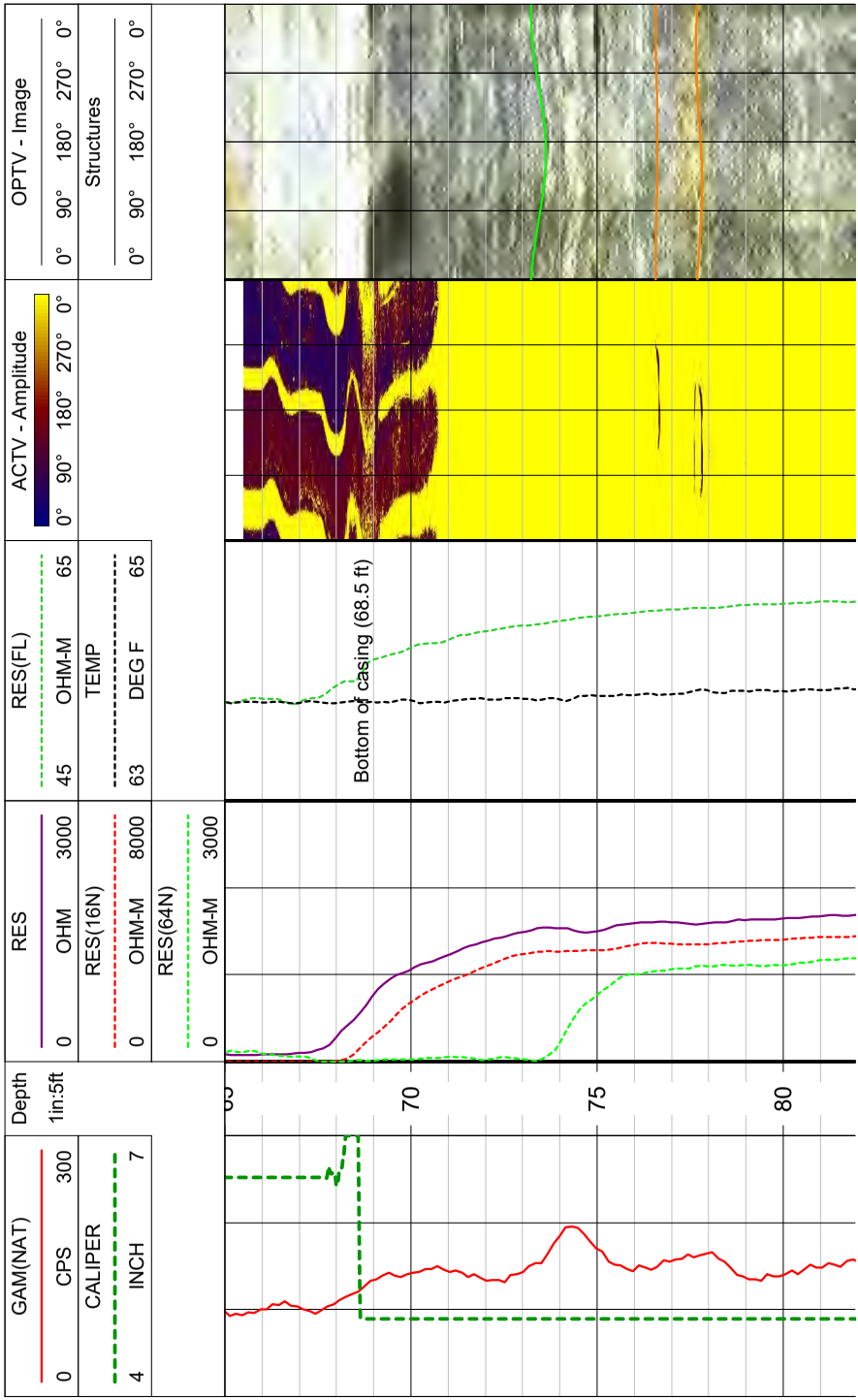
PERMANENT DATUM: ELEVATION K.B.

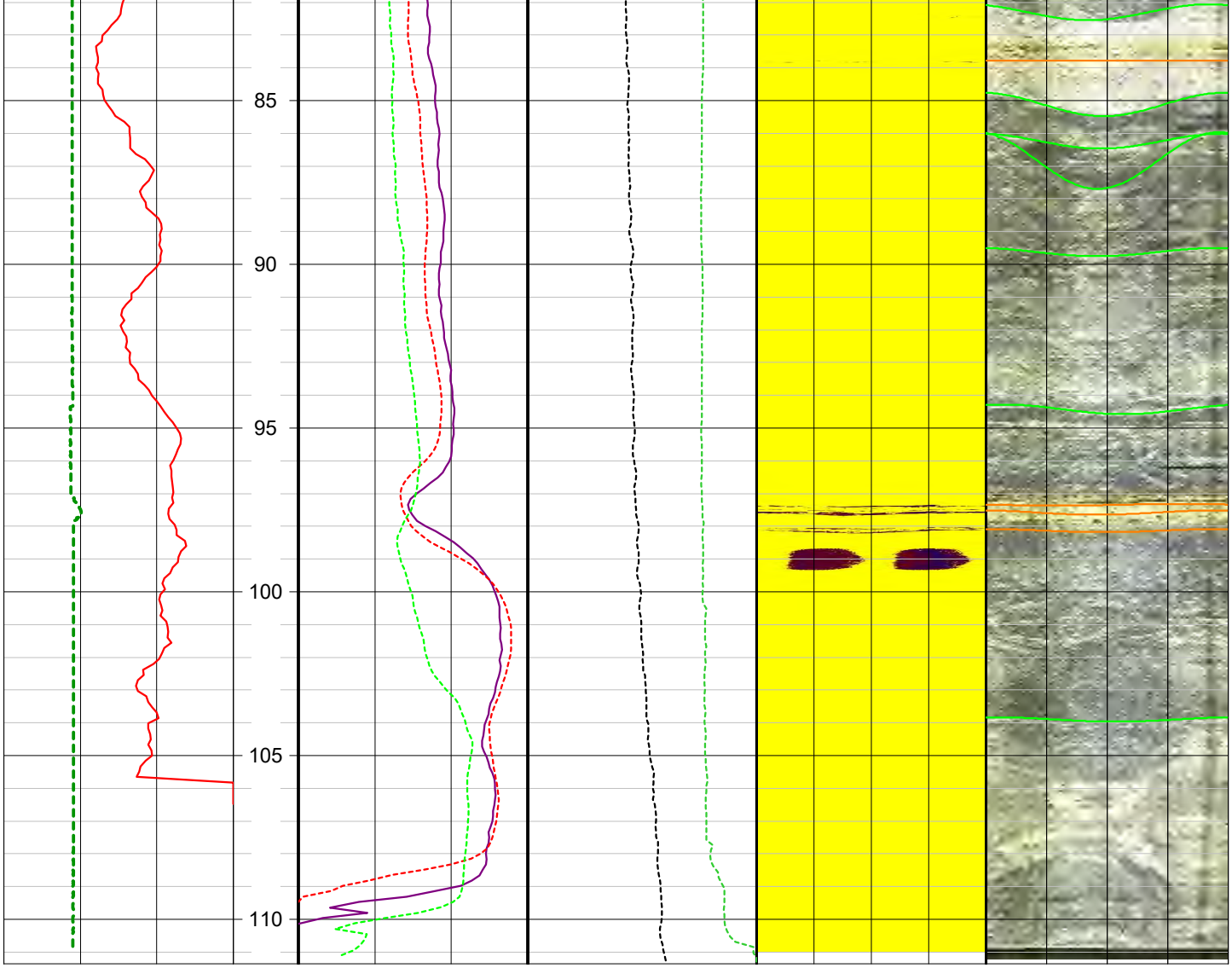
LOG MEAS. FROM: Top of Casing (TOC) ABOVE PERM. DATUM D.F.

DRILLING MEAS. FROM: G.L.

DATE	2/25/2020	TYPE FLUID IN HOLE	water
RUN No		SALINITY	
TYPE LOG	multi, cal., OPTV, ACTV	DENSITY	
DEPTH-DRILLER		LEVEL	
DEPTH-LOGGER	111 ft.	MAX. REC. TEMP.	
BTM LOGGED INTERVAL			
TOP LOGGED INTERVAL			
OPERATING RIG TIME			
RECORDED BY	DJ		
WITNESSED BY			

REMARKS:
6-inch diameter steel cased to 68.5 ft. below TOC
Casing Stick-up ht.: 2.2 ft.
Open rock portion is PQ core diameter (approx. 4.8 inches)

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Multi-Tool& Caliper Log / Optical & Acoustic Televiewer

CO Arcadis
WELL B-3-SF
FLD FPE Edgefield
CTY Edgefield
STE SC
FILING No

CLIENT Arcadis
WELL ID B-3-SF
SITE FPE Edgefield
CITY Edgefield **STATE** SC

LOCATION

SEC TWP RGE

OTHER SERVICES

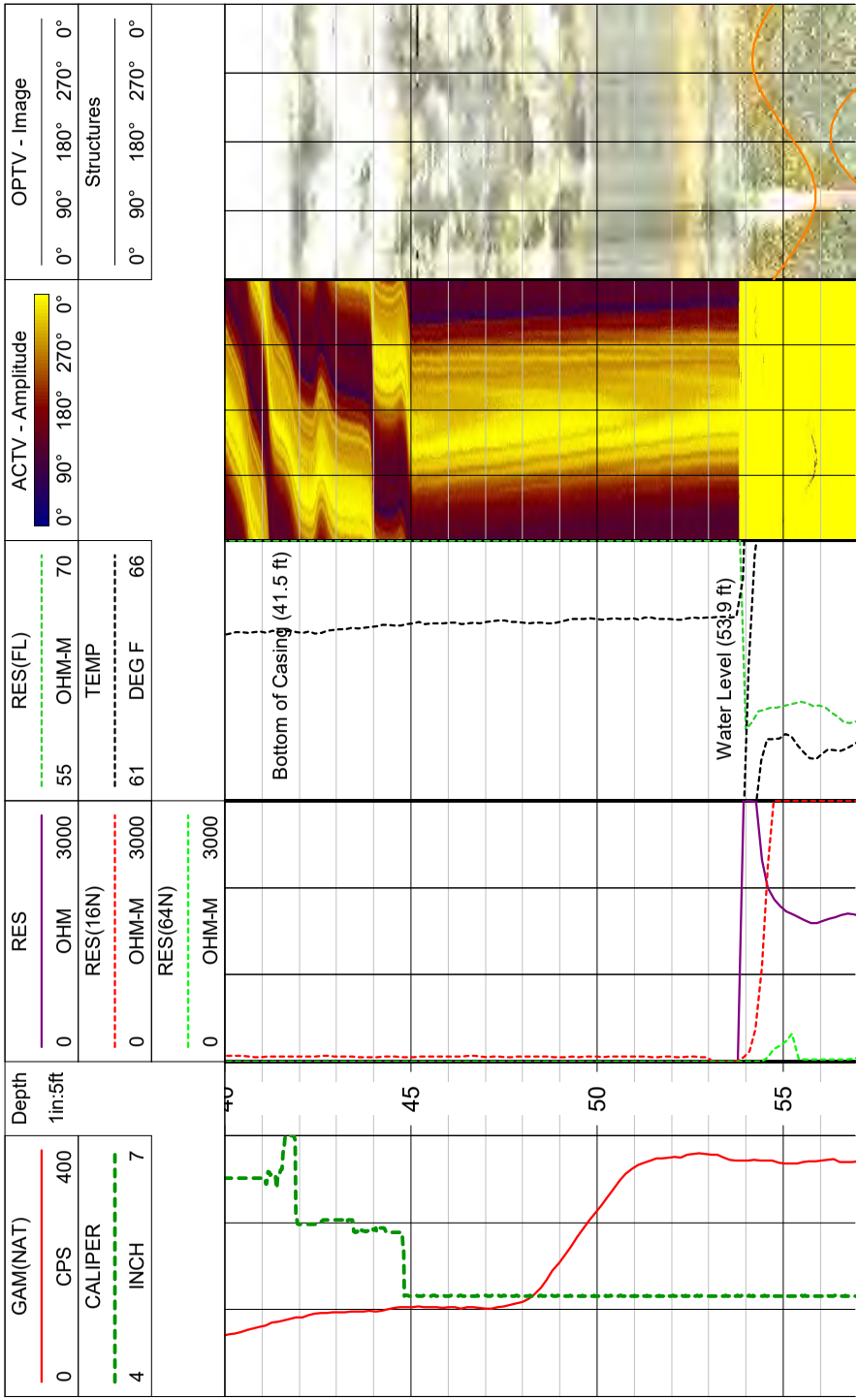
PERMANENT DATUM: ELEVATION K.B.

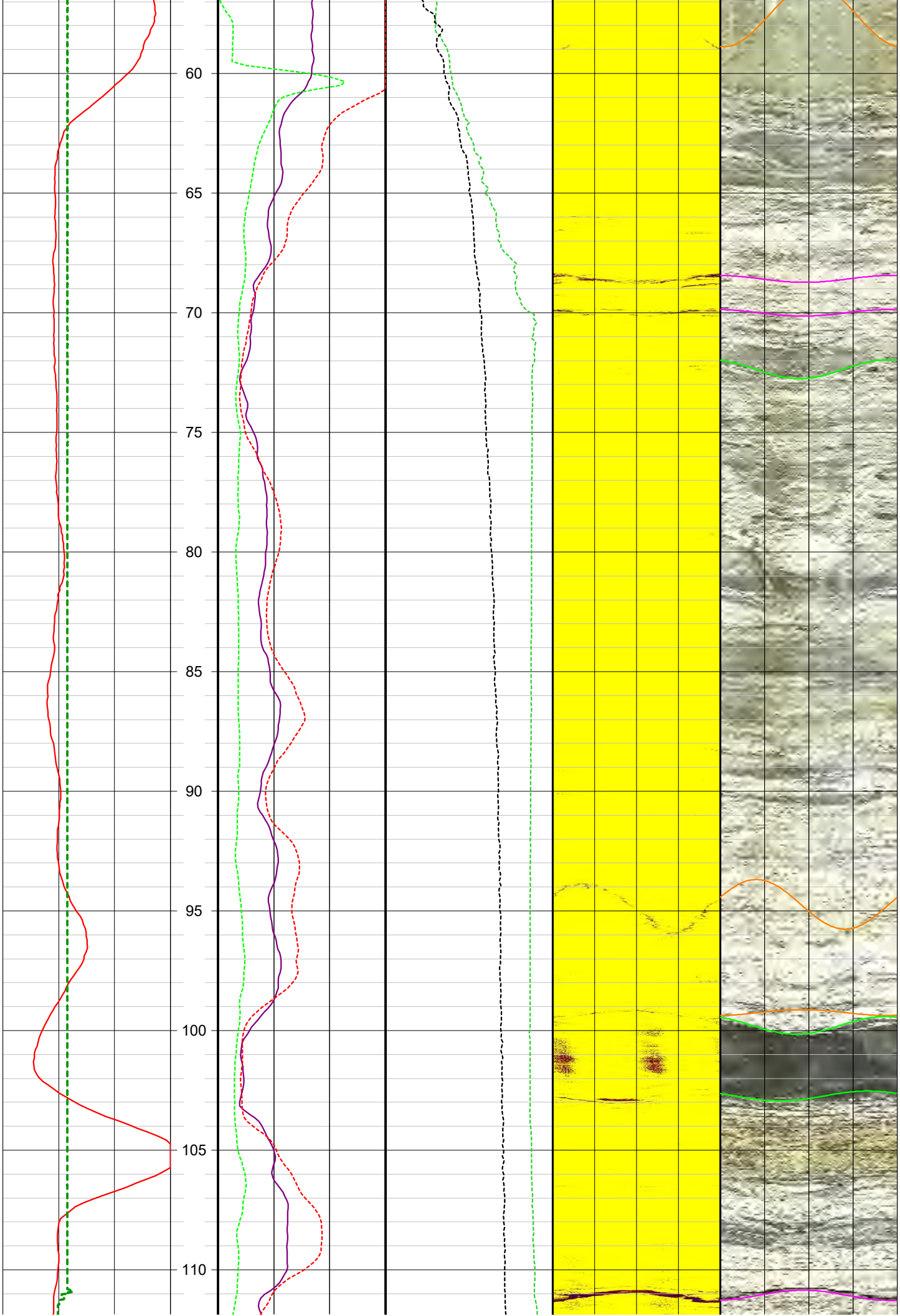
LOG MEAS. FROM: Top of Casing (TOC) ABOVE PERM. DATUM D.F.

DRILLING MEAS. FROM: G.L.

DATE	2/24/2020	TYPE FLUID IN HOLE	water
RUN No		SALINITY	
TYPE LOG	multi, cal., OPTV, ACTV	DENSITY	
DEPTH-DRILLER		LEVEL	53.9 ft.
DEPTH-LOGGER	123.5 ft.	MAX. REC. TEMP.	
BTM LOGGED INTERVAL			
TOP LOGGED INTERVAL			
OPERATING RIG TIME			
RECORDED BY	DJ		
WITNESSED BY			

REMARKS:
6-inch diameter steel casing to 41 feet below TOC.
Casing Stick-up Ht.: 1.15 ft.
Open rock portion is PQ core diameter (approx. 4.8 inches)

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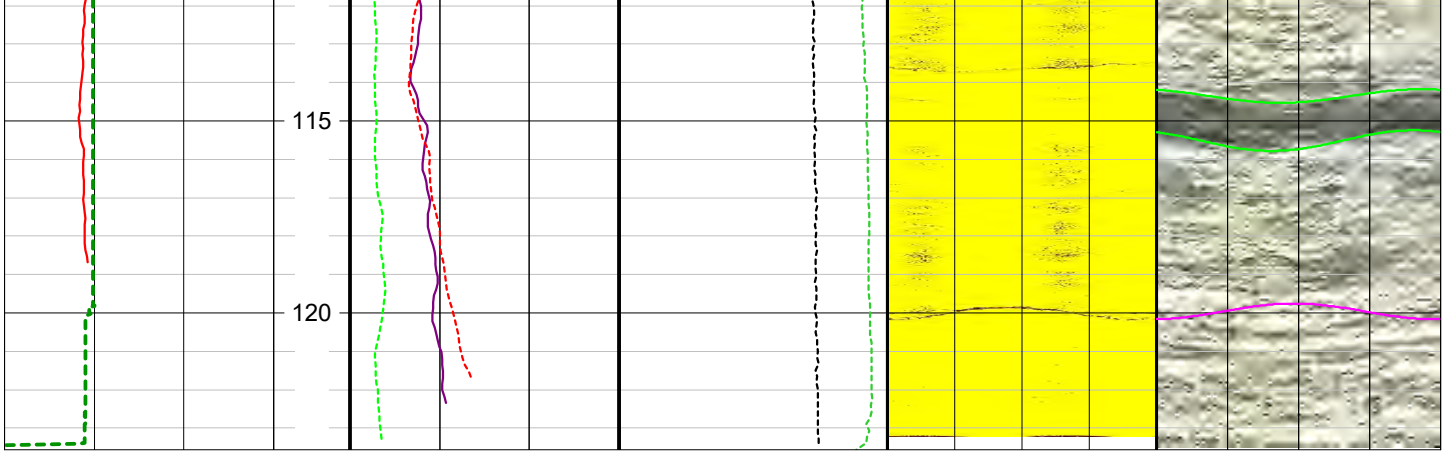
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Multi-Tool& Caliper Log / Optical & Acoustic Televiewer

CO Arcadis
WELL B-4-SF
FLD FPE Edgefield
CTY Edgefield
STE SC
FILING No

CLIENT Arcadis
WELL ID B-4-SF
SITE FPE Edgefield
CITY Edgefield **STATE** SC

LOCATION

SEC TWP RGE

OTHER SERVICES

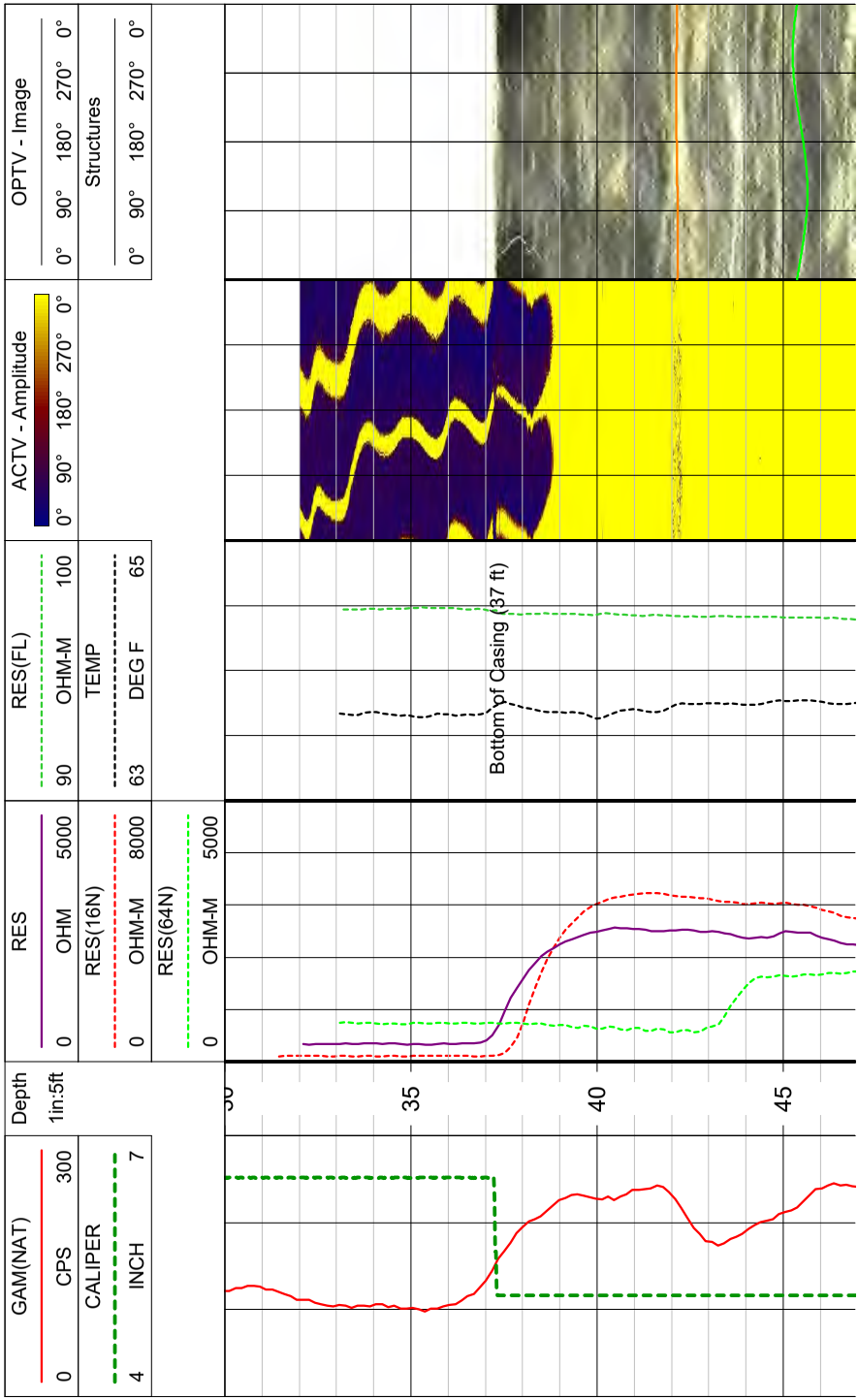
PERMANENT DATUM: ELEVATION K.B.

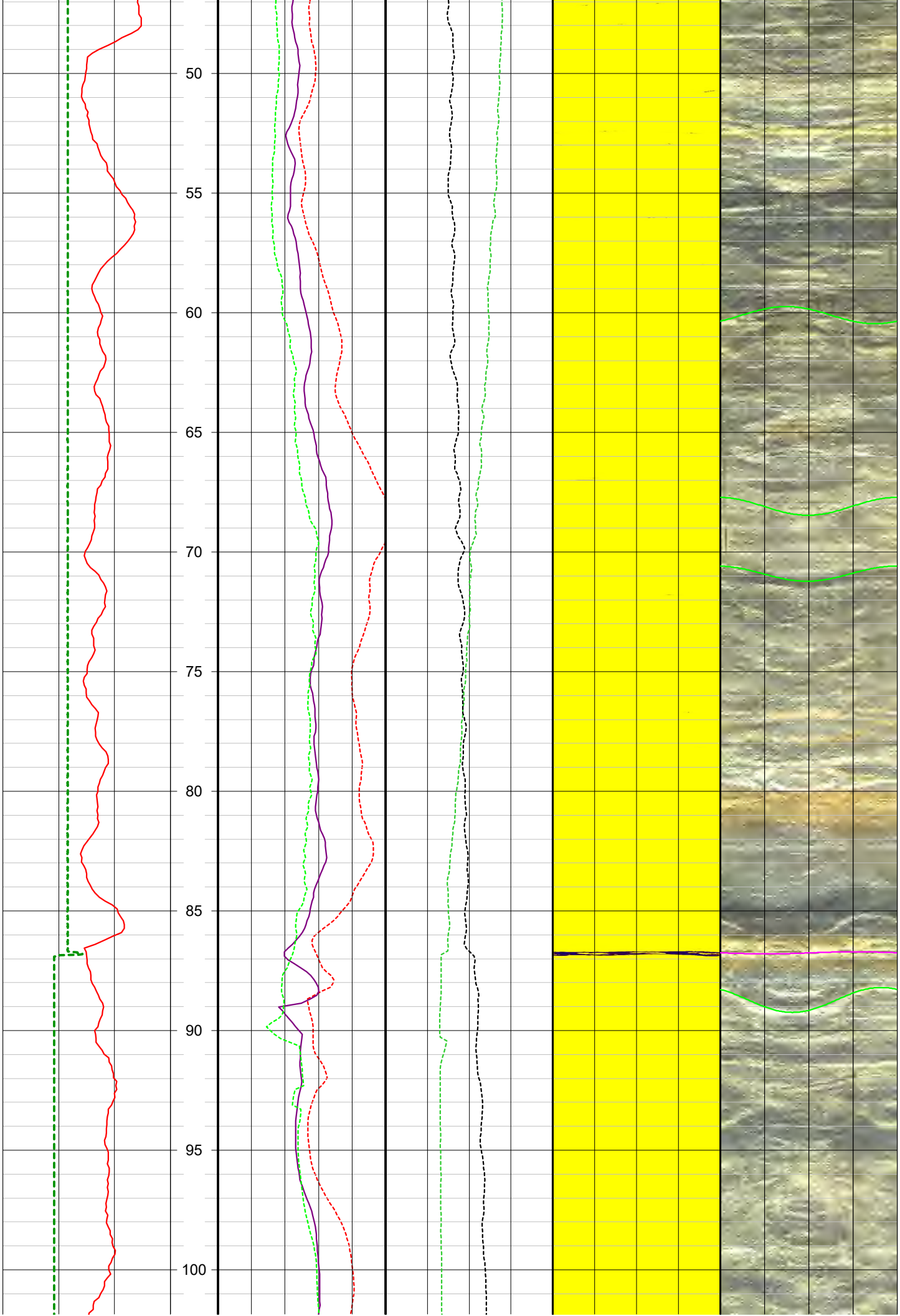
LOG MEAS. FROM: Top of Casing (TOC) ABOVE PERM. DATUM D.F.

DRILLING MEAS. FROM: G.L.

DATE	2/24 & 2/25/20	TYPE FLUID IN HOLE	water
RUN No		SALINITY	
TYPE LOG	multi, cal., OPTV, ACTV	DENSITY	
DEPTH-DRILLER		LEVEL	
DEPTH-LOGGER	121.5 ft.	MAX. REC. TEMP.	
BTM LOGGED INTERVAL			
TOP LOGGED INTERVAL			
OPERATING RIG TIME			
RECORDED BY	DJ		
WITNESSED BY			

REMARKS: 6-inch diameter steel casing to 37 feet below TOC.
Casing Stick-up Ht.: 2.3 ft.
Open rock portion is PQ core diameter (approx. 4.8 inches)

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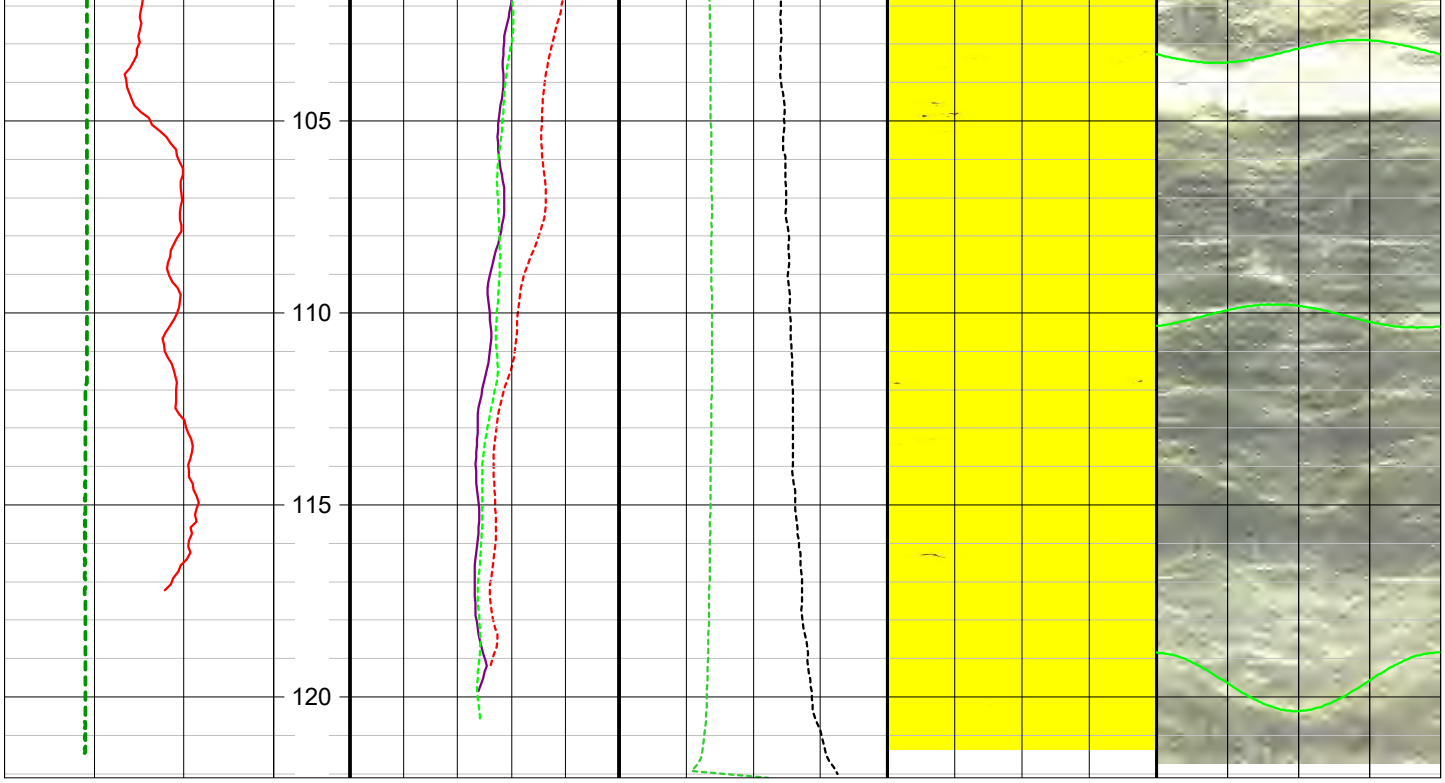
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Multi-Tool& Caliper Log / Optical & Acoustic Televiewer

CO Arcadis
WELL B-5-SF
FLD FPE Edgefield
CTY Edgefield
STE SC
FILING No

CLIENT Arcadis
WELL ID B-5-SF
SITE FPE Edgefield
CITY Edgefield **STATE** SC

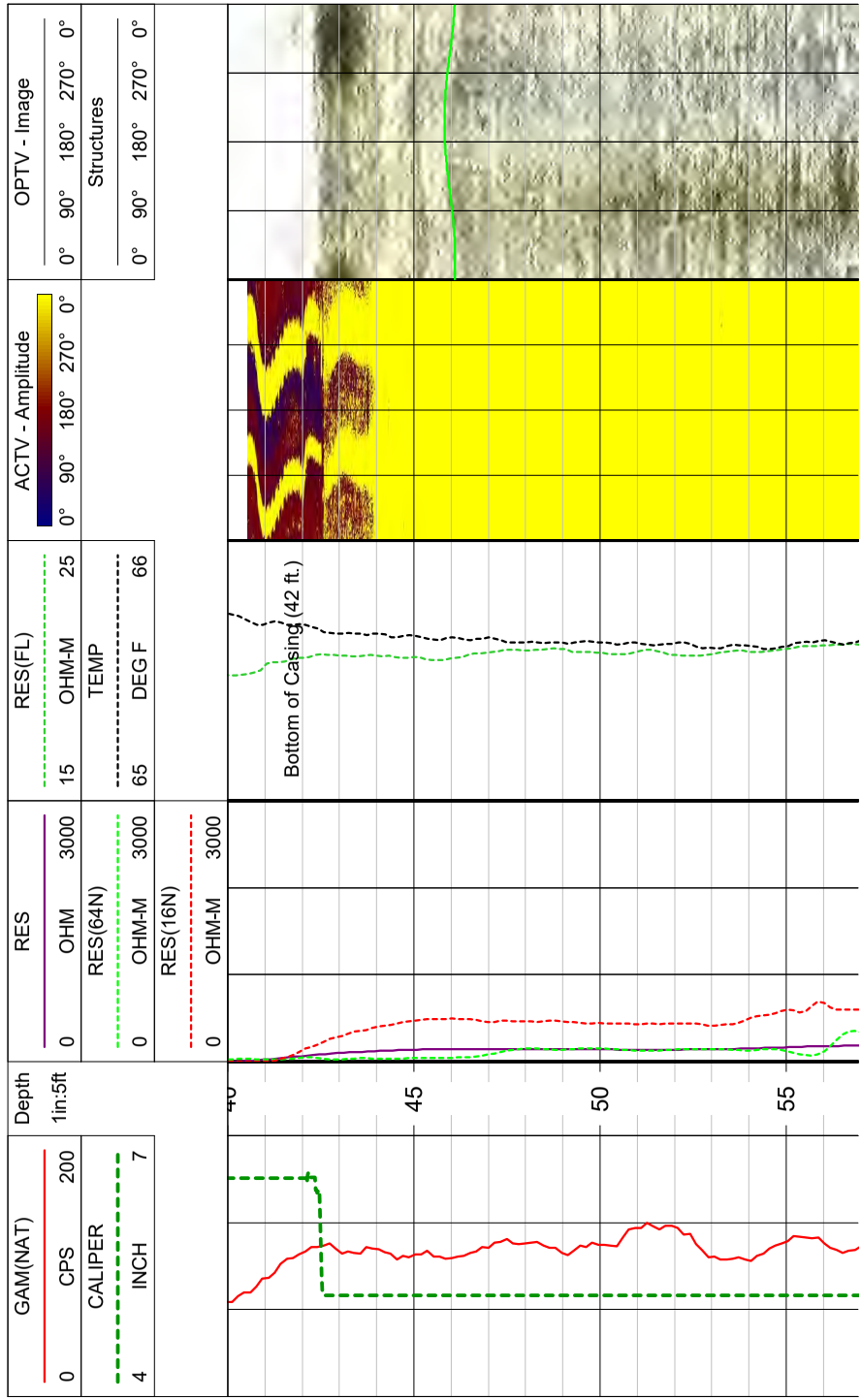
LOCATION
SEC TWP RGE

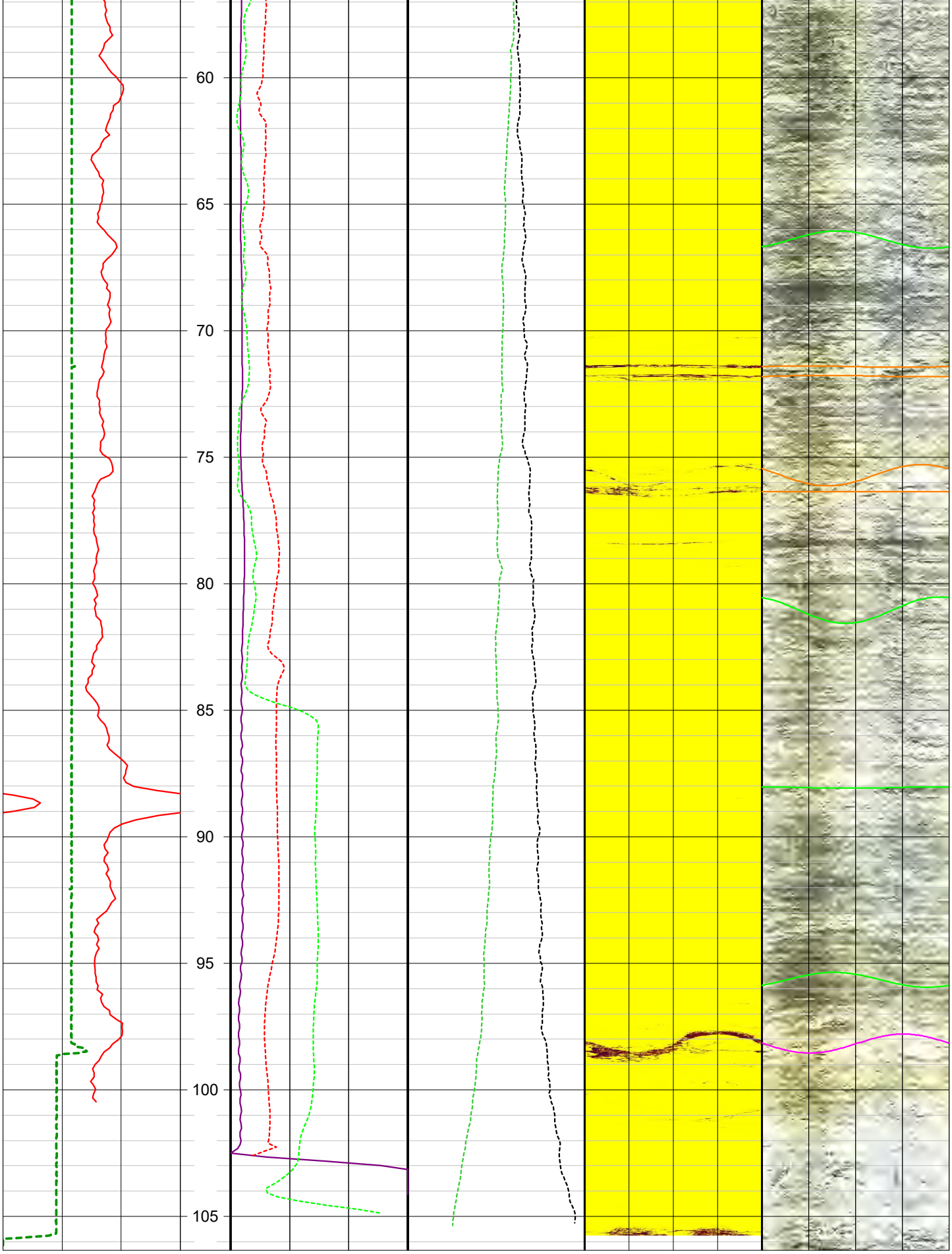
OTHER SERVICES

PERMANENT DATUM: ELEVATION K.B.
LOG MEAS. FROM: Top of Casing (TOC) ABOVE PERM. DATUM D.F.
DRILLING MEAS. FROM: G.L.

DATE	2/26/2020	TYPE FLUID IN HOLE	water
RUN No		SALINITY	
TYPE LOG	multi, cal., OPTV, ACTV	DENSITY	
DEPTH-DRILLER		LEVEL	
DEPTH-LOGGER	106 ft.	MAX. REC. TEMP.	
BTM LOGGED INTERVAL			
TOP LOGGED INTERVAL			
OPERATING RIG TIME			
RECORDED BY	DJ		
WITNESSED BY			

REMARKS:
6-inch diameter steel casing to 42 feet below TOC.
Casing Stick-up Ht.: 1.1 ft.
Open rock portion is PQ core diameter (approx. 4.8 inches)

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APPENDIX B

Groundwater Quality Analytical Data

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

FPE, Edgefield, SC

30067293/Project# 30006562.00002

SGS Job Number: JD21710

Sampling Dates: 03/09/21 - 03/12/21

Report to:

Arcadis
1450 Greene Street Suite 220
Augusta, GA 30901
Charles.Lawson@Arcadis-us.com; Jeff.Beckner@Arcadis.com

ATTN: Jeff Beckner

Total number of pages in report: **40**

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

Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Table of Contents

SGS North America Inc.

Sample Summary

Arcadis

Job No: JD21710

FPE, Edgefield, SC
Project No: 30067293/Project# 30006562.00002

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD21710-1	03/09/21	13:24	BS	03/13/21	AQ	Ground Water	B-1SF(40-50)A
JD21710-2	03/09/21	13:50	BS	03/13/21	AQ	Ground Water	B-1SF(40-50)B
JD21710-3	03/10/21	08:37	BS	03/13/21	AQ	Ground Water	B-1SF(75-85)A
JD21710-4	03/10/21	09:45	BS	03/13/21	AQ	Ground Water	B-1SF(75-85)B
JD21710-5	03/10/21	15:13	BS	03/13/21	AQ	Ground Water	B-2SF(95-105)A
JD21710-6	03/10/21	17:15	BS	03/13/21	AQ	Ground Water	B-2SF(95-105)B
JD21710-7	03/11/21	10:42	BS	03/13/21	AQ	Ground Water	B-5SF(70-80)A
JD21710-8	03/11/21	11:55	BS	03/13/21	AQ	Ground Water	B-5SF(70-80)B
JD21710-9	03/11/21	15:00	BS	03/13/21	AQ	Ground Water	B-5SF(95-105)A
JD21710-10	03/12/21	07:35	BS	03/13/21	AQ	Ground Water	B-5SF(95-105)B
JD21710-11	03/12/21	11:00	BS	03/13/21	AQ	Ground Water	B-3SF(65-75)A
JD21710-12	03/12/21	12:12	BS	03/13/21	AQ	Ground Water	B-3SF(65-75)B

Sample Summary
(continued)

Arcadis

Job No: JD21710

FPE, Edgefield, SC
Project No: 30067293/Project# 30006562.00002

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD21710-13	03/12/21	12:12	BS	03/13/21	AQ	Trip Blank Water	TB-01

Summary of Hits

Job Number: JD21710
Account: Arcadis
Project: FPE, Edgefield, SC
Collected: 03/09/21 thru 03/12/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD21710-1	**B-1SF(40-50)A**					
1,1-Dichloroethylene [a]		5.4	1.0	0.32	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		1040	50	14	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		23.2	1.0	0.22	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		1060	100	25	ug/l	SW846 8260D
4-Methyl-2-pentanone (MIBK) [a]		2.1 J	5.0	1.0	ug/l	SW846 8260D
Tetrachloroethylene [a]		0.87 J	1.0	0.22	ug/l	SW846 8260D
Toluene [a]		0.41 J	1.0	0.30	ug/l	SW846 8260D
Trichloroethylene [b]		6450	100	35	ug/l	SW846 8260D
Vinyl Chloride [a]		11.5	1.0	0.41	ug/l	SW846 8260D
JD21710-2	**B-1SF(40-50)B**					
1,1-Dichloroethylene [a]		4.3	1.0	0.32	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		939	50	14	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		31.8	1.0	0.22	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		956	100	25	ug/l	SW846 8260D
Tetrachloroethylene [a]		0.77 J	1.0	0.22	ug/l	SW846 8260D
Toluene [a]		0.46 J	1.0	0.30	ug/l	SW846 8260D
Trichloroethylene [b]		5740	100	35	ug/l	SW846 8260D
Vinyl Chloride [a]		10	1.0	0.41	ug/l	SW846 8260D
JD21710-3	**B-1SF(75-85)A**					
cis-1,2-Dichloroethylene [a]		960	100	28	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		26.7 J	100	22	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		987	200	50	ug/l	SW846 8260D
Trichloroethylene [a]		6800	100	35	ug/l	SW846 8260D
JD21710-4	**B-1SF(75-85)B**					
cis-1,2-Dichloroethylene [a]		959	100	28	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		31.9 J	100	22	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		991	200	50	ug/l	SW846 8260D
Trichloroethylene [a]		7190	100	35	ug/l	SW846 8260D
JD21710-5	**B-2SF(95-105)A**					
Chloroform [a]		3.3 J	10	3.0	ug/l	SW846 8260D
1,1-Dichloroethylene [a]		6.3 J	10	3.2	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		71.8	10	2.8	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		71.8	20	5.0	ug/l	SW846 8260D
Trichloroethylene [a]		612	10	3.5	ug/l	SW846 8260D

Summary of Hits

Job Number: JD21710
Account: Arcadis
Project: FPE, Edgefield, SC
Collected: 03/09/21 thru 03/12/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD21710-6	**B-2SF(95-105)B**					
cis-1,2-Dichloroethylene [a]		374	50	14	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		374	100	25	ug/l	SW846 8260D
Trichloroethylene [a]		4090	50	17	ug/l	SW846 8260D
JD21710-7	**B-5SF(70-80)A**					
2-Butanone (MEK) [a]		279	50	20	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		55.4	10	2.8	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		3.3 J	10	2.2	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		58.7	20	5.0	ug/l	SW846 8260D
Trichloroethylene [a]		708	10	3.5	ug/l	SW846 8260D
JD21710-8	**B-5SF(70-80)B**					
2-Butanone (MEK) [a]		38.8 J	50	20	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		54.5	10	2.8	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		54.5	20	5.0	ug/l	SW846 8260D
Tetrachloroethylene [a]		2.3 J	10	2.2	ug/l	SW846 8260D
Trichloroethylene [a]		725	10	3.5	ug/l	SW846 8260D
JD21710-9	**B-5SF(95-105)A**					
2-Butanone (MEK) [a]		370	50	20	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		56.2	10	2.8	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		56.2	20	5.0	ug/l	SW846 8260D
Trichloroethylene [a]		638	10	3.5	ug/l	SW846 8260D
JD21710-10	**B-5SF(95-105)B**					
2-Butanone (MEK) [a]		226	50	20	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		55.2	10	2.8	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		55.2	20	5.0	ug/l	SW846 8260D
Trichloroethylene [a]		515	10	3.5	ug/l	SW846 8260D
JD21710-11	**B-3SF(65-75)A**					
cis-1,2-Dichloroethylene [a]		98.4	10	2.8	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		7.7 J	10	2.2	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		106	20	5.0	ug/l	SW846 8260D
Trichloroethylene [a]		559	10	3.5	ug/l	SW846 8260D

Summary of Hits

Job Number: JD21710
Account: Arcadis
Project: FPE, Edgefield, SC
Collected: 03/09/21 thru 03/12/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD21710-12	**B-3SF(65-75)B**					
cis-1,2-Dichloroethylene [a]		104	10	2.8	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		3.4 J	10	2.2	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		108	20	5.0	ug/l	SW846 8260D
Trichloroethylene [a]		604	10	3.5	ug/l	SW846 8260D
JD21710-13	**TB-01**					

No hits reported in this sample.

(a) Analysis performed at SGS Orlando, FL.
(b) Sample vial(s) contained significant headspace; reported results are considered minimum values. Analysis performed at SGS Orlando, FL.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	B-1SF(40-50)A		
Lab Sample ID:	JD21710-1	**Date Sampled:**	03/09/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26900.D	1	03/18/21 19:41	AFL	n/a	n/a	F:V5E1236
Run #2 [a]	5E26917.D	50	03/19/21 13:21	AFL	n/a	n/a	F:V5E1237
Run #3 [b]	5E26946.D	100	03/22/21 13:02	AFL	n/a	n/a	F:V5E1238

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml
Run #3	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane [c]	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	5.4	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1040 [d]	50	14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	23.2	1.0	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	1060 [d]	100	25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.1	5.0	1.0	ug/l	J
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.87	1.0	0.22	ug/l	J
108-88-3	Toluene	0.41	1.0	0.30	ug/l	J

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

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

Report of Analysis

Client Sample ID:	B-1SF(40-50)A		
Lab Sample ID:	JD21710-1	**Date Sampled:**	03/09/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	6450 [e]	100	35	ug/l	
75-01-4	Vinyl Chloride	11.5	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	98%	99%	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	102%	100%	79-125%
2037-26-5	Toluene-D8	102%	100%	105%	85-112%
460-00-4	4-Bromofluorobenzene	102%	101%	102%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Sample vial(s) contained significant headspace; reported results are considered minimum values. Analysis performed at SGS Orlando, FL.
(c) Associated BS recovery outside control limits high; however sample is ND.
(d) Result is from Run# 2
(e) Result is from Run# 3

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

Report of Analysis

Client Sample ID:	B-1SF(40-50)B		
Lab Sample ID:	JD21710-2	**Date Sampled:**	03/09/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26901.D	1	03/18/21 20:04	AFL	n/a	n/a	F:V5E1236
Run #2 [a]	5E26918.D	50	03/19/21 13:44	AFL	n/a	n/a	F:V5E1237
Run #3 [b]	5E26947.D	100	03/22/21 13:26	AFL	n/a	n/a	F:V5E1238

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml
Run #3	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane [c]	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	4.3	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	939 [d]	50	14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	31.8	1.0	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	956 [d]	100	25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.77	1.0	0.22	ug/l	J
108-88-3	Toluene	0.46	1.0	0.30	ug/l	J

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

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

Report of Analysis

Client Sample ID:	B-1SF(40-50)B		
Lab Sample ID:	JD21710-2	**Date Sampled:**	03/09/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	5740 [e]	100	35	ug/l	
75-01-4	Vinyl Chloride	10	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	98%	98%	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	103%	101%	79-125%
2037-26-5	Toluene-D8	102%	100%	104%	85-112%
460-00-4	4-Bromofluorobenzene	101%	102%	102%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Sample vial(s) contained significant headspace; reported results are considered minimum values. Analysis performed at SGS Orlando, FL.
(c) Associated BS recovery outside control limits high; however sample is ND.
(d) Result is from Run# 2
(e) Result is from Run# 3

Report of Analysis

Client Sample ID:	B-1SF(75-85)A		
Lab Sample ID:	JD21710-3	**Date Sampled:**	03/10/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26922.D	100	03/19/21 15:17	AFL	n/a	n/a	F:V5E1237
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2500	1000	ug/l	
71-43-2	Benzene	ND	100	31	ug/l	
75-27-4	Bromodichloromethane	ND	100	24	ug/l	
75-25-2	Bromoform	ND	100	41	ug/l	
78-93-3	2-Butanone (MEK)	ND	500	200	ug/l	
75-15-0	Carbon Disulfide	ND	200	53	ug/l	
56-23-5	Carbon Tetrachloride	ND	100	36	ug/l	
108-90-7	Chlorobenzene	ND	100	20	ug/l	
75-00-3	Chloroethane [b]	ND	200	67	ug/l	
67-66-3	Chloroform	ND	100	30	ug/l	
124-48-1	Dibromochloromethane	ND	100	28	ug/l	
75-34-3	1,1-Dichloroethane	ND	100	34	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	100	32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	960	100	28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	26.7	100	22	ug/l	J
540-59-0	1,2-Dichloroethene (total)	987	200	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	100	29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	21	ug/l	
100-41-4	Ethylbenzene	ND	100	36	ug/l	
591-78-6	2-Hexanone	ND	1000	200	ug/l	
74-83-9	Methyl Bromide [b]	ND	500	200	ug/l	
74-87-3	Methyl Chloride	ND	200	50	ug/l	
75-09-2	Methylene Chloride	ND	500	200	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	500	100	ug/l	
100-42-5	Styrene	ND	100	22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	30	ug/l	
127-18-4	Tetrachloroethylene	ND	100	22	ug/l	
108-88-3	Toluene	ND	100	30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	100	47	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-1SF(75-85)A		
Lab Sample ID:	JD21710-3	**Date Sampled:**	03/10/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	6800	100	35	ug/l	
75-01-4	Vinyl Chloride	ND	100	41	ug/l	
1330-20-7	Xylene (total)	ND	300	72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	B-1SF(75-85)B		
Lab Sample ID:	JD21710-4	**Date Sampled:**	03/10/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26923.D	100	03/19/21 15:40	AFL	n/a	n/a	F:V5E1237
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2500	1000	ug/l	
71-43-2	Benzene	ND	100	31	ug/l	
75-27-4	Bromodichloromethane	ND	100	24	ug/l	
75-25-2	Bromoform	ND	100	41	ug/l	
78-93-3	2-Butanone (MEK)	ND	500	200	ug/l	
75-15-0	Carbon Disulfide	ND	200	53	ug/l	
56-23-5	Carbon Tetrachloride	ND	100	36	ug/l	
108-90-7	Chlorobenzene	ND	100	20	ug/l	
75-00-3	Chloroethane [b]	ND	200	67	ug/l	
67-66-3	Chloroform	ND	100	30	ug/l	
124-48-1	Dibromochloromethane	ND	100	28	ug/l	
75-34-3	1,1-Dichloroethane	ND	100	34	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	100	32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	959	100	28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	31.9	100	22	ug/l	J
540-59-0	1,2-Dichloroethene (total)	991	200	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	100	29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	21	ug/l	
100-41-4	Ethylbenzene	ND	100	36	ug/l	
591-78-6	2-Hexanone	ND	1000	200	ug/l	
74-83-9	Methyl Bromide [b]	ND	500	200	ug/l	
74-87-3	Methyl Chloride	ND	200	50	ug/l	
75-09-2	Methylene Chloride	ND	500	200	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	500	100	ug/l	
100-42-5	Styrene	ND	100	22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	30	ug/l	
127-18-4	Tetrachloroethylene	ND	100	22	ug/l	
108-88-3	Toluene	ND	100	30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	100	47	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-1SF(75-85)B		
Lab Sample ID:	JD21710-4	**Date Sampled:**	03/10/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	7190	100	35	ug/l	
75-01-4	Vinyl Chloride	ND	100	41	ug/l	
1330-20-7	Xylene (total)	ND	300	72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	B-2SF(95-105)A		
Lab Sample ID:	JD21710-5	**Date Sampled:**	03/10/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26948.D	10	03/22/21 13:49	AFL	n/a	n/a	F:V5E1238
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	250	100	ug/l	
71-43-2	Benzene	ND	10	3.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	20	6.7	ug/l	
67-66-3	Chloroform	3.3	10	3.0	ug/l	J
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	6.3	10	3.2	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	71.8	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.2	ug/l	
540-59-0	1,2-Dichloroethene (total)	71.8	20	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide	ND	50	20	ug/l	
74-87-3	Methyl Chloride	ND	20	5.0	ug/l	
75-09-2	Methylene Chloride	ND	50	20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	10	ug/l	
100-42-5	Styrene	ND	10	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	ND	10	2.2	ug/l	
108-88-3	Toluene	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-2SF(95-105)A		
Lab Sample ID:	JD21710-5	**Date Sampled:**	03/10/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	612	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	105%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.

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

Report of Analysis

Client Sample ID:	B-2SF(95-105)B		
Lab Sample ID:	JD21710-6	**Date Sampled:**	03/10/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26925.D	50	03/19/21 16:27	AFL	n/a	n/a	F:V5E1237
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1300	500	ug/l	
71-43-2	Benzene	ND	50	16	ug/l	
75-27-4	Bromodichloromethane	ND	50	12	ug/l	
75-25-2	Bromoform	ND	50	20	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	100	ug/l	
75-15-0	Carbon Disulfide	ND	100	27	ug/l	
56-23-5	Carbon Tetrachloride	ND	50	18	ug/l	
108-90-7	Chlorobenzene	ND	50	10	ug/l	
75-00-3	Chloroethane [b]	ND	100	33	ug/l	
67-66-3	Chloroform	ND	50	15	ug/l	
124-48-1	Dibromochloromethane	ND	50	14	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	17	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	16	ug/l	
75-35-4	1,1-Dichloroethylene	ND	50	16	ug/l	
156-59-2	cis-1,2-Dichloroethylene	374	50	14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	50	11	ug/l	
540-59-0	1,2-Dichloroethene (total)	374	100	25	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	11	ug/l	
100-41-4	Ethylbenzene	ND	50	18	ug/l	
591-78-6	2-Hexanone	ND	500	100	ug/l	
74-83-9	Methyl Bromide [b]	ND	250	100	ug/l	
74-87-3	Methyl Chloride	ND	100	25	ug/l	
75-09-2	Methylene Chloride	ND	250	100	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	50	ug/l	
100-42-5	Styrene	ND	50	11	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	15	ug/l	
127-18-4	Tetrachloroethylene	ND	50	11	ug/l	
108-88-3	Toluene	ND	50	15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	12	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	23	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-2SF(95-105)B		
Lab Sample ID:	JD21710-6	**Date Sampled:**	03/10/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	4090	50	17	ug/l	
75-01-4	Vinyl Chloride	ND	50	20	ug/l	
1330-20-7	Xylene (total)	ND	150	36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	B-5SF(70-80)A		
Lab Sample ID:	JD21710-7	**Date Sampled:**	03/11/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26926.D	10	03/19/21 16:50	AFL	n/a	n/a	F:V5E1237
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	250	100	ug/l	
71-43-2	Benzene	ND	10	3.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	279	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane [b]	ND	20	6.7	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	3.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	55.4	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	3.3	10	2.2	ug/l	J
540-59-0	1,2-Dichloroethene (total)	58.7	20	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide [b]	ND	50	20	ug/l	
74-87-3	Methyl Chloride	ND	20	5.0	ug/l	
75-09-2	Methylene Chloride	ND	50	20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	10	ug/l	
100-42-5	Styrene	ND	10	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	ND	10	2.2	ug/l	
108-88-3	Toluene	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-5SF(70-80)A		
Lab Sample ID:	JD21710-7	**Date Sampled:**	03/11/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	708	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	B-5SF(70-80)B		
Lab Sample ID:	JD21710-8	**Date Sampled:**	03/11/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26949.D	10	03/22/21 14:12	AFL	n/a	n/a	F:V5E1238
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	250	100	ug/l	
71-43-2	Benzene	ND	10	3.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	38.8	50	20	ug/l	J
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	20	6.7	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	3.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	54.5	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.2	ug/l	
540-59-0	1,2-Dichloroethene (total)	54.5	20	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide	ND	50	20	ug/l	
74-87-3	Methyl Chloride	ND	20	5.0	ug/l	
75-09-2	Methylene Chloride	ND	50	20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	10	ug/l	
100-42-5	Styrene	ND	10	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	2.3	10	2.2	ug/l	J
108-88-3	Toluene	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-5SF(70-80)B		
Lab Sample ID:	JD21710-8	**Date Sampled:**	03/11/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	725	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	104%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.

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

Report of Analysis

Client Sample ID:	B-5SF(95-105)A		
Lab Sample ID:	JD21710-9	**Date Sampled:**	03/11/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26928.D	10	03/19/21 17:36	AFL	n/a	n/a	F:V5E1237
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	250	100	ug/l	
71-43-2	Benzene	ND	10	3.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	370	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane [b]	ND	20	6.7	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	3.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	56.2	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.2	ug/l	
540-59-0	1,2-Dichloroethene (total)	56.2	20	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide [b]	ND	50	20	ug/l	
74-87-3	Methyl Chloride	ND	20	5.0	ug/l	
75-09-2	Methylene Chloride	ND	50	20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	10	ug/l	
100-42-5	Styrene	ND	10	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	ND	10	2.2	ug/l	
108-88-3	Toluene	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-5SF(95-105)A		
Lab Sample ID:	JD21710-9	**Date Sampled:**	03/11/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	638	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	B-5SF(95-105)B		
Lab Sample ID:	JD21710-10	**Date Sampled:**	03/12/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26929.D	10	03/19/21 17:59	AFL	n/a	n/a	F:V5E1237
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	250	100	ug/l	
71-43-2	Benzene	ND	10	3.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	226	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane [b]	ND	20	6.7	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	3.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	55.2	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.2	ug/l	
540-59-0	1,2-Dichloroethene (total)	55.2	20	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide [b]	ND	50	20	ug/l	
74-87-3	Methyl Chloride	ND	20	5.0	ug/l	
75-09-2	Methylene Chloride	ND	50	20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	10	ug/l	
100-42-5	Styrene	ND	10	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	ND	10	2.2	ug/l	
108-88-3	Toluene	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-5SF(95-105)B		
Lab Sample ID:	JD21710-10	**Date Sampled:**	03/12/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	515	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	B-3SF(65-75)A		
Lab Sample ID:	JD21710-11	**Date Sampled:**	03/12/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26930.D	10	03/19/21 18:22	AFL	n/a	n/a	F:V5E1237
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	250	100	ug/l	
71-43-2	Benzene	ND	10	3.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane [b]	ND	20	6.7	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	3.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	98.4	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	7.7	10	2.2	ug/l	J
540-59-0	1,2-Dichloroethene (total)	106	20	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide [b]	ND	50	20	ug/l	
74-87-3	Methyl Chloride	ND	20	5.0	ug/l	
75-09-2	Methylene Chloride	ND	50	20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	10	ug/l	
100-42-5	Styrene	ND	10	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	ND	10	2.2	ug/l	
108-88-3	Toluene	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-3SF(65-75)A		
Lab Sample ID:	JD21710-11	**Date Sampled:**	03/12/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	559	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	B-3SF(65-75)B		
Lab Sample ID:	JD21710-12	**Date Sampled:**	03/12/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26931.D	10	03/19/21 18:46	AFL	n/a	n/a	F:V5E1237
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	250	100	ug/l	
71-43-2	Benzene	ND	10	3.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane [b]	ND	20	6.7	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	3.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	104	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	3.4	10	2.2	ug/l	J
540-59-0	1,2-Dichloroethene (total)	108	20	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide [b]	ND	50	20	ug/l	
74-87-3	Methyl Chloride	ND	20	5.0	ug/l	
75-09-2	Methylene Chloride	ND	50	20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	10	ug/l	
100-42-5	Styrene	ND	10	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	ND	10	2.2	ug/l	
108-88-3	Toluene	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-3SF(65-75)B		
Lab Sample ID:	JD21710-12	**Date Sampled:**	03/12/21
Matrix:	AQ - Ground Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	604	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	TB-01		
Lab Sample ID:	JD21710-13	**Date Sampled:**	03/12/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E26912.D	1	03/19/21 11:25	AFL	n/a	n/a	F:V5E1237
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane [b]	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide [b]	ND	5.0	2.0	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	

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

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

Report of Analysis

Client Sample ID:	TB-01		
Lab Sample ID:	JD21710-13	**Date Sampled:**	03/12/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Chain of Custody (SGS Orlando, FL)

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

EHSA-QAC-0023-02-FORM-Standard COC

GW WTD

Page 1 of 1

FED-EX Tracking # 9851 0899 8933 | Bottle Order Control # MJ-03321-212
SGS Quote # | SGS Job # JD21710

Client / Reporting Information

Company Name: Arcadis
Street Address: 1450 Greene St
City: Augusta State: GA Zip: 30901
Project Contact: Jeff Beckner E-mail:
Phone # 803 215 0616
Sampler(s) Name(s): Robby Sharp Phone #
Project Manager: Jeff Beckner

Project Information

Project Name: FPE Edgefield
Street:
City: State:
Project # 30067293
Client Purchase Order #

Billing Information (If different from Report to)

Company Name: Arcadis
Street Address: 1450 Greene St
City: Augusta State: GA Zip: 30901
Attention: Jeff Beckner

Requested Analysis

8260B

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE		LAB USE ONLY
1	B-1SF (40-50) A		3/9/21	1324	RS	G	GW	3	3								X	
2	B-1SF (40-50) B		3/9/21	1350	RS	G	GW	3	3								X	
3	B-1SF (75-85) A		3/10/21	0837	RS	G	GW	3	3								X	
4	B-1SF (75-85) B		3/10/21	0945	RS	G	GW	3	3								X	
5	B-2SF (95-105) A		3/10/21	1513	RS	G	GW	3	3								X	
6	B-2SF (95-105) B		3/10/21	1715	RS	G	GW	3	3								X	
7	B-5SF (70-80) A		3/11/21	1042	RS	G	GW	3	3								X	
8	B-5SF (70-80) B		3/11/21	1155	RS	G	GW	3	3								X	
9	B-5SF (95-105) A		3/11/21	1500	RS	G	GW	3	3								X	
10	B-5SF (95-105) B		3/12/21	0735	RS	G	GW	3	3								X	
11	B-3SF (65-75) A		3/12/21	1100	RS	G	GW	3	3								X	
12	B-3SF (65-75) B		3/12/21	1212	RS	G	GW	3	3								X	
13	TB-01						WW	2	2								X	

VOC
SVB

Turn Around Time (Business Days) lab lab — Deliverable — Comments / Special Instructions

Approved By (SGS PM): / Date:

- [ ] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [x] Other Standard

All data available via Lablink
* Approval needed for 1-3 Business Day TAT

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria_____
- [ ] CT RCP Criteria_____
- [ ] State Forms
- [ ] EDD Format _____
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

INITIAL ASSESSMENT 3A.pp
LABEL VERIFICATION

http://www.sgs.com/en/terms-and-conditions

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

	Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1	Robby Sharp	3/12/21 1500	FedEx	FedEx	3/13/2021 9:55	DL
2						
3						
4						
5						

Custody Seal # 21516 — [x] Intact [ ] Not intact — Preserved where applicable: Absent [ ] — Therm. ID: IR4 — On Ice [x] — Cooler Temp. °C 3.1 3.1p

SGS Sample Receipt Summary

Job Number: JD21710 **Client:** ARCADIS **Project:** FPE, EDGEFIELD, SC

Date / Time Received: 3/13/2021 9:55:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (1.8);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD21710: Chain of Custody
Page 2 of 2

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #: JD21710

Client / Reporting Information

Company Name:
Street Address:
City State Zip
Project Contact E-mail: michelle.jenkins@sgs.com
Phone #:
Sampler(s) Name(s): BS Phone:

Project Information

Project Name: FPE, Edgefield, SC
Street:
City State
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip
Attention:

Requested Analysis

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB-Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VB260TCL	LAB USE ONLY
1	B-1SF(40-50)A		3/9/21	1:24:00 PM	BS	AQ										X	
2	B-1SF(40-50)B		3/9/21	1:50:00 PM	BS	AQ										X	
3	B-1SF(75-85)A		3/10/21	8:37:00 AM	BS	AQ										X	
4	B-1SF(75-85)B		3/10/21	9:45:00 AM	BS	AQ										X	
5	B-2SF(95-100)A		3/10/21	3:13:00 PM	BS	AQ										X	
6	B-2SF(95-100)B		3/10/21	5:15:00 PM	BS	AQ										X	
7	B-5SF(70-80)A		3/11/21	10:42:00 AM	BS	AQ										X	
8	B-5SF(70-80)B		3/11/21	11:55:00 AM	BS	AQ										X	
9	B-5SF(95-105)A		3/11/21	3:00:00 PM	BS	AQ										X	
10	B-5SF(95-105)B		3/12/21	7:35:00 AM	BS	AQ										X	
11	B-3SF(65-75)A		3/12/21	11:00:00 AM	BS	AQ										X	
12	B-3SF(65-75)B		3/12/21	12:12:00 PM	BS	AQ										X	

INITIAL ASSESSMENT
LABEL VERIFICATION

Turnaround Time (Business days)

Approved By (SGS PM); / Date:

- [ ] Standard 10 Business Days
- [ ] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENCY
- [X] Other Due 3/22/2021

Emergency & Rush T/A data available via Lablink. Approval needed for RUSH/Emergency TAT

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other COMMA

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

8260BI

http://www.sgs.com/en/terms-and-conditions

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

	Relinquished By:	Date / Time:	Received By:
1		3/16/21 1610	1 Fedex
2	Relinquished By: Fedex	Date / Time:	Received By: 3/17/21 1000
3	Relinquished By:	Date / Time:	Received By: 3
4	Relinquished By:	Date / Time:	Received By: 4
5	Relinquished by:	Date / Time:	Received By: 5

Custody Seal # 28085 | Intact | Not Intact | Preserved where applicable | Absent | Therm. ID: | On Ice | Cooler Temp. °C 0.2

jd21710.xls
Rev. Date: 4/10/18

JD21710: Chain of Custody
Page 1 of 3
SGS Orlando, FL

SGS

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #: JD21710

Client / Reporting Information

Company Name:
Street Address:
City / State / Zip:
Project Contact: E-mail: michelle.jenkins@sgs.com
Phone #:
Sampler(s) Name(s): BS | Phone:

Project Information

Project Name: FPE, Edgefield, SC
Street:
City / State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention:

Requested Analysis

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	None	DI Water	MEOH	EnCore	VB260TCL	LAB USE ONLY
13	TB-01		3/12/21	12:12:00 PM	BS	WTB										X	

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- [ ] Standard 10 Business Days
- [ ] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENCY
- [X] Other Due 3/22/2021

Emergency & Rush T/A data available via LabLink. Approval needed for RUSH/Emergency TAT

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other COMMA

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

8260BI

http://www.sgs.com/en/terms-and-conditions

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

	Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1		3/16/21 16:30	Fed Ex	Fed Ex		3/17/21 1000
3						
5						

Custody Seal # 2085 | Intact / Not intact | Preserved where applicable | Absent | Therm. ID: | On Ice | Cooler Temp. °C

jd21710.xls
Rev. Date: 4/10/18

JD21710: Chain of Custody
Page 2 of 3

SGS Sample Receipt Summary

Job Number: JD21710 **Client:** SGS NJ **Project:** FPE,EDGEFIELD

Date / Time Received: 3/17/2021 10:00:00 AM **Delivery Method:** FX **Airbill #'s:** *251 0901 0617

Therm ID: IR 1; **Therm CF:** -1.8; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (0.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: PETERH Date: 3/17/2021 10:00:00 A Reviewer: _____ Date: _____

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

FPE, Edgefield, SC

30067293/Project# 30006562.00002

SGS Job Number: JD22228

Sampling Dates: 03/22/21 - 03/23/21

Report to:

Arcadis
1450 Greene Street Suite 220
Augusta, GA 30901
Charles.Lawson@Arcadis-us.com; Jeff.Beckner@Arcadis.com

ATTN: Jeff Beckner

Total number of pages in report: 25

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

Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Table of Contents

SGS North America Inc.

Sample Summary

Arcadis

Job No: JD22228

FPE, Edgefield, SC
Project No: 30067293/Project# 30006562.00002

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD22228-1	03/22/21	11:49	CL	03/24/21	AQ	Water	B-3SF(90-100)A
JD22228-2	03/22/21	12:33	CL	03/24/21	AQ	Water	B-3SF(90-100)B
JD22228-3	03/22/21	15:00	CL	03/24/21	AQ	Water	B-3SF(110-120)A
JD22228-4	03/22/21	16:00	CL	03/24/21	AQ	Water	B-3SF(110-120)B
JD22228-5	03/23/21	09:49	CL	03/24/21	AQ	Water	B-4SF(80-90)A
JD22228-6	03/23/21	10:52	CL	03/24/21	AQ	Water	B-4SF(80-90)B
JD22228-7	03/23/21	10:52	CL	03/24/21	AQ	Trip Blank Water	TRIP BLANK

Summary of Hits

Job Number: JD22228
Account: Arcadis
Project: FPE, Edgefield, SC
Collected: 03/22/21 thru 03/23/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD22228-1	**B-3SF(90-100)A**					
cis-1,2-Dichloroethylene [a]		77.4	5.0	1.4	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		3.5 J	5.0	1.1	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		80.9	10	2.5	ug/l	SW846 8260D
Trichloroethylene [a]		365	5.0	1.7	ug/l	SW846 8260D
JD22228-2	**B-3SF(90-100)B**					
cis-1,2-Dichloroethylene [a]		107	10	2.8	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		6.5 J	10	2.2	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		114	20	5.0	ug/l	SW846 8260D
Trichloroethylene [a]		725	10	3.5	ug/l	SW846 8260D
JD22228-3	**B-3SF(110-120)A**					
cis-1,2-Dichloroethylene [a]		213	20	5.5	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		12.4 J	20	4.4	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		225	40	9.9	ug/l	SW846 8260D
Trichloroethylene [a]		1220	20	6.9	ug/l	SW846 8260D
JD22228-4	**B-3SF(110-120)B**					
cis-1,2-Dichloroethylene [a]		85.2	5.0	1.4	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		2.9 J	5.0	1.1	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		88.1	10	2.5	ug/l	SW846 8260D
Trichloroethylene [a]		490	20	6.9	ug/l	SW846 8260D
JD22228-5	**B-4SF(80-90)A**					
cis-1,2-Dichloroethylene [a]		271	100	28	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		271	200	50	ug/l	SW846 8260D
Trichloroethylene [a]		5900	100	35	ug/l	SW846 8260D
JD22228-6	**B-4SF(80-90)B**					
cis-1,2-Dichloroethylene [a]		277	100	28	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		277	200	50	ug/l	SW846 8260D
Tetrachloroethylene [a]		24.1 J	100	22	ug/l	SW846 8260D
Trichloroethylene [a]		8070	100	35	ug/l	SW846 8260D
JD22228-7	**TRIP BLANK**					

No hits reported in this sample.

Summary of Hits

Job Number: JD22228
Account: Arcadis
Project: FPE, Edgefield, SC
Collected: 03/22/21 thru 03/23/21

Lab Sample ID	Client Sample ID	Result/				
Analyte		Qual	RL	MDL	Units	Method

(a) Analysis performed at SGS Orlando, FL.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	B-3SF(90-100)A		
Lab Sample ID:	JD22228-1	**Date Sampled:**	03/22/21
Matrix:	AQ - Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E27215.D	5	04/02/21 13:25	AFL	n/a	n/a	F:V5E1249
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	130	50	ug/l	
71-43-2	Benzene	ND	5.0	1.6	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	10	ug/l	
75-15-0	Carbon Disulfide	ND	10	2.7	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.3	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.6	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.6	ug/l	
156-59-2	cis-1,2-Dichloroethylene	77.4	5.0	1.4	ug/l	
156-60-5	trans-1,2-Dichloroethylene	3.5	5.0	1.1	ug/l	J
540-59-0	1,2-Dichloroethene (total)	80.9	10	2.5	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.1	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.8	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide	ND	25	10	ug/l	
74-87-3	Methyl Chloride	ND	10	2.5	ug/l	
75-09-2	Methylene Chloride	ND	25	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	5.0	ug/l	
100-42-5	Styrene	ND	5.0	1.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.5	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	1.1	ug/l	
108-88-3	Toluene	ND	5.0	1.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.3	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-3SF(90-100)A		
Lab Sample ID:	JD22228-1	**Date Sampled:**	03/22/21
Matrix:	AQ - Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	365	5.0	1.7	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	2.0	ug/l	
1330-20-7	Xylene (total)	ND	15	3.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	106%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	B-3SF(90-100)B		
Lab Sample ID:	JD22228-2	**Date Sampled:**	03/22/21
Matrix:	AQ - Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E27216.D	10	04/02/21 13:48	AFL	n/a	n/a	F:V5E1249
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	250	100	ug/l	
71-43-2	Benzene	ND	10	3.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	20	6.7	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	3.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	107	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	6.5	10	2.2	ug/l	J
540-59-0	1,2-Dichloroethene (total)	114	20	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide	ND	50	20	ug/l	
74-87-3	Methyl Chloride	ND	20	5.0	ug/l	
75-09-2	Methylene Chloride	ND	50	20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	10	ug/l	
100-42-5	Styrene	ND	10	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	ND	10	2.2	ug/l	
108-88-3	Toluene	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-3SF(90-100)B		
Lab Sample ID:	JD22228-2	**Date Sampled:**	03/22/21
Matrix:	AQ - Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	725	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	106%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	B-3SF(110-120)A		
Lab Sample ID:	JD22228-3	**Date Sampled:**	03/22/21
Matrix:	AQ - Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	C0147776.D	20	04/01/21 17:34	AFL	n/a	n/a	F:VC5950
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	200	ug/l	
71-43-2	Benzene	ND	20	6.2	ug/l	
75-27-4	Bromodichloromethane	ND	20	4.8	ug/l	
75-25-2	Bromoform	ND	20	8.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	40	ug/l	
75-15-0	Carbon Disulfide	ND	40	11	ug/l	
56-23-5	Carbon Tetrachloride	ND	20	7.1	ug/l	
108-90-7	Chlorobenzene	ND	20	4.0	ug/l	
75-00-3	Chloroethane	ND	40	13	ug/l	
67-66-3	Chloroform	ND	20	6.0	ug/l	
124-48-1	Dibromochloromethane	ND	20	5.5	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	6.2	ug/l	
75-35-4	1,1-Dichloroethylene	ND	20	6.4	ug/l	
156-59-2	cis-1,2-Dichloroethylene	213	20	5.5	ug/l	
156-60-5	trans-1,2-Dichloroethylene	12.4	20	4.4	ug/l	J
540-59-0	1,2-Dichloroethene (total)	225	40	9.9	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	8.5	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	5.8	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	4.3	ug/l	
100-41-4	Ethylbenzene	ND	20	7.1	ug/l	
591-78-6	2-Hexanone	ND	200	40	ug/l	
74-83-9	Methyl Bromide	ND	100	40	ug/l	
74-87-3	Methyl Chloride [b]	ND	40	10	ug/l	
75-09-2	Methylene Chloride	ND	100	40	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	100	20	ug/l	
100-42-5	Styrene	ND	20	4.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	6.0	ug/l	
127-18-4	Tetrachloroethylene	ND	20	4.3	ug/l	
108-88-3	Toluene	ND	20	6.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	9.3	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-3SF(110-120)A		
Lab Sample ID:	JD22228-3	**Date Sampled:**	03/22/21
Matrix:	AQ - Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	1220	20	6.9	ug/l	
75-01-4	Vinyl Chloride	ND	20	8.2	ug/l	
1330-20-7	Xylene (total)	ND	60	14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	96%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.

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

Report of Analysis

Client Sample ID:	B-3SF(110-120)B		
Lab Sample ID:	JD22228-4	**Date Sampled:**	03/22/21
Matrix:	AQ - Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5E27217.D	5	04/02/21 14:11	AFL	n/a	n/a	F:V5E1249
Run #2 [a]	C0147777.D	20	04/01/21 18:01	AFL	n/a	n/a	F:VC5950

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	130	50	ug/l	
71-43-2	Benzene	ND	5.0	1.6	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	10	ug/l	
75-15-0	Carbon Disulfide	ND	10	2.7	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.3	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.6	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.6	ug/l	
156-59-2	cis-1,2-Dichloroethylene	85.2	5.0	1.4	ug/l	
156-60-5	trans-1,2-Dichloroethylene	2.9	5.0	1.1	ug/l	J
540-59-0	1,2-Dichloroethene (total)	88.1	10	2.5	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.1	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.8	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide	ND	25	10	ug/l	
74-87-3	Methyl Chloride	ND	10	2.5	ug/l	
75-09-2	Methylene Chloride	ND	25	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	5.0	ug/l	
100-42-5	Styrene	ND	5.0	1.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.5	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	1.1	ug/l	
108-88-3	Toluene	ND	5.0	1.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.3	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-3SF(110-120)B		
Lab Sample ID:	JD22228-4	**Date Sampled:**	03/22/21
Matrix:	AQ - Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	490 [c]	20	6.9	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	2.0	ug/l	
1330-20-7	Xylene (total)	ND	15	3.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	106%	79-125%
2037-26-5	Toluene-D8	106%	93%	85-112%
460-00-4	4-Bromofluorobenzene	101%	99%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	B-4SF(80-90)A		
Lab Sample ID:	JD22228-5	**Date Sampled:**	03/23/21
Matrix:	AQ - Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	C0147778.D	100	04/01/21 18:27	AFL	n/a	n/a	F:VC5950
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2500	1000	ug/l	
71-43-2	Benzene	ND	100	31	ug/l	
75-27-4	Bromodichloromethane	ND	100	24	ug/l	
75-25-2	Bromoform	ND	100	41	ug/l	
78-93-3	2-Butanone (MEK)	ND	500	200	ug/l	
75-15-0	Carbon Disulfide	ND	200	53	ug/l	
56-23-5	Carbon Tetrachloride	ND	100	36	ug/l	
108-90-7	Chlorobenzene	ND	100	20	ug/l	
75-00-3	Chloroethane	ND	200	67	ug/l	
67-66-3	Chloroform	ND	100	30	ug/l	
124-48-1	Dibromochloromethane	ND	100	28	ug/l	
75-34-3	1,1-Dichloroethane	ND	100	34	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	100	32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	271	100	28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	100	22	ug/l	
540-59-0	1,2-Dichloroethene (total)	271	200	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	100	29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	21	ug/l	
100-41-4	Ethylbenzene	ND	100	36	ug/l	
591-78-6	2-Hexanone	ND	1000	200	ug/l	
74-83-9	Methyl Bromide	ND	500	200	ug/l	
74-87-3	Methyl Chloride [b]	ND	200	50	ug/l	
75-09-2	Methylene Chloride	ND	500	200	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	500	100	ug/l	
100-42-5	Styrene	ND	100	22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	30	ug/l	
127-18-4	Tetrachloroethylene	ND	100	22	ug/l	
108-88-3	Toluene	ND	100	30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	100	47	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-4SF(80-90)A		
Lab Sample ID:	JD22228-5	**Date Sampled:**	03/23/21
Matrix:	AQ - Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	5900	100	35	ug/l	
75-01-4	Vinyl Chloride	ND	100	41	ug/l	
1330-20-7	Xylene (total)	ND	300	72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.

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

Report of Analysis

Client Sample ID:	B-4SF(80-90)B		
Lab Sample ID:	JD22228-6	**Date Sampled:**	03/23/21
Matrix:	AQ - Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	C0147779.D	100	04/01/21 18:54	AFL	n/a	n/a	F:VC5950
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2500	1000	ug/l	
71-43-2	Benzene	ND	100	31	ug/l	
75-27-4	Bromodichloromethane	ND	100	24	ug/l	
75-25-2	Bromoform	ND	100	41	ug/l	
78-93-3	2-Butanone (MEK)	ND	500	200	ug/l	
75-15-0	Carbon Disulfide	ND	200	53	ug/l	
56-23-5	Carbon Tetrachloride	ND	100	36	ug/l	
108-90-7	Chlorobenzene	ND	100	20	ug/l	
75-00-3	Chloroethane	ND	200	67	ug/l	
67-66-3	Chloroform	ND	100	30	ug/l	
124-48-1	Dibromochloromethane	ND	100	28	ug/l	
75-34-3	1,1-Dichloroethane	ND	100	34	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	100	32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	277	100	28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	100	22	ug/l	
540-59-0	1,2-Dichloroethene (total)	277	200	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	100	29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	21	ug/l	
100-41-4	Ethylbenzene	ND	100	36	ug/l	
591-78-6	2-Hexanone	ND	1000	200	ug/l	
74-83-9	Methyl Bromide	ND	500	200	ug/l	
74-87-3	Methyl Chloride [b]	ND	200	50	ug/l	
75-09-2	Methylene Chloride	ND	500	200	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	500	100	ug/l	
100-42-5	Styrene	ND	100	22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	30	ug/l	
127-18-4	Tetrachloroethylene	24.1	100	22	ug/l	J
108-88-3	Toluene	ND	100	30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	100	47	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-4SF(80-90)B		
Lab Sample ID:	JD22228-6	**Date Sampled:**	03/23/21
Matrix:	AQ - Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	8070	100	35	ug/l	
75-01-4	Vinyl Chloride	ND	100	41	ug/l	
1330-20-7	Xylene (total)	ND	300	72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	94%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.

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

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JD22228-7	**Date Sampled:**	03/23/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	C0147761.D	1	04/01/21 10:53	AFL	n/a	n/a	F:VC5950
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	
74-87-3	Methyl Chloride [b]	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	

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

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

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JD22228-7	**Date Sampled:**	03/23/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/24/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Chain of Custody (SGS Orlando, FL)

1215 6032 07 21 WW1 TB MJ-033 21-212

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ~~ANALYSIS~~ REQUEST FORM

Page ___ of ___

Lab Work Order # JD 22228

Send Results to:

Contact & Company Name: JEFF BECKNER ARCADIS

Telephone: 706-922-4421

Address: 1450 Greene St Ste 200 Ste 300

Fax:

City: AUGUSTA State: GA Zip: 30901

E-mail Address: Jeff.Beckner@arcadis.com

Project Name/Location (City, State): FPC EDGEFIELD S.C.

Project #: 30067293

Sampler's Printed Name: C. Hussey

Sampler's Signature:

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative: B	Filtered (✓)	# of Containers: 3	Container Information: 1	PARAMETER ANALYSIS & METHOD: B260.8 VOC 40 mL VIAL	REMARKS
1	B-3SF (90-100) A	3/22/21	11:45		X	W	3					
2	B-3SF (90-100) B	3/22/21	12:33		X	W	3					
3	B-3SF (110-120) A	3/22/21	15:06		X	W	3					
4	B-3SF (110-120) B	3/22/21	16:00		X	W	3					
5	B-4SF (80-90) A	3/23/21	9:49		X	W	3					VI83
6	B-4SF (80-90) B	3/23/21	10:52		X	W	3					
7	TRIP BLANK						2					

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

VITAL ASSESSMENT TB 3/25

ARFL VERIFICATION _____

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Charles Hussey	Printed Name: FedEX	Printed Name: FedEX	Printed Name: Jeemit Patel
☑ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements:	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: SGS
Shipping Tracking #:	Condition/Cooler Temp: 3.4°C IP IR4	Date/Time: 3/23/21 18:00	Date/Time: 3/24/21 10:00	Date/Time:	Date/Time:

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

JD22228: Chain of Custody

Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD22228 **Client:** ARCADIS **Project:** FPE, EDGEFIELD, SC

Date / Time Received: 3/24/2021 10:00:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.4);

Cooler Temps (Corrected) °C: Cooler 1: (2.1);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD22228: Chain of Custody
Page 2 of 2

SGS

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

Page 1 of 1

FED-EX Tracking # | Bottle Order Control # | SGS Quote # | SGS Job # JD22228

Client / Reporting Information
Company Name:
Street Address:
City / State / Zip:
Project Contact / E-mail: michelle.jenkins@sgs.com
Phone #:
Sampler(s) Name(s): CL

Project Information
Project Name: FPE, Edgefield, SC
Street:
City / State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to): Company Name / Street Address / City / State / Zip / Attention:

Requested Analysis: V8260TCL

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB-Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	V8260TCL	LAB USE ONLY
1	B-3SF(90-100)A		3/22/21	11:49:00 AM	CL	AQ										X	
2	B-3SF(90-100)B		3/22/21	12:33:00 PM	CL	AQ										X	
3	B-3SF(110-120)A		3/22/21	3:00:00 PM	CL	AQ										X	
4	B-3SF(110-120)B		3/22/21	4:00:00 PM	CL	AQ										X	
5	B-4SF(80-90)A		3/23/21	9:49:00 AM	CL	AQ										X	
6	B-4SF(80-90)B		3/23/21	10:52:00 AM	CL	AQ										X	
7	TRIP BLANK		3/23/21	10:52:00 AM	CL	AQ										X	

Turnaround Time (Business days)
- [ ] Standard 10 Business Days
- [ ] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENCY
- [X] Other Due 3/31/2021

Approved By (SGS PM): / Date:

Emergency & Rush T/A data available via Lablink. Approval needed for RUSH/Emergency TAT

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other COMMA

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions
Please run 8260D!
INITIAL ASSESSMENT NB
LABEL VERIFICATION MK

http://www.sgs.com/en/terms-and-conditions

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

Relinquished By:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 [signature]	3.24.21 1700	1 FX	2 FX	3/31/21 1000	2 [signature]
3		3	4		4
5		5	Custody Seal #	Intact / Not intact; Preserved where applicable; Absent; Therm. ID	On Ice; Cooler Temp. °C

2.8 IR#4

jd22228.xls
Rev. Date: 4/10/18

JD22228: Chain of Custody
Page 1 of 2
SGS Orlando, FL

SGS Sample Receipt Summary

Job Number: JD22228 **Client:** SGS NJ **Project:** FPE EDGEFIELD

Date / Time Received: 3/31/2021 10:00:00 AM **Delivery Method:** FX **Airbill #'s:** 9251 0901 4520

Therm ID: IR 1; **Therm CF:** -1.8; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☑		☐	☐
2. Trip Blank listed on COC	☑		☐	☐
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☑		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☑	☐
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: PETERH Date: 3/31/2021 10:00:00 A Reviewer: _____ Date: _____

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

FPE, Edgefield, SC

30006562.00002

SGS Job Number: JD16156

Sampling Date: 11/11/20

Report to:

Arcadis
1450 Greene Street Suite 220
Augusta, GA 30901
Charles.Lawson@Arcadis-us.com; Jeff.Beckner@Arcadis.com

ATTN: Jeff Beckner

Total number of pages in report: **33**

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

Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Table of Contents

SGS North America Inc.

Sample Summary

Arcadis

Job No: JD16156

FPE, Edgefield, SC
Project No: 30006562.00002

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD16156-1	11/11/20	09:42	CU	11/12/20	AQ	Water	B-5 SF (75')
JD16156-2	11/11/20	09:49	CU	11/12/20	AQ	Water	B-5 SF (98')
JD16156-3	11/11/20	10:10	CU	11/12/20	AQ	Water	B-3 SF (68')
JD16156-4	11/11/20	10:13	CU	11/12/20	AQ	Water	B-3 SF (110')
JD16156-5	11/11/20	10:39	CU	11/12/20	AQ	Water	B-4 SF (85')
JD16156-6	11/11/20	10:41	CU	11/12/20	AQ	Water	B-4 SF (119')
JD16156-7	11/11/20	10:59	CU	11/12/20	AQ	Water	B-2 SF (100')
JD16156-8	11/11/20	10:54	CU	11/12/20	AQ	Water	B-2 SF (80')
JD16156-9	11/11/20	11:12	CU	11/12/20	AQ	Water	B-1 SF (45')
JD16156-10	11/11/20	11:20	CU	11/12/20	AQ	Water	B-1 SF (80')
JD16156-11	11/11/20	11:20	CU	11/12/20	AQ	Trip Blank Water	TRIP BLANK

Summary of Hits

Job Number: JD16156
Account: Arcadis
Project: FPE, Edgefield, SC
Collected: 11/11/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD16156-1	**B-5 SF (75')**					
2-Butanone (MEK) [a]		58.3	25	10	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		58.1	5.0	1.4	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		1.7 J	5.0	1.1	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		59.8	10	2.5	ug/l	SW846 8260D
Trichloroethylene [a]		633	10	3.5	ug/l	SW846 8260D
JD16156-2	**B-5 SF (98')**					
2-Butanone (MEK) [a]		53.4	25	10	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		54.9	5.0	1.4	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		2.5 J	5.0	1.1	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		57.4	10	2.5	ug/l	SW846 8260D
Trichloroethylene [a]		633	10	3.5	ug/l	SW846 8260D
JD16156-3	**B-3 SF (68')**					
cis-1,2-Dichloroethylene [a]		130	5.0	1.4	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		2.2 J	5.0	1.1	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		132	10	2.5	ug/l	SW846 8260D
Trichloroethylene [a]		931	20	6.9	ug/l	SW846 8260D
JD16156-4	**B-3 SF (110')**					
cis-1,2-Dichloroethylene [a]		132	10	2.8	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		132	20	5.0	ug/l	SW846 8260D
Trichloroethylene [a]		953	20	6.9	ug/l	SW846 8260D
JD16156-5	**B-4 SF (85')**					
cis-1,2-Dichloroethylene [a]		304	100	28	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		304	200	50	ug/l	SW846 8260D
Tetrachloroethylene [a]		22.4 J	100	22	ug/l	SW846 8260D
Trichloroethylene [a]		8310	100	35	ug/l	SW846 8260D
JD16156-6	**B-4 SF (119')**					
cis-1,2-Dichloroethylene [a]		71.6	20	5.5	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		71.6	40	9.9	ug/l	SW846 8260D
Trichloroethylene [a]		1600	20	6.9	ug/l	SW846 8260D
JD16156-7	**B-2 SF (100')**					
Chloroform [a]		2.8 J	5.0	1.5	ug/l	SW846 8260D

Summary of Hits

Job Number: JD16156
Account: Arcadis
Project: FPE, Edgefield, SC
Collected: 11/11/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,1-Dichloroethylene [a]		4.7 J	5.0	1.6	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		80.4	5.0	1.4	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		5.5	5.0	1.1	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		85.9	10	2.5	ug/l	SW846 8260D
Methylene Chloride [a]		15.4 J	25	10	ug/l	SW846 8260D
Tetrachloroethylene [a]		1.5 J	5.0	1.1	ug/l	SW846 8260D
Trichloroethylene [a]		628	10	3.5	ug/l	SW846 8260D
JD16156-8	**B-2 SF (80')**					
Chloroform [a]		2.7 J	5.0	1.5	ug/l	SW846 8260D
1,1-Dichloroethylene [a]		6.0	5.0	1.6	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		77.4	5.0	1.4	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		3.4 J	5.0	1.1	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		80.8	10	2.5	ug/l	SW846 8260D
Methylene Chloride [a]		15.3 J	25	10	ug/l	SW846 8260D
Tetrachloroethylene [a]		1.5 J	5.0	1.1	ug/l	SW846 8260D
Trichloroethylene [a]		607	10	3.5	ug/l	SW846 8260D
JD16156-9	**B-1 SF (45')**					
cis-1,2-Dichloroethylene [a]		1180	100	28	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		28.3 J	100	22	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		1210	200	50	ug/l	SW846 8260D
Trichloroethylene [a]		8450	100	35	ug/l	SW846 8260D
JD16156-10	**B-1 SF (80')**					
cis-1,2-Dichloroethylene [a]		1220	50	14	ug/l	SW846 8260D
trans-1,2-Dichloroethylene [a]		14.8 J	50	11	ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		1230	100	25	ug/l	SW846 8260D
Trichloroethylene [a]		8840	100	35	ug/l	SW846 8260D
JD16156-11	**TRIP BLANK**					

No hits reported in this sample.

(a) Analysis performed at SGS Orlando, FL.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	B-5 SF (75')		
Lab Sample ID:	JD16156-1	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Y54172.D	5	11/19/20 02:48	AFL	n/a	n/a	F:VY2249
Run #2 [a]	P76117.D	10	11/19/20 19:11	AFL	n/a	n/a	F:VP3046

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	50	ug/l	
71-43-2	Benzene	ND	5.0	1.6	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.0	ug/l	
78-93-3	2-Butanone (MEK)	58.3	25	10	ug/l	
75-15-0	Carbon Disulfide	ND	10	2.7	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.3	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.6	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.6	ug/l	
156-59-2	cis-1,2-Dichloroethylene	58.1	5.0	1.4	ug/l	
156-60-5	trans-1,2-Dichloroethylene	1.7	5.0	1.1	ug/l	J
540-59-0	1,2-Dichloroethene (total)	59.8	10	2.5	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.1	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.8	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide [b]	ND	25	10	ug/l	
74-87-3	Methyl Chloride	ND	10	2.5	ug/l	
75-09-2	Methylene Chloride	ND	25	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	5.0	ug/l	
100-42-5	Styrene	ND	5.0	1.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.5	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	1.1	ug/l	
108-88-3	Toluene	ND	5.0	1.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.3	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-5 SF (75')		
Lab Sample ID:	JD16156-1	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	633 [c]	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	2.0	ug/l	
1330-20-7	Xylene (total)	ND	15	3.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	92%	97%	79-125%
2037-26-5	Toluene-D8	98%	108%	85-112%
460-00-4	4-Bromofluorobenzene	103%	95%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	B-5 SF (98')		
Lab Sample ID:	JD16156-2	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Y54173.D	5	11/19/20 03:15	AFL	n/a	n/a	F:VY2249
Run #2 [a]	P76118.D	10	11/19/20 19:36	AFL	n/a	n/a	F:VP3046

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	50	ug/l	
71-43-2	Benzene	ND	5.0	1.6	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.0	ug/l	
78-93-3	2-Butanone (MEK)	53.4	25	10	ug/l	
75-15-0	Carbon Disulfide	ND	10	2.7	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.3	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.6	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.6	ug/l	
156-59-2	cis-1,2-Dichloroethylene	54.9	5.0	1.4	ug/l	
156-60-5	trans-1,2-Dichloroethylene	2.5	5.0	1.1	ug/l	J
540-59-0	1,2-Dichloroethene (total)	57.4	10	2.5	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.1	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.8	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide [b]	ND	25	10	ug/l	
74-87-3	Methyl Chloride	ND	10	2.5	ug/l	
75-09-2	Methylene Chloride	ND	25	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	5.0	ug/l	
100-42-5	Styrene	ND	5.0	1.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.5	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	1.1	ug/l	
108-88-3	Toluene	ND	5.0	1.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.3	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-5 SF (98')		
Lab Sample ID:	JD16156-2	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	633 [c]	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	2.0	ug/l	
1330-20-7	Xylene (total)	ND	15	3.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	92%	97%	79-125%
2037-26-5	Toluene-D8	99%	107%	85-112%
460-00-4	4-Bromofluorobenzene	102%	96%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	B-3 SF (68')		
Lab Sample ID:	JD16156-3	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Y54174.D	5	11/19/20 03:43	AFL	n/a	n/a	F:VY2249
Run #2 [a]	P76119.D	20	11/19/20 20:01	AFL	n/a	n/a	F:VP3046

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	50	ug/l	
71-43-2	Benzene	ND	5.0	1.6	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	10	ug/l	
75-15-0	Carbon Disulfide	ND	10	2.7	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.3	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.6	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.6	ug/l	
156-59-2	cis-1,2-Dichloroethylene	130	5.0	1.4	ug/l	
156-60-5	trans-1,2-Dichloroethylene	2.2	5.0	1.1	ug/l	J
540-59-0	1,2-Dichloroethene (total)	132	10	2.5	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.1	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.8	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide [b]	ND	25	10	ug/l	
74-87-3	Methyl Chloride	ND	10	2.5	ug/l	
75-09-2	Methylene Chloride	ND	25	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	5.0	ug/l	
100-42-5	Styrene	ND	5.0	1.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.5	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	1.1	ug/l	
108-88-3	Toluene	ND	5.0	1.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.3	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-3 SF (68')		
Lab Sample ID:	JD16156-3	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	931 [c]	20	6.9	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	2.0	ug/l	
1330-20-7	Xylene (total)	ND	15	3.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	92%	97%	79-125%
2037-26-5	Toluene-D8	98%	109%	85-112%
460-00-4	4-Bromofluorobenzene	102%	98%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	B-3 SF (110')		
Lab Sample ID:	JD16156-4	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Y54175.D	10	11/19/20 04:10	AFL	n/a	n/a	F:VY2249
Run #2 [a]	P76120.D	20	11/19/20 20:26	AFL	n/a	n/a	F:VP3046

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	250	100	ug/l	
71-43-2	Benzene	ND	10	3.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	20	6.7	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	3.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	132	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.2	ug/l	
540-59-0	1,2-Dichloroethene (total)	132	20	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide [b]	ND	50	20	ug/l	
74-87-3	Methyl Chloride	ND	20	5.0	ug/l	
75-09-2	Methylene Chloride	ND	50	20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	10	ug/l	
100-42-5	Styrene	ND	10	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	ND	10	2.2	ug/l	
108-88-3	Toluene	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-3 SF (110')		
Lab Sample ID:	JD16156-4	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	953 [c]	20	6.9	ug/l	
75-01-4	Vinyl Chloride	ND	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	92%	97%	79-125%
2037-26-5	Toluene-D8	97%	107%	85-112%
460-00-4	4-Bromofluorobenzene	103%	96%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	B-4 SF (85')		
Lab Sample ID:	JD16156-5	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Y54176.D	100	11/19/20 04:38	AFL	n/a	n/a	F:VY2249
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2500	1000	ug/l	
71-43-2	Benzene	ND	100	31	ug/l	
75-27-4	Bromodichloromethane	ND	100	24	ug/l	
75-25-2	Bromoform	ND	100	41	ug/l	
78-93-3	2-Butanone (MEK)	ND	500	200	ug/l	
75-15-0	Carbon Disulfide	ND	200	53	ug/l	
56-23-5	Carbon Tetrachloride	ND	100	36	ug/l	
108-90-7	Chlorobenzene	ND	100	20	ug/l	
75-00-3	Chloroethane	ND	200	67	ug/l	
67-66-3	Chloroform	ND	100	30	ug/l	
124-48-1	Dibromochloromethane	ND	100	28	ug/l	
75-34-3	1,1-Dichloroethane	ND	100	34	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	100	32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	304	100	28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	100	22	ug/l	
540-59-0	1,2-Dichloroethene (total)	304	200	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	100	29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	21	ug/l	
100-41-4	Ethylbenzene	ND	100	36	ug/l	
591-78-6	2-Hexanone	ND	1000	200	ug/l	
74-83-9	Methyl Bromide [b]	ND	500	200	ug/l	
74-87-3	Methyl Chloride	ND	200	50	ug/l	
75-09-2	Methylene Chloride	ND	500	200	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	500	100	ug/l	
100-42-5	Styrene	ND	100	22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	30	ug/l	
127-18-4	Tetrachloroethylene	22.4	100	22	ug/l	J
108-88-3	Toluene	ND	100	30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	100	47	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-4 SF (85')		
Lab Sample ID:	JD16156-5	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	8310	100	35	ug/l	
75-01-4	Vinyl Chloride	ND	100	41	ug/l	
1330-20-7	Xylene (total)	ND	300	72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	90%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	B-4 SF (119')		
Lab Sample ID:	JD16156-6	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	P76121.D	20	11/19/20 20:51	AFL	n/a	n/a	F:VP3046
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	500	200	ug/l	
71-43-2	Benzene	ND	20	6.2	ug/l	
75-27-4	Bromodichloromethane	ND	20	4.8	ug/l	
75-25-2	Bromoform [b]	ND	20	8.1	ug/l	
78-93-3	2-Butanone (MEK) [b]	ND	100	40	ug/l	
75-15-0	Carbon Disulfide	ND	40	11	ug/l	
56-23-5	Carbon Tetrachloride	ND	20	7.1	ug/l	
108-90-7	Chlorobenzene	ND	20	4.0	ug/l	
75-00-3	Chloroethane	ND	40	13	ug/l	
67-66-3	Chloroform	ND	20	6.0	ug/l	
124-48-1	Dibromochloromethane	ND	20	5.5	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	6.2	ug/l	
75-35-4	1,1-Dichloroethylene	ND	20	6.4	ug/l	
156-59-2	cis-1,2-Dichloroethylene	71.6	20	5.5	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	20	4.4	ug/l	
540-59-0	1,2-Dichloroethene (total)	71.6	40	9.9	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	8.5	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	5.8	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	4.3	ug/l	
100-41-4	Ethylbenzene	ND	20	7.1	ug/l	
591-78-6	2-Hexanone [b]	ND	200	40	ug/l	
74-83-9	Methyl Bromide	ND	100	40	ug/l	
74-87-3	Methyl Chloride	ND	40	10	ug/l	
75-09-2	Methylene Chloride	ND	100	40	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [b]	ND	100	20	ug/l	
100-42-5	Styrene	ND	20	4.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	6.0	ug/l	
127-18-4	Tetrachloroethylene	ND	20	4.3	ug/l	
108-88-3	Toluene	ND	20	6.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	9.3	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-4 SF (119')		
Lab Sample ID:	JD16156-6	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	1600	20	6.9	ug/l	
75-01-4	Vinyl Chloride	ND	20	8.2	ug/l	
1330-20-7	Xylene (total)	ND	60	14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	107%		85-112%
460-00-4	4-Bromofluorobenzene	97%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.

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

Report of Analysis

Client Sample ID:	B-2 SF (100')		
Lab Sample ID:	JD16156-7	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Y54178.D	5	11/19/20 05:32	AFL	n/a	n/a	F:VY2249
Run #2 [a]	P76122.D	10	11/19/20 21:17	AFL	n/a	n/a	F:VP3046

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	50	ug/l	
71-43-2	Benzene	ND	5.0	1.6	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	10	ug/l	
75-15-0	Carbon Disulfide	ND	10	2.7	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.3	ug/l	
67-66-3	Chloroform	2.8	5.0	1.5	ug/l	J
124-48-1	Dibromochloromethane	ND	5.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.6	ug/l	
75-35-4	1,1-Dichloroethylene	4.7	5.0	1.6	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	80.4	5.0	1.4	ug/l	
156-60-5	trans-1,2-Dichloroethylene	5.5	5.0	1.1	ug/l	
540-59-0	1,2-Dichloroethene (total)	85.9	10	2.5	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.1	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.8	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide [b]	ND	25	10	ug/l	
74-87-3	Methyl Chloride	ND	10	2.5	ug/l	
75-09-2	Methylene Chloride	15.4	25	10	ug/l	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	5.0	ug/l	
100-42-5	Styrene	ND	5.0	1.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.5	ug/l	
127-18-4	Tetrachloroethylene	1.5	5.0	1.1	ug/l	J
108-88-3	Toluene	ND	5.0	1.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.3	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-2 SF (100')		
Lab Sample ID:	JD16156-7	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	628 [c]	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	2.0	ug/l	
1330-20-7	Xylene (total)	ND	15	3.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	93%	100%	79-125%
2037-26-5	Toluene-D8	98%	107%	85-112%
460-00-4	4-Bromofluorobenzene	101%	97%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	B-2 SF (80')		
Lab Sample ID:	JD16156-8	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Y54179.D	5	11/19/20 06:00	AFL	n/a	n/a	F:VY2249
Run #2 [a]	P76123.D	10	11/19/20 21:42	AFL	n/a	n/a	F:VP3046

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	50	ug/l	
71-43-2	Benzene	ND	5.0	1.6	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	10	ug/l	
75-15-0	Carbon Disulfide	ND	10	2.7	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.3	ug/l	
67-66-3	Chloroform	2.7	5.0	1.5	ug/l	J
124-48-1	Dibromochloromethane	ND	5.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.6	ug/l	
75-35-4	1,1-Dichloroethylene	6.0	5.0	1.6	ug/l	
156-59-2	cis-1,2-Dichloroethylene	77.4	5.0	1.4	ug/l	
156-60-5	trans-1,2-Dichloroethylene	3.4	5.0	1.1	ug/l	J
540-59-0	1,2-Dichloroethene (total)	80.8	10	2.5	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.1	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.8	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide [b]	ND	25	10	ug/l	
74-87-3	Methyl Chloride	ND	10	2.5	ug/l	
75-09-2	Methylene Chloride	15.3	25	10	ug/l	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	5.0	ug/l	
100-42-5	Styrene	ND	5.0	1.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.5	ug/l	
127-18-4	Tetrachloroethylene	1.5	5.0	1.1	ug/l	J
108-88-3	Toluene	ND	5.0	1.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.3	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-2 SF (80')		
Lab Sample ID:	JD16156-8	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	607 [c]	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	2.0	ug/l	
1330-20-7	Xylene (total)	ND	15	3.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	96%	99%	79-125%
2037-26-5	Toluene-D8	97%	107%	85-112%
460-00-4	4-Bromofluorobenzene	101%	96%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	B-1 SF (45')		
Lab Sample ID:	JD16156-9	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Y54180.D	100	11/19/20 06:27	AFL	n/a	n/a	F:VY2249
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2500	1000	ug/l	
71-43-2	Benzene	ND	100	31	ug/l	
75-27-4	Bromodichloromethane	ND	100	24	ug/l	
75-25-2	Bromoform	ND	100	41	ug/l	
78-93-3	2-Butanone (MEK)	ND	500	200	ug/l	
75-15-0	Carbon Disulfide	ND	200	53	ug/l	
56-23-5	Carbon Tetrachloride	ND	100	36	ug/l	
108-90-7	Chlorobenzene	ND	100	20	ug/l	
75-00-3	Chloroethane	ND	200	67	ug/l	
67-66-3	Chloroform	ND	100	30	ug/l	
124-48-1	Dibromochloromethane	ND	100	28	ug/l	
75-34-3	1,1-Dichloroethane	ND	100	34	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	100	32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1180	100	28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	28.3	100	22	ug/l	J
540-59-0	1,2-Dichloroethene (total)	1210	200	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	100	29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	21	ug/l	
100-41-4	Ethylbenzene	ND	100	36	ug/l	
591-78-6	2-Hexanone	ND	1000	200	ug/l	
74-83-9	Methyl Bromide [b]	ND	500	200	ug/l	
74-87-3	Methyl Chloride	ND	200	50	ug/l	
75-09-2	Methylene Chloride	ND	500	200	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	500	100	ug/l	
100-42-5	Styrene	ND	100	22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	30	ug/l	
127-18-4	Tetrachloroethylene	ND	100	22	ug/l	
108-88-3	Toluene	ND	100	30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	100	47	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-1 SF (45')		
Lab Sample ID:	JD16156-9	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	8450	100	35	ug/l	
75-01-4	Vinyl Chloride	ND	100	41	ug/l	
1330-20-7	Xylene (total)	ND	300	72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	93%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID: B-1 SF (80')
Lab Sample ID: JD16156-10
Matrix: AQ - Water
Method: SW846 8260D
Project: FPE, Edgefield, SC

Date Sampled: 11/11/20
Date Received: 11/12/20
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Y54181.D	50	11/19/20 06:54	AFL	n/a	n/a	F:VY2249
Run #2 [a]	P76124.D	100	11/19/20 22:07	AFL	n/a	n/a	F:VP3046

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1300	500	ug/l	
71-43-2	Benzene	ND	50	16	ug/l	
75-27-4	Bromodichloromethane	ND	50	12	ug/l	
75-25-2	Bromoform	ND	50	20	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	100	ug/l	
75-15-0	Carbon Disulfide	ND	100	27	ug/l	
56-23-5	Carbon Tetrachloride	ND	50	18	ug/l	
108-90-7	Chlorobenzene	ND	50	10	ug/l	
75-00-3	Chloroethane	ND	100	33	ug/l	
67-66-3	Chloroform	ND	50	15	ug/l	
124-48-1	Dibromochloromethane	ND	50	14	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	17	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	16	ug/l	
75-35-4	1,1-Dichloroethylene	ND	50	16	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1220	50	14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	14.8	50	11	ug/l	J
540-59-0	1,2-Dichloroethene (total)	1230	100	25	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	11	ug/l	
100-41-4	Ethylbenzene	ND	50	18	ug/l	
591-78-6	2-Hexanone	ND	500	100	ug/l	
74-83-9	Methyl Bromide [b]	ND	250	100	ug/l	
74-87-3	Methyl Chloride	ND	100	25	ug/l	
75-09-2	Methylene Chloride	ND	250	100	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	50	ug/l	
100-42-5	Styrene	ND	50	11	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	15	ug/l	
127-18-4	Tetrachloroethylene	ND	50	11	ug/l	
108-88-3	Toluene	ND	50	15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	12	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	23	ug/l	

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

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

Report of Analysis

Client Sample ID:	B-1 SF (80')		
Lab Sample ID:	JD16156-10	**Date Sampled:**	11/11/20
Matrix:	AQ - Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	8840 [c]	100	35	ug/l	
75-01-4	Vinyl Chloride	ND	50	20	ug/l	
1330-20-7	Xylene (total)	ND	150	36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	93%	98%	79-125%
2037-26-5	Toluene-D8	97%	108%	85-112%
460-00-4	4-Bromofluorobenzene	101%	98%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JD16156-11	**Date Sampled:**	11/11/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Y54169.D	1	11/19/20 01:25	AFL	n/a	n/a	F:VY2249
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide [b]	ND	5.0	2.0	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	

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

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

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JD16156-11	**Date Sampled:**	11/11/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/12/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	89%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

(a) Sample vial(s) contained bubbles greater than 6mm. Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high, sample was ND.

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Chain of Custody (SGS Orlando, FL)

WW, TB

JD16156

AH1-091120-148

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page ___ of ___

Lab Work Order #

Send Results to:

Contact & Company Name: Jeff Beckner ARCADIS

Telephone: 706-829-4425

Address: 1450 Greene St Ste 220

Fax:

City: Augusta State: GA Zip: 30901

E-mail Address: Jeff.Beckner@Arcadis.com

Project Name/Location (City, State): FPE ~~Augusta~~ EDGEFIELD, SC

Project #: 30006562

Sampler's Printed Name: Charles Lawson

Sampler's Signature: CB Lawson

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: ____ G. Other: ____ H. Other: ____

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: ____ 10. Other: ____

Matrix Key: SO - Soil W - Water T - Tissue SE - Sediment SL - Sludge A - Air NL - NAPL/Oil SW - Sample Wipe Other: ____

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	PARAMETER ANALYSIS & METHOD: 8260 VOC 40 ml Glass Vial Helve.	REMARKS
1	B-5 SF (75')	11/11/2020	9:42		X	W	B		3	1	3	
2	B-5 SF (99')	"	9:49		X	W			3		3	
3	B-3 SF (69')	"	10:10		X	W			3		3	
4	B-3 SF (110')	"	10:13		X	W			3		3	
5	B-4 SF (85')	"	10:39		X	W			3		3	
6	B-4 SF (119')	"	10:41		X	W			3		3	VS64
7	B-2 SF (100')	"	10:59		X	W			3		3	
8	B-2 SF (80')	"	10:54		X	W			3		3	
9	B-1 SF (45')	"	11:12		X	W			3		3	
10	B-1 SF (80')	"	11:20		X	W			3		3	
11	TRIP BLANK								2		2	

Initial Assessment JB

Label Verification ____

Special Instructions/Comments: SAMPLE FROM DIFFUSION BAGS NOT ENOUGH SAMPLE FOR QA/QC

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Charles Lawson	Printed Name: [illegible]	Printed Name: [illegible]	Printed Name:
☒ Cooler packed with ice (✓) ICE	Sample Receipt:	Signature: CB Lawson	Signature: [illegible]	Signature: [illegible]	Signature:
Specify Turnaround Requirements:		Firm: ARCADIS	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: 4.1°C IR Sen	Date/Time: 11/11/2020 13:00	Date/Time:	Date/Time: 11/12/20 10:15	Date/Time:

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

FedEx # 606023 4272

4.1 4

SGS Sample Receipt Summary

Job Number: JD16156 **Client:** ARCADIS **Project:**

Date / Time Received: 11/12/2020 10:15:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (4.1);

Cooler Temps (Corrected) °C: Cooler 1: (3.6);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

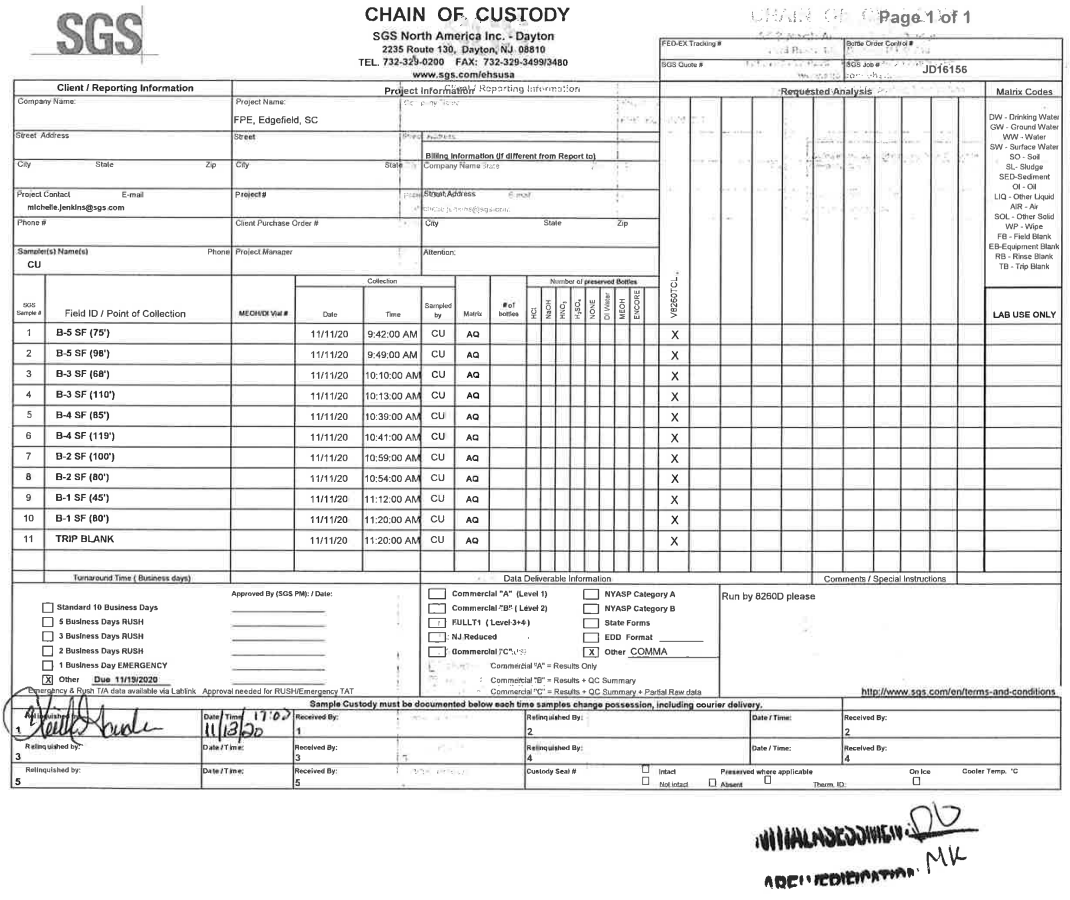
Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD16156: Chain of Custody
Page 2 of 2



SGS

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

Page 1 of 1

FED-EX Tracking #
Bottle Order Control #
SGS Quote #
SGS Job # JD16156

Client / Reporting Information

Company Name:
Street Address
City State Zip
Project Contact E-mail
michelle.jenkins@sgs.com
Phone #
Sampler(s) Name(s) Phone
CU

Project Information / Reporting Information

Project Name:
FPE, Edgefield, SC
Street
City State
Billing Information (if different from Report to)
Company Name
Street Address
City State Zip
Project #
Client Purchase Order #
Project Manager
Attention:

Requested Analysis

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB-Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VR260TCL_	LAB USE ONLY
1	B-5 SF (75')		11/11/20	9:42:00 AM	CU	AQ										X	
2	B-5 SF (98')		11/11/20	9:49:00 AM	CU	AQ										X	
3	B-3 SF (68')		11/11/20	10:10:00 AM	CU	AQ										X	
4	B-3 SF (110')		11/11/20	10:13:00 AM	CU	AQ										X	
5	B-4 SF (85')		11/11/20	10:39:00 AM	CU	AQ										X	
6	B-4 SF (119')		11/11/20	10:41:00 AM	CU	AQ										X	
7	B-2 SF (100')		11/11/20	10:59:00 AM	CU	AQ										X	
8	B-2 SF (80')		11/11/20	10:54:00 AM	CU	AQ										X	
9	B-1 SF (45')		11/11/20	11:12:00 AM	CU	AQ										X	
10	B-1 SF (80')		11/11/20	11:20:00 AM	CU	AQ										X	
11	TRIP BLANK		11/11/20	11:20:00 AM	CU	AQ										X	

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- [ ] Standard 10 Business Days
- [ ] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENCY
- [X] Other Due 11/19/2020

Emergency & Rush T/A data available via Lablink. Approval needed for RUSH/Emergency TAT

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULL1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other COMMA

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Run by 8260D please

http://www.sgs.com/en/terms-and-conditions

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

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1	11/12/20 17:00	1	2		2
Relinquished by: 3	Date / Time:	Received By: 3	Relinquished By: 4	Date / Time:	Received By: 4
Relinquished by: 5	Date / Time:	Received By: 5	Custody Seal #	☐ Intact ☐ Not Intact	Preserved where applicable ☐ Absent ☐ Therm. ID: ☐ On Ice Cooler Temp. °C

jd16156.xls
Rev. Date: 4/10/18

JD16156: Chain of Custody
Page 1 of 2
SGS Orlando, FL

SGS Sample Receipt Summary

Job Number: JD16156 **Client:** SGS DAYTON **Project:** FPE

Date / Time Received: 11/14/2020 9:45:00 AM **Delivery Method:** FX **Airbill #'s:**

Therm ID: IR 1; **Therm CF:** 0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (3.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☑		☐	☐
2. Trip Blank listed on COC	☑		☐	☐

	W	or	S	N/A
3. Type Of TB Received	☑		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☑	☐
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: GUERBINEF Date: 11/14/2020 9:45:00 A Reviewer: _____ Date: _____

JD16156: Chain of Custody
Page 2 of 2

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

FPE, Edgefield, SC

30006562.00002

SGS Job Number: JD6386

Sampling Date: 04/22/20

Report to:

Arcadis
1450 Greene Street Suite 220
Augusta, GA 30901
Charles.Lawson@Arcadis-us.com; Jeff.Beckner@Arcadis.com

ATTN: Jeff Beckner

Total number of pages in report: 32

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

Laura Degenhardt
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Sections: 1 2 3 4

Table of Contents

SGS North America Inc.

Sample Summary

Arcadis

Job No: JD6386

FPE, Edgefield, SC
Project No: 30006562.00002

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD6386-1	04/22/20	08:39	CL	04/23/20	AQ	Ground Water	B-5 SF (75')
JD6386-2	04/22/20	08:45	CL	04/23/20	AQ	Ground Water	B-5 SF (98')
JD6386-3	04/22/20	09:04	CL	04/23/20	AQ	Ground Water	B-3 SF (68')
JD6386-4	04/22/20	09:10	CL	04/23/20	AQ	Ground Water	B-3 SF (110')
JD6386-5	04/22/20	09:34	CL	04/23/20	AQ	Ground Water	B-4 SF (85')
JD6386-6	04/22/20	09:57	CL	04/23/20	AQ	Ground Water	B-2 SF (80')
JD6386-7	04/22/20	10:03	CL	04/23/20	AQ	Ground Water	B-2 SF (100')
JD6386-8	04/22/20	10:22	CL	04/23/20	AQ	Ground Water	B-1 SF (45')
JD6386-9	04/22/20	10:29	CL	04/23/20	AQ	Ground Water	B-1 SF (80')
JD6386-10	04/22/20	10:29	CL	04/23/20	AQ	Trip Blank Water	TRIP BLANK
JD6386-11	04/22/20	09:39	CL	04/23/20	AQ	Ground Water	B-4 SF (119')

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the RL

Summary of Hits

Job Number: JD6386
Account: Arcadis
Project: FPE, Edgefield, SC
Collected: 04/22/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD6386-1	**B-5 SF (75')**					
2-Butanone (MEK) [a]		48.9	25		ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		39.9	5.0		ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		39.9	10		ug/l	SW846 8260D
Trichloroethylene [a]		308	5.0		ug/l	SW846 8260D
JD6386-2	**B-5 SF (98')**					
2-Butanone (MEK) [a]		51.0	25		ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		38.0	5.0		ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		38.0	10		ug/l	SW846 8260D
Trichloroethylene [a]		293	5.0		ug/l	SW846 8260D
JD6386-3	**B-3 SF (68')**					
cis-1,2-Dichloroethylene [a]		121	5.0		ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		121	10		ug/l	SW846 8260D
Trichloroethylene [a]		437	10		ug/l	SW846 8260D
JD6386-4	**B-3 SF (110')**					
cis-1,2-Dichloroethylene [a]		125	10		ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		125	20		ug/l	SW846 8260D
Trichloroethylene [a]		607	10		ug/l	SW846 8260D
JD6386-5	**B-4 SF (85')**					
cis-1,2-Dichloroethylene [a]		252	100		ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		252	200		ug/l	SW846 8260D
Trichloroethylene [a]		8630	100		ug/l	SW846 8260D
JD6386-6	**B-2 SF (80')**					
1,1-Dichloroethylene [a]		7.8	5.0		ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		64.6	5.0		ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		64.6	10		ug/l	SW846 8260D
Trichloroethylene [a]		458	5.0		ug/l	SW846 8260D
JD6386-7	**B-2 SF (100')**					
1,1-Dichloroethylene [a]		7.6	5.0		ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		67.0	5.0		ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		67.0	10		ug/l	SW846 8260D
Trichloroethylene [a]		457	5.0		ug/l	SW846 8260D

Summary of Hits

Job Number: JD6386
Account: Arcadis
Project: FPE, Edgefield, SC
Collected: 04/22/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD6386-8	**B-1 SF (45')**					
cis-1,2-Dichloroethylene [a]		718	50		ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		718	100		ug/l	SW846 8260D
Trichloroethylene [a]		5800	100		ug/l	SW846 8260D
JD6386-9	**B-1 SF (80')**					
cis-1,2-Dichloroethylene [a]		589	50		ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		589	100		ug/l	SW846 8260D
Trichloroethylene [a]		4720	50		ug/l	SW846 8260D
JD6386-10	**TRIP BLANK**					
No hits reported in this sample.						
JD6386-11	**B-4 SF (119')**					
cis-1,2-Dichloroethylene [a]		116	50		ug/l	SW846 8260D
1,2-Dichloroethene (total) [a]		116	100		ug/l	SW846 8260D
Trichloroethylene [a]		5510	100		ug/l	SW846 8260D

(a) Analysis performed at SGS Orlando, FL.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	B-5 SF (75')		
Lab Sample ID:	JD6386-1	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A26980.D	5	04/30/20 04:30	AFL	n/a	n/a	F:V1A1100
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	130	ug/l	
71-43-2	Benzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	ug/l	
75-25-2	Bromoform	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	48.9	25	ug/l	
75-15-0	Carbon Disulfide	ND	10	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	ug/l	
108-90-7	Chlorobenzene	ND	5.0	ug/l	
75-00-3	Chloroethane [b]	ND	10	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	39.9	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	ug/l	
540-59-0	1,2-Dichloroethene (total)	39.9	10	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
74-83-9	Methyl Bromide [b]	ND	10	ug/l	
74-87-3	Methyl Chloride	ND	10	ug/l	
75-09-2	Methylene Chloride	ND	25	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	ug/l	
108-88-3	Toluene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	ug/l	

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

Report of Analysis

Client Sample ID:	B-5 SF (75')		
Lab Sample ID:	JD6386-1	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
79-01-6	Trichloroethylene	308	5.0	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	ug/l	
1330-20-7	Xylene (total)	ND	15	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		83-118%
17060-07-0	1,2-Dichloroethane-D4	92%		79-125%
2037-26-5	Toluene-D8	96%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.

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

Report of Analysis

Client Sample ID:	B-5 SF (98')		
Lab Sample ID:	JD6386-2	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A26981.D	5	04/30/20 04:56	AFL	n/a	n/a	F:V1A1100
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	130	ug/l	
71-43-2	Benzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	ug/l	
75-25-2	Bromoform	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	51.0	25	ug/l	
75-15-0	Carbon Disulfide	ND	10	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	ug/l	
108-90-7	Chlorobenzene	ND	5.0	ug/l	
75-00-3	Chloroethane [b]	ND	10	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	38.0	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	ug/l	
540-59-0	1,2-Dichloroethene (total)	38.0	10	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
74-83-9	Methyl Bromide [b]	ND	10	ug/l	
74-87-3	Methyl Chloride	ND	10	ug/l	
75-09-2	Methylene Chloride	ND	25	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	ug/l	
108-88-3	Toluene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	ug/l	

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

Report of Analysis

Client Sample ID:	B-5 SF (98')		
Lab Sample ID:	JD6386-2	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
79-01-6	Trichloroethylene	293	5.0	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	ug/l	
1330-20-7	Xylene (total)	ND	15	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	94%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.

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

Report of Analysis

Client Sample ID:	B-3 SF (68')		
Lab Sample ID:	JD6386-3	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A26999.D	5	04/30/20 14:36	AFL	n/a	n/a	F:V1A1101
Run #2 [a]	1A26982.D	10	04/30/20 05:22	AFL	n/a	n/a	F:V1A1100

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

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	130	ug/l	
71-43-2	Benzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	ug/l	
75-25-2	Bromoform	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	ug/l	
75-15-0	Carbon Disulfide	ND	10	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	ug/l	
108-90-7	Chlorobenzene	ND	5.0	ug/l	
75-00-3	Chloroethane [b]	ND	10	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	121	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	ug/l	
540-59-0	1,2-Dichloroethene (total)	121	10	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
74-83-9	Methyl Bromide [c]	ND	10	ug/l	
74-87-3	Methyl Chloride	ND	10	ug/l	
75-09-2	Methylene Chloride	ND	25	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	ug/l	
108-88-3	Toluene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	ug/l	

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

Report of Analysis

Client Sample ID:	B-3 SF (68')		
Lab Sample ID:	JD6386-3	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
79-01-6	Trichloroethylene	437 [d]	10	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	ug/l	
1330-20-7	Xylene (total)	ND	15	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	93%	93%	79-125%
2037-26-5	Toluene-D8	96%	95%	85-112%
460-00-4	4-Bromofluorobenzene	99%	98%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.
(c) Associated CCV and BS outside control limits low.
(d) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	B-3 SF (110')		
Lab Sample ID:	JD6386-4	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A26983.D	10	04/30/20 05:48	AFL	n/a	n/a	F:V1A1100
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	250	ug/l	
71-43-2	Benzene	ND	10	ug/l	
75-27-4	Bromodichloromethane	ND	10	ug/l	
75-25-2	Bromoform	ND	10	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	ug/l	
75-15-0	Carbon Disulfide	ND	20	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	ug/l	
108-90-7	Chlorobenzene	ND	10	ug/l	
75-00-3	Chloroethane [b]	ND	20	ug/l	
67-66-3	Chloroform	ND	10	ug/l	
124-48-1	Dibromochloromethane	ND	10	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	125	10	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	ug/l	
540-59-0	1,2-Dichloroethene (total)	125	20	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	ug/l	
100-41-4	Ethylbenzene	ND	10	ug/l	
591-78-6	2-Hexanone	ND	100	ug/l	
74-83-9	Methyl Bromide [b]	ND	20	ug/l	
74-87-3	Methyl Chloride	ND	20	ug/l	
75-09-2	Methylene Chloride	ND	50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	ug/l	
100-42-5	Styrene	ND	10	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	ug/l	
127-18-4	Tetrachloroethylene	ND	10	ug/l	
108-88-3	Toluene	ND	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	ug/l	

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

Report of Analysis

Client Sample ID:	B-3 SF (110')		
Lab Sample ID:	JD6386-4	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
79-01-6	Trichloroethylene	607	10	ug/l	
75-01-4	Vinyl Chloride	ND	10	ug/l	
1330-20-7	Xylene (total)	ND	30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	92%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.

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

Report of Analysis

Client Sample ID:	B-4 SF (85')		
Lab Sample ID:	JD6386-5	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A27006.D	100	04/30/20 17:37	AFL	n/a	n/a	F:V1A1101
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	2500	ug/l	
71-43-2	Benzene	ND	100	ug/l	
75-27-4	Bromodichloromethane	ND	100	ug/l	
75-25-2	Bromoform	ND	100	ug/l	
78-93-3	2-Butanone (MEK)	ND	500	ug/l	
75-15-0	Carbon Disulfide	ND	200	ug/l	
56-23-5	Carbon Tetrachloride	ND	100	ug/l	
108-90-7	Chlorobenzene	ND	100	ug/l	
75-00-3	Chloroethane [b]	ND	200	ug/l	
67-66-3	Chloroform	ND	100	ug/l	
124-48-1	Dibromochloromethane	ND	100	ug/l	
75-34-3	1,1-Dichloroethane	ND	100	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	ug/l	
75-35-4	1,1-Dichloroethylene	ND	100	ug/l	
156-59-2	cis-1,2-Dichloroethylene	252	100	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	100	ug/l	
540-59-0	1,2-Dichloroethene (total)	252	200	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/l	
100-41-4	Ethylbenzene	ND	100	ug/l	
591-78-6	2-Hexanone	ND	1000	ug/l	
74-83-9	Methyl Bromide [c]	ND	200	ug/l	
74-87-3	Methyl Chloride	ND	200	ug/l	
75-09-2	Methylene Chloride	ND	500	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	500	ug/l	
100-42-5	Styrene	ND	100	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/l	
127-18-4	Tetrachloroethylene	ND	100	ug/l	
108-88-3	Toluene	ND	100	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/l	

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

Report of Analysis

Client Sample ID:	B-4 SF (85')		
Lab Sample ID:	JD6386-5	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
79-01-6	Trichloroethylene	8630	100	ug/l	
75-01-4	Vinyl Chloride	ND	100	ug/l	
1330-20-7	Xylene (total)	ND	300	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	91%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	97%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.
(c) Associated CCV and BS recovery outside control limits low.

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

Report of Analysis

Client Sample ID:	B-2 SF (80')		
Lab Sample ID:	JD6386-6	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A27024.D	5	05/01/20 13:06	AFL	n/a	n/a	F:V1A1102
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	130	ug/l	
71-43-2	Benzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	ug/l	
75-25-2	Bromoform	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	ug/l	
75-15-0	Carbon Disulfide	ND	10	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	ug/l	
108-90-7	Chlorobenzene	ND	5.0	ug/l	
75-00-3	Chloroethane [b]	ND	10	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	ug/l	
75-35-4	1,1-Dichloroethylene	7.8	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	64.6	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	ug/l	
540-59-0	1,2-Dichloroethene (total)	64.6	10	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
74-83-9	Methyl Bromide [c]	ND	10	ug/l	
74-87-3	Methyl Chloride	ND	10	ug/l	
75-09-2	Methylene Chloride	ND	25	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	ug/l	
108-88-3	Toluene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	ug/l	

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

Report of Analysis

Client Sample ID:	B-2 SF (80')		
Lab Sample ID:	JD6386-6	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
79-01-6	Trichloroethylene	458	5.0	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	ug/l	
1330-20-7	Xylene (total)	ND	15	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	91%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.
(c) Associated CCV and BS outside control limits low.

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

Report of Analysis

Client Sample ID:	B-2 SF (100')		
Lab Sample ID:	JD6386-7	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A27025.D	5	05/01/20 13:32	AFL	n/a	n/a	F:V1A1102
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	130	ug/l	
71-43-2	Benzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	ug/l	
75-25-2	Bromoform	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	ug/l	
75-15-0	Carbon Disulfide	ND	10	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	ug/l	
108-90-7	Chlorobenzene	ND	5.0	ug/l	
75-00-3	Chloroethane [b]	ND	10	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	ug/l	
75-35-4	1,1-Dichloroethylene	7.6	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	67.0	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	ug/l	
540-59-0	1,2-Dichloroethene (total)	67.0	10	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
74-83-9	Methyl Bromide [c]	ND	10	ug/l	
74-87-3	Methyl Chloride	ND	10	ug/l	
75-09-2	Methylene Chloride	ND	25	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	ug/l	
108-88-3	Toluene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	ug/l	

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

Report of Analysis

Client Sample ID:	B-2 SF (100')		
Lab Sample ID:	JD6386-7	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
79-01-6	Trichloroethylene	457	5.0	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	ug/l	
1330-20-7	Xylene (total)	ND	15	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	90%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.
(c) Associated CCV and BS outside control limits low.

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

Report of Analysis

Client Sample ID:	B-1 SF (45')		
Lab Sample ID:	JD6386-8	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A27009.D	50	04/30/20 18:54	AFL	n/a	n/a	F:V1A1101
Run #2 [a]	1A27023.D	100	05/01/20 12:40	AFL	n/a	n/a	F:V1A1102

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

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	1300	ug/l	
71-43-2	Benzene	ND	50	ug/l	
75-27-4	Bromodichloromethane	ND	50	ug/l	
75-25-2	Bromoform	ND	50	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	ug/l	
75-15-0	Carbon Disulfide	ND	100	ug/l	
56-23-5	Carbon Tetrachloride	ND	50	ug/l	
108-90-7	Chlorobenzene	ND	50	ug/l	
75-00-3	Chloroethane [b]	ND	100	ug/l	
67-66-3	Chloroform	ND	50	ug/l	
124-48-1	Dibromochloromethane	ND	50	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	718	50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	50	ug/l	
540-59-0	1,2-Dichloroethene (total)	718	100	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	ug/l	
100-41-4	Ethylbenzene	ND	50	ug/l	
591-78-6	2-Hexanone	ND	500	ug/l	
74-83-9	Methyl Bromide [c]	ND	100	ug/l	
74-87-3	Methyl Chloride	ND	100	ug/l	
75-09-2	Methylene Chloride	ND	250	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/l	
100-42-5	Styrene	ND	50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	ug/l	
127-18-4	Tetrachloroethylene	ND	50	ug/l	
108-88-3	Toluene	ND	50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	ug/l	

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

Report of Analysis

Client Sample ID:	B-1 SF (45')		
Lab Sample ID:	JD6386-8	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
79-01-6	Trichloroethylene	5800 [d]	100	ug/l	
75-01-4	Vinyl Chloride	ND	50	ug/l	
1330-20-7	Xylene (total)	ND	150	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%	94%	83-118%
17060-07-0	1,2-Dichloroethane-D4	91%	90%	79-125%
2037-26-5	Toluene-D8	96%	94%	85-112%
460-00-4	4-Bromofluorobenzene	98%	98%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.
(c) Associated CCV and BS recovery outside control limits low.
(d) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	B-1 SF (80')		
Lab Sample ID:	JD6386-9	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A27010.D	50	04/30/20 19:20	AFL	n/a	n/a	F:V1A1101
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	1300	ug/l	
71-43-2	Benzene	ND	50	ug/l	
75-27-4	Bromodichloromethane	ND	50	ug/l	
75-25-2	Bromoform	ND	50	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	ug/l	
75-15-0	Carbon Disulfide	ND	100	ug/l	
56-23-5	Carbon Tetrachloride	ND	50	ug/l	
108-90-7	Chlorobenzene	ND	50	ug/l	
75-00-3	Chloroethane [b]	ND	100	ug/l	
67-66-3	Chloroform	ND	50	ug/l	
124-48-1	Dibromochloromethane	ND	50	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	589	50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	50	ug/l	
540-59-0	1,2-Dichloroethene (total)	589	100	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	ug/l	
100-41-4	Ethylbenzene	ND	50	ug/l	
591-78-6	2-Hexanone	ND	500	ug/l	
74-83-9	Methyl Bromide [c]	ND	100	ug/l	
74-87-3	Methyl Chloride	ND	100	ug/l	
75-09-2	Methylene Chloride	ND	250	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/l	
100-42-5	Styrene	ND	50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	ug/l	
127-18-4	Tetrachloroethylene	ND	50	ug/l	
108-88-3	Toluene	ND	50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	ug/l	

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

Report of Analysis

Client Sample ID:	B-1 SF (80')		
Lab Sample ID:	JD6386-9	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
79-01-6	Trichloroethylene	4720	50	ug/l	
75-01-4	Vinyl Chloride	ND	50	ug/l	
1330-20-7	Xylene (total)	ND	150	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	89%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.
(c) Associated CCV and BS recovery outside control limits low.

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

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JD6386-10	**Date Sampled:**	04/22/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A27021.D	1	05/01/20 11:48	AFL	n/a	n/a	F:V1A1102
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	25	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane [b]	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
74-83-9	Methyl Bromide [c]	ND	2.0	ug/l	
74-87-3	Methyl Chloride	ND	2.0	ug/l	
75-09-2	Methylene Chloride	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
100-42-5	Styrene	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	

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

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JD6386-10	**Date Sampled:**	04/22/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
79-01-6	Trichloroethylene	ND	1.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	91%		79-125%
2037-26-5	Toluene-D8	94%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low.
(c) Associated CCV and BS outside control limits low.

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

Report of Analysis

Client Sample ID:	B-4 SF (119')		
Lab Sample ID:	JD6386-11	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A27026.D	50	05/01/20 13:57	AFL	n/a	n/a	F:V1A1102
Run #2 [a]	1A27052.D	100	05/02/20 13:27	AFL	n/a	n/a	F:V1A1103

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

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	1300	ug/l	
71-43-2	Benzene	ND	50	ug/l	
75-27-4	Bromodichloromethane	ND	50	ug/l	
75-25-2	Bromoform	ND	50	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	ug/l	
75-15-0	Carbon Disulfide	ND	100	ug/l	
56-23-5	Carbon Tetrachloride	ND	50	ug/l	
108-90-7	Chlorobenzene	ND	50	ug/l	
75-00-3	Chloroethane [b]	ND	100	ug/l	
67-66-3	Chloroform	ND	50	ug/l	
124-48-1	Dibromochloromethane	ND	50	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	116	50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	50	ug/l	
540-59-0	1,2-Dichloroethene (total)	116	100	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	ug/l	
100-41-4	Ethylbenzene	ND	50	ug/l	
591-78-6	2-Hexanone	ND	500	ug/l	
74-83-9	Methyl Bromide [c]	ND	100	ug/l	
74-87-3	Methyl Chloride	ND	100	ug/l	
75-09-2	Methylene Chloride	ND	250	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/l	
100-42-5	Styrene	ND	50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	ug/l	
127-18-4	Tetrachloroethylene	ND	50	ug/l	
108-88-3	Toluene	ND	50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	ug/l	

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

Report of Analysis

Client Sample ID:	B-4 SF (119')		
Lab Sample ID:	JD6386-11	**Date Sampled:**	04/22/20
Matrix:	AQ - Ground Water	**Date Received:**	04/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	FPE, Edgefield, SC		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
79-01-6	Trichloroethylene	5510 [d]	100	ug/l	
75-01-4	Vinyl Chloride	ND	50	ug/l	
1330-20-7	Xylene (total)	ND	150	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%	94%	83-118%
17060-07-0	1,2-Dichloroethane-D4	89%	89%	79-125%
2037-26-5	Toluene-D8	95%	95%	85-112%
460-00-4	4-Bromofluorobenzene	98%	98%	83-118%

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits low. Associated CCV outside of control limits low.
(c) Associated CCV and BS outside control limits low.
(d) Result is from Run# 2

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW WB Control # KM-041320-59 / Tracking # 121560302880 IN

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page ___ of ___

Lab Work Order # JD6386

Send Results to:

Contact & Company Name: Jeff Beckna Arcadis

Telephone: 706-929-4421

Address: 1450 Greene St Ste 220

Fax:

City: Augusta State: GA Zip: 30901

E-mail Address: Jeff.Beckna@Arcadis.com

Project Name/Location (City, State): FPC Godfrey SC

Project #: 30006562

Sampler's Printed Name: Charles Lawson

Sampler's Signature: CB Lawson

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	PARAMETER ANALYSIS & METHOD: 8260 VOC 40 mL GLASS VIAL Y/N
1	B-5 SF (75')	4/22/2020	8:39		X	W	B		3		
2	B-5 SF (99')	4/22/2020	9:45		X	W			3		
3	B-3 SF (69')	4/22/2020	9:04		X	W			3		
4	B-3 SF (110')	4/22/2020	9:10		X	W			3		
5	B-4 SF (95')	4/22/2020	9:34		X	W			3		
6	B-2 SF (90')	4/22/2020	9:57		X	W			3		
7	B-2 SF (100')	4/22/2020	10:03		X	W			3		
8	B-1 SF (45')	4/22/2020	10:22		X	W			3		
9	B-1 SF (90')	4/22/2020	10:29		X	W			3		
10	TRIP BLANK								2		
11	B-4 SF (119')	4/22/2020	9:39								

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: _____

REMARKS

SBWB

Initial Assessment ZBPDS

Label Verification _____

Special Instructions/Comments: SAMPLES FROM DIFFUSION BAGS NOT ENOUGH SAMPLES for QA/QC

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt

Lab Name: SGS

☑ Cooler packed with ice (✓)

Specify Turnaround Requirements:

Shipping Tracking #:

Cooler Custody Seal (✓): ☒ Intact ☐ Not Intact

Sample Receipt:

Condition/Cooler Temp: 3.3C-P

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: Charles Lawson	Printed Name: FedEx	Printed Name: FedEx	Printed Name: Dominic Guerriero
Signature: CB Lawson	Signature:	Signature:	Signature:
Firm: ARCADIS	Firm/Courier:	Firm/Courier:	Firm: SGS
Date/Time: 4/22/2020 13:00	Date/Time:	Date/Time: 4/23/20 9:15	Date/Time: 4/23/2020 9:15

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

4.1 4

SGS Sample Receipt Summary

Job Number: JD6386 **Client:** Arcadis **Project:** FPE Edgefield S.C.

Date / Time Received: 4/23/2020 9:15:00 AM **Delivery Method:** FedEx **Airbill #'s:** 121560302880

Cooler Temps (Raw Measured) °C: Cooler 1: (3.3);

Cooler Temps (Corrected) °C: Cooler 1: (3.0);

Cooler Security

	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature

	Y	or	N
1. Temp criteria achieved:	☑		☐

2. Cooler temp verification: IR Gun
3. Cooler media: Ice (Bag)
4. No. Coolers: 1

Quality Control Preservation

	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation

	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition

	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐

3. Condition of sample: Intact

Sample Integrity - Instructions

	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☑		☐	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 229517 pH 12+: 208717 Other: (Specify) _____ _____

Comments: -11: Received B-4 SF (119') with collection date/time of 4/22/2020 9:39 not originally listed on COC. Added to COC. Received 3 x 40mL HCL vials.

SM089-02 Rev. Date 12/1/16

Responded to by: Kelly Ramos

Response Date: 4/23/2020

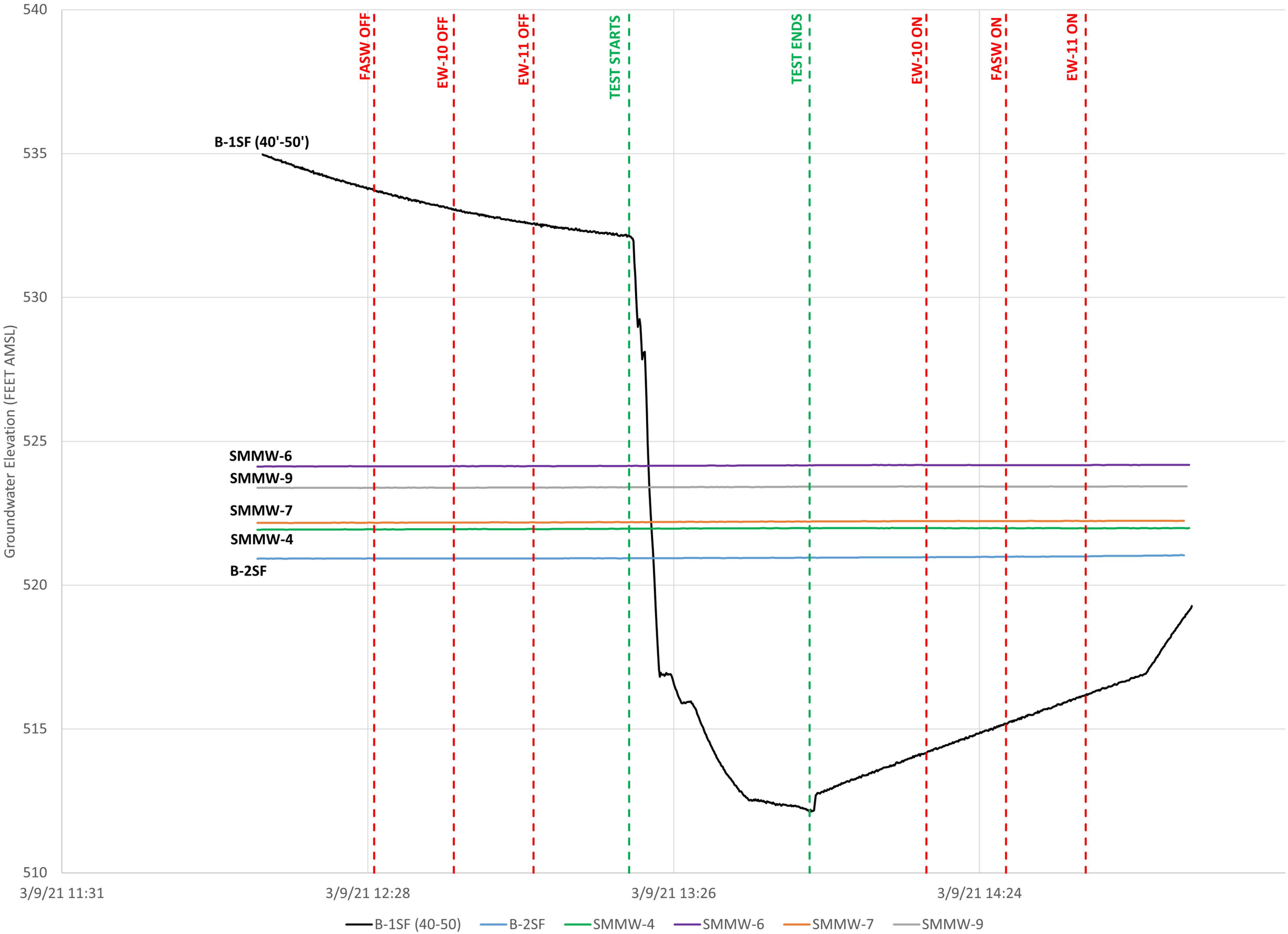
Please proceed and run for VOCs

JD6386: Chain of Custody
Page 3 of 3

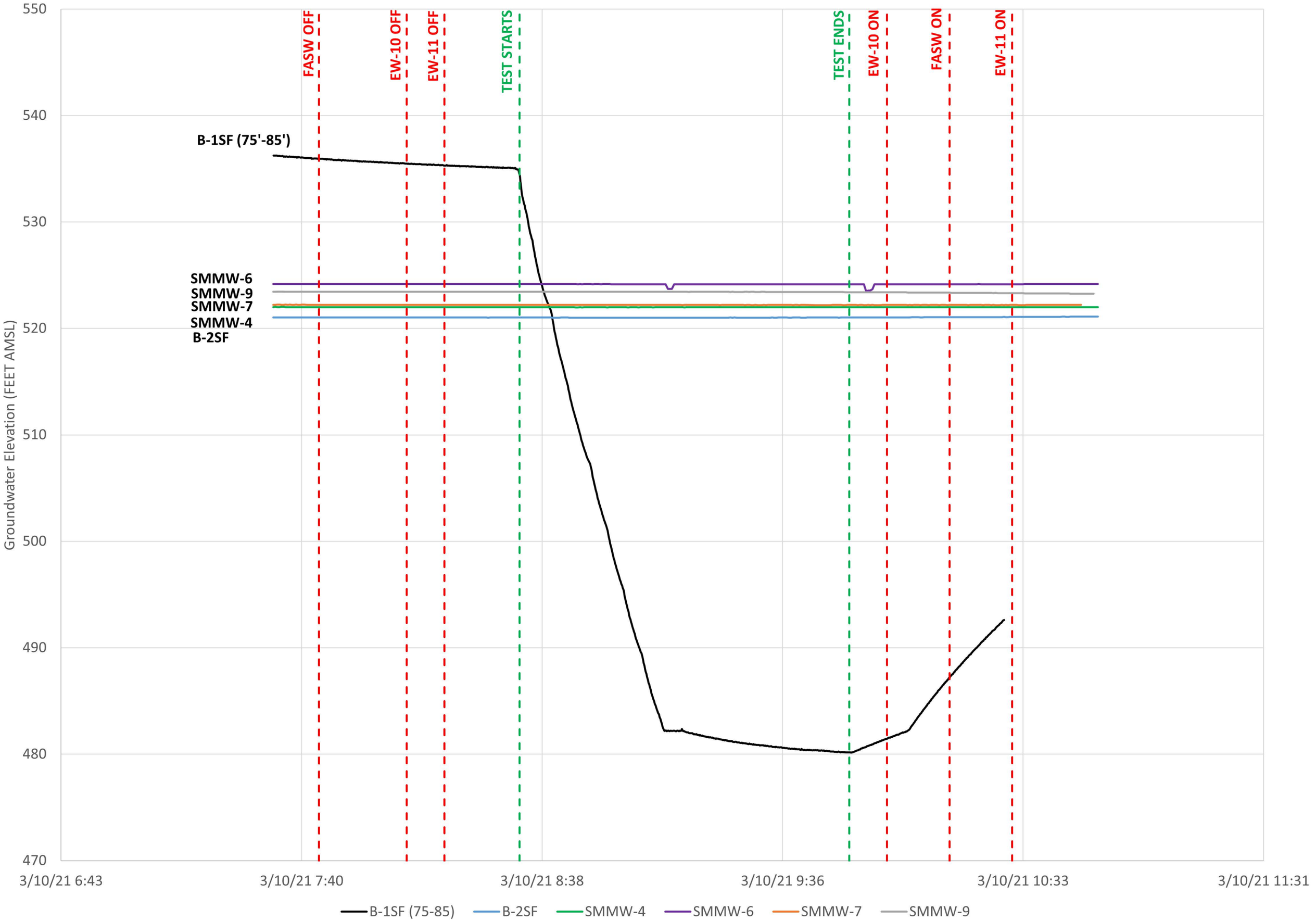
APPENDIX C

Packer Test Hydrographs and Hydraulic Conductivity Analysis

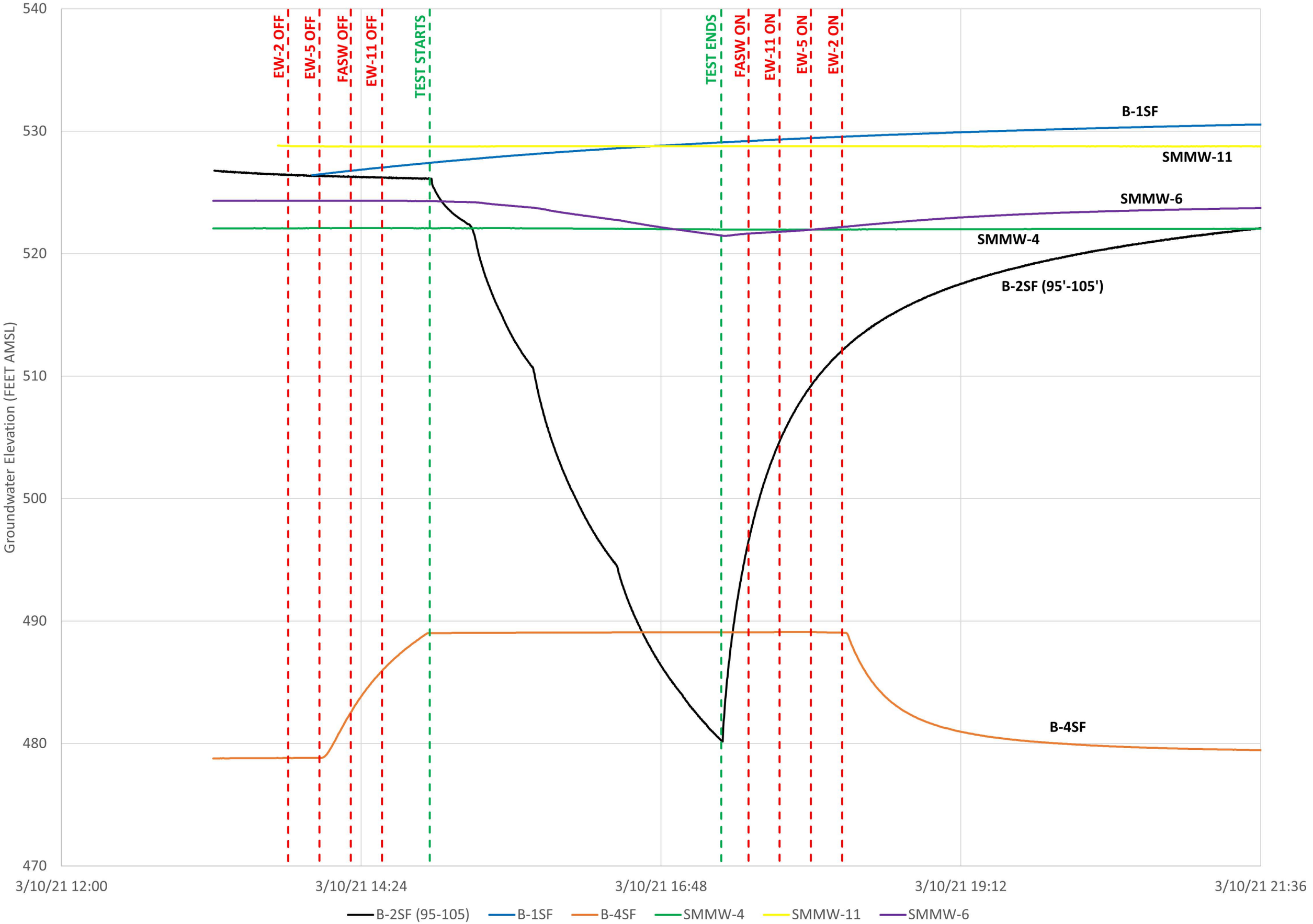
B-1SF (40' - 50') Fracture Zone Variable Rate Pump Test Hydrograph



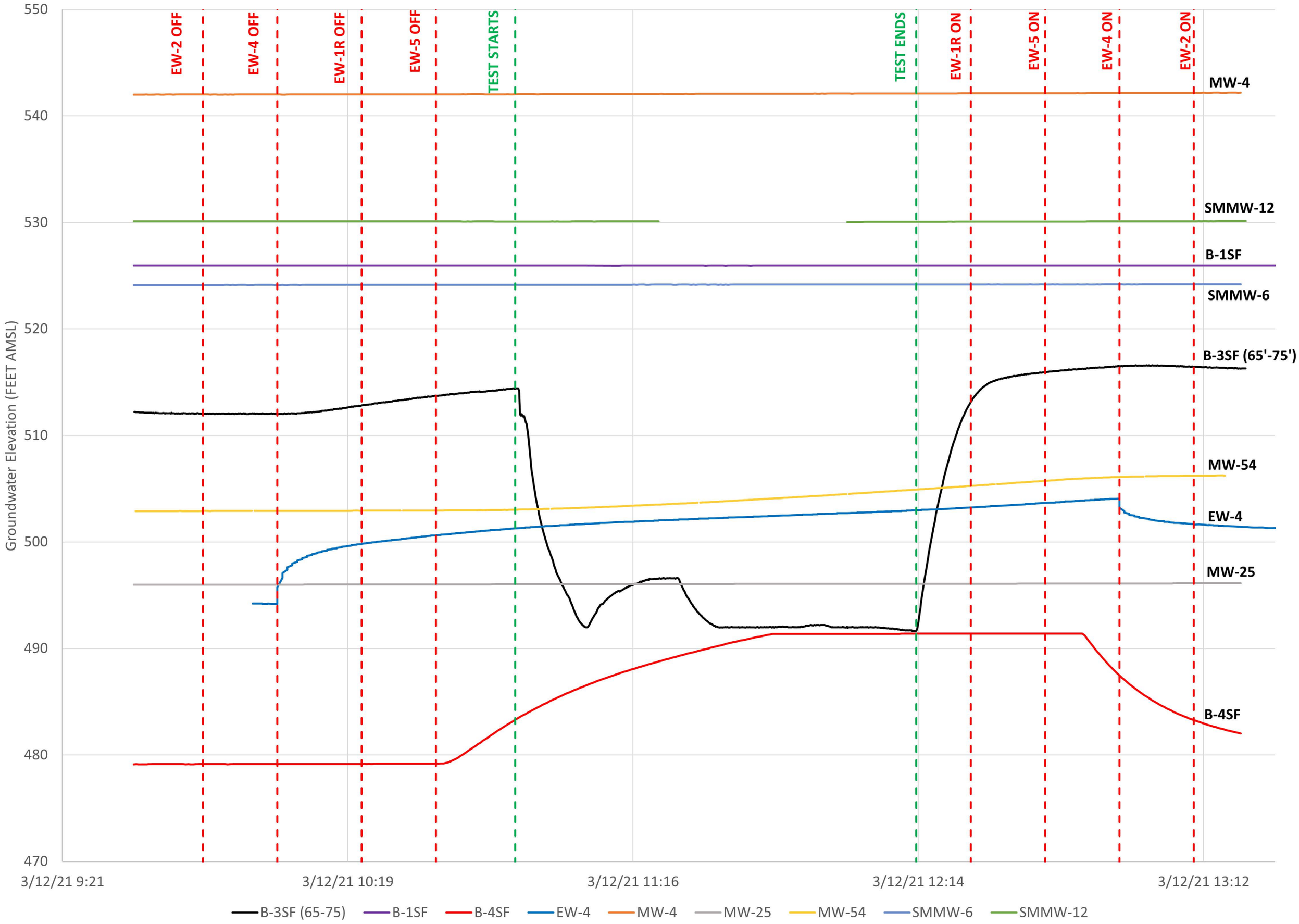
B-1SF (75' - 85') Facture Zone Variable Rate Pump Test Hydrograph



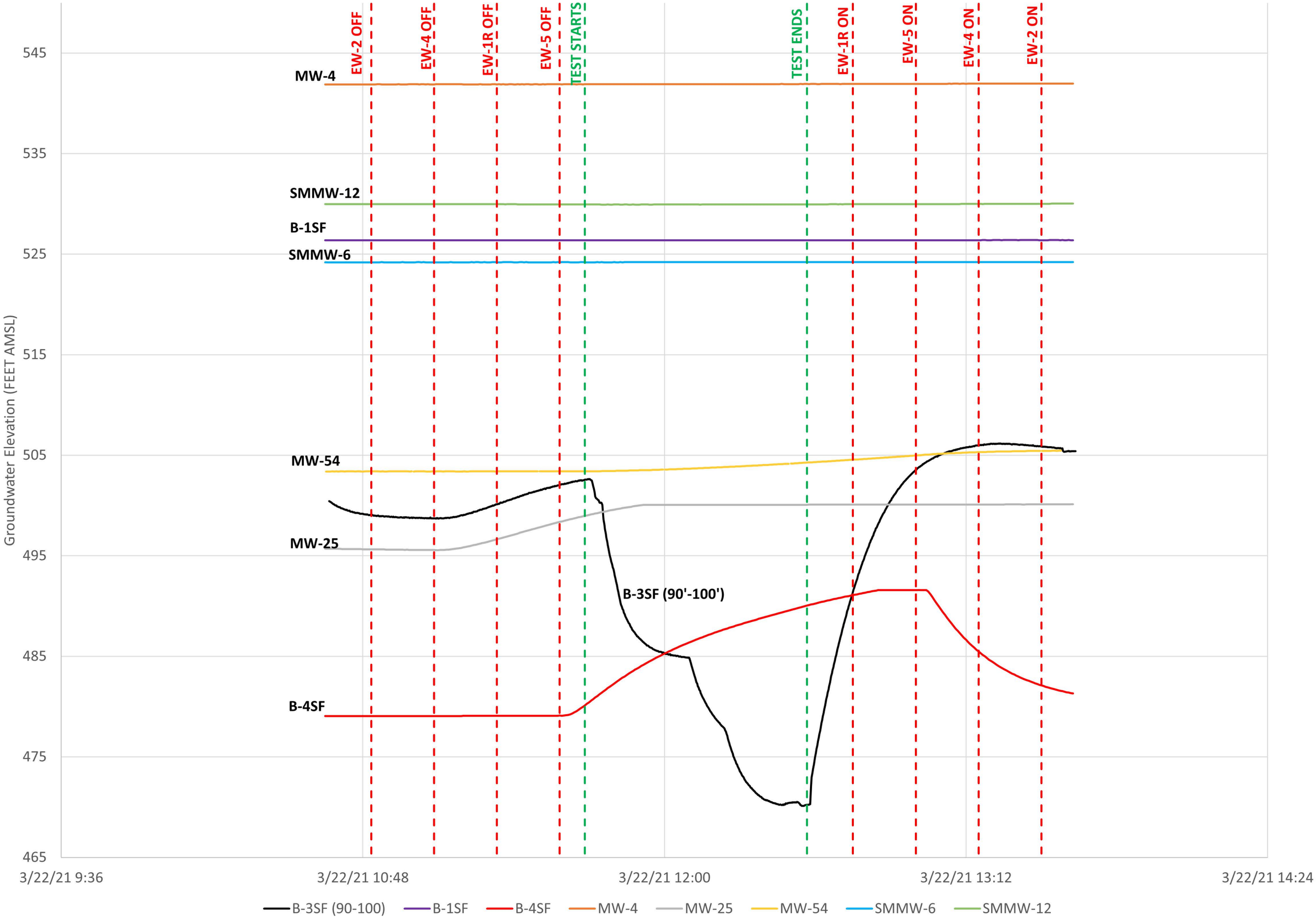
B-2SF (95' - 105') Fracture Zone Variable Rate Pump Test Hydrograph



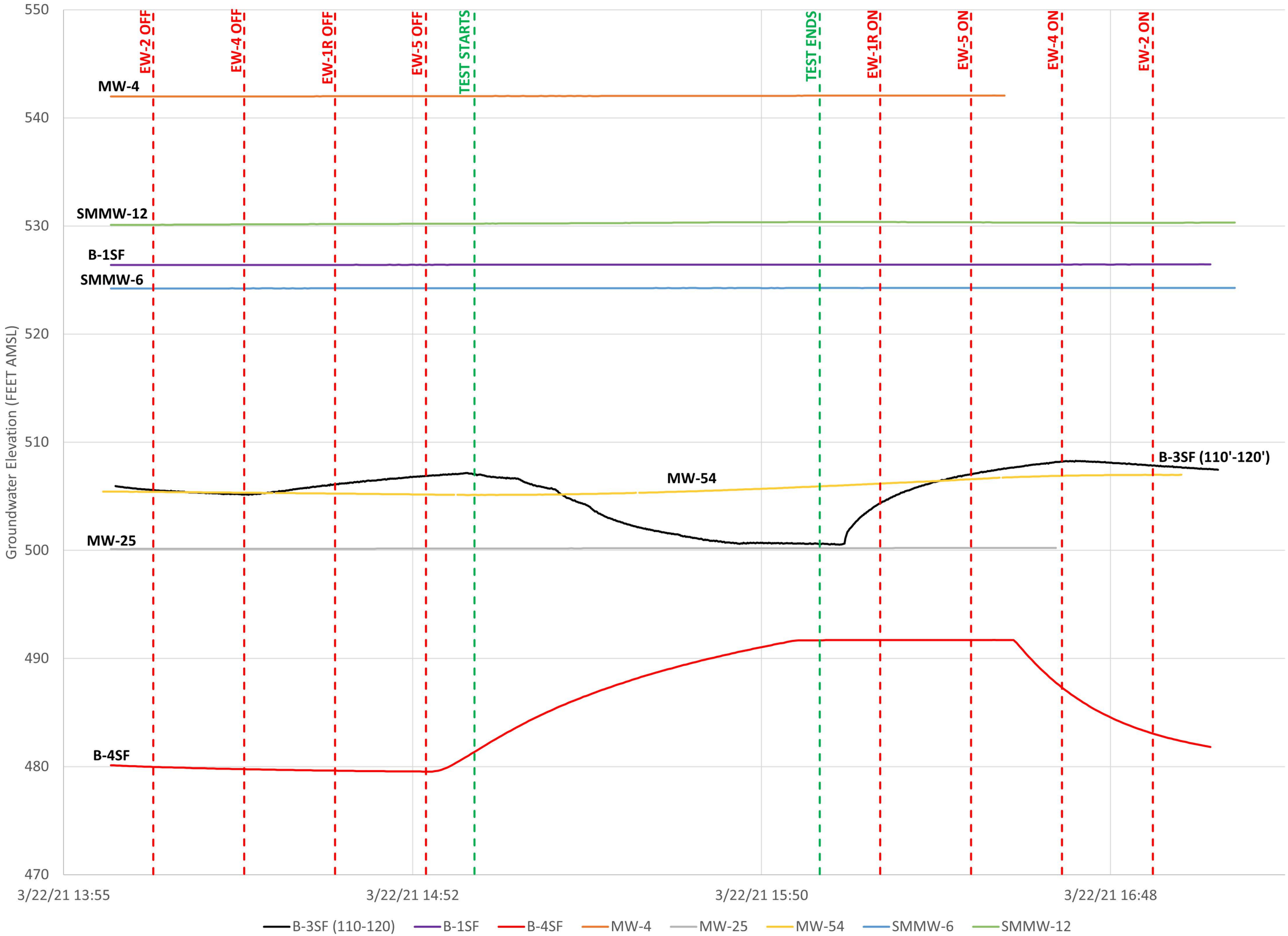
B-3SF (65' - 75') Fracture Zone Variable Rate Pump Test Hydrograph



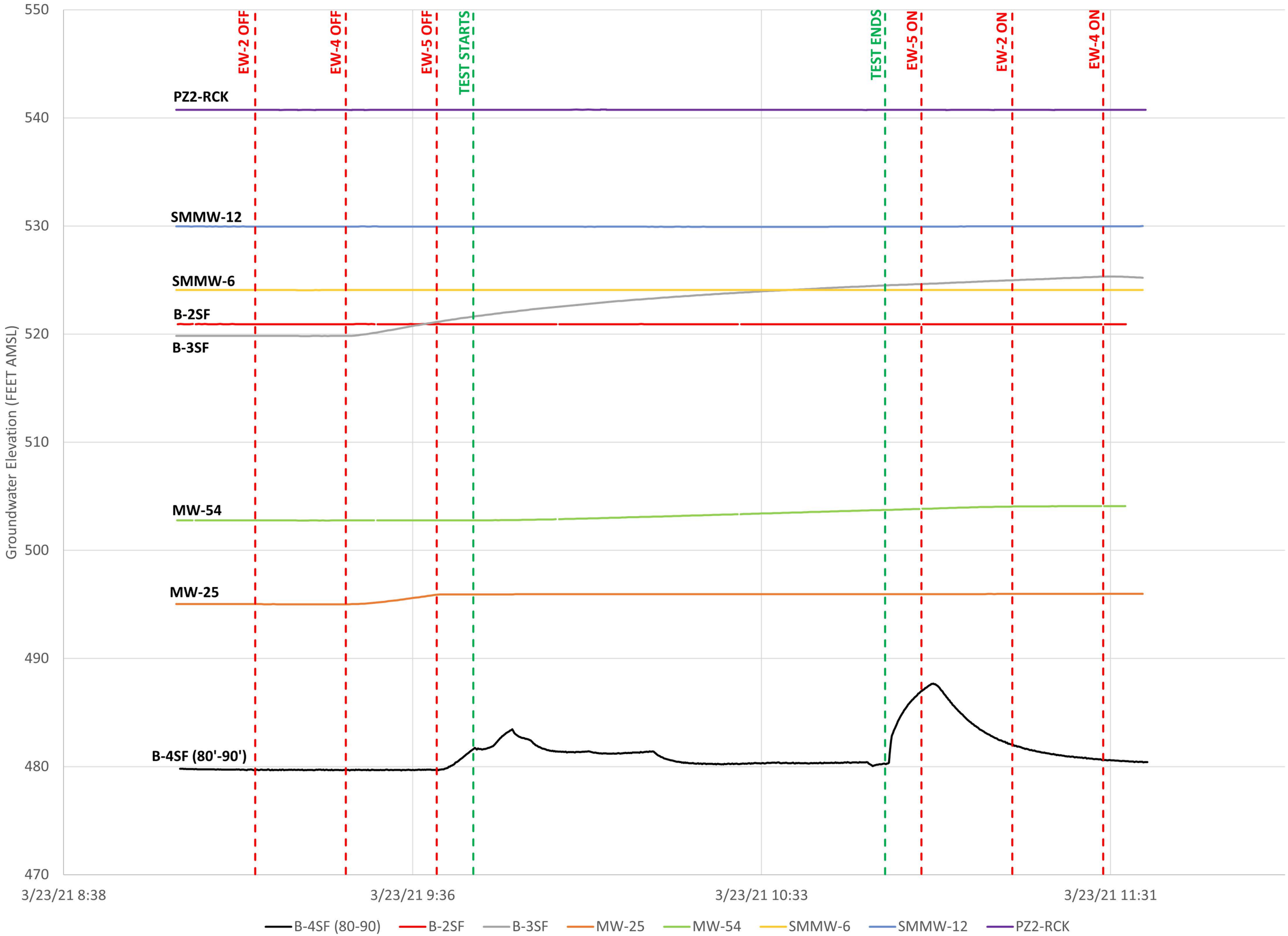
B-3SF (90' - 100') Fracture Zone Variable Rate Pump Test Hydrograph



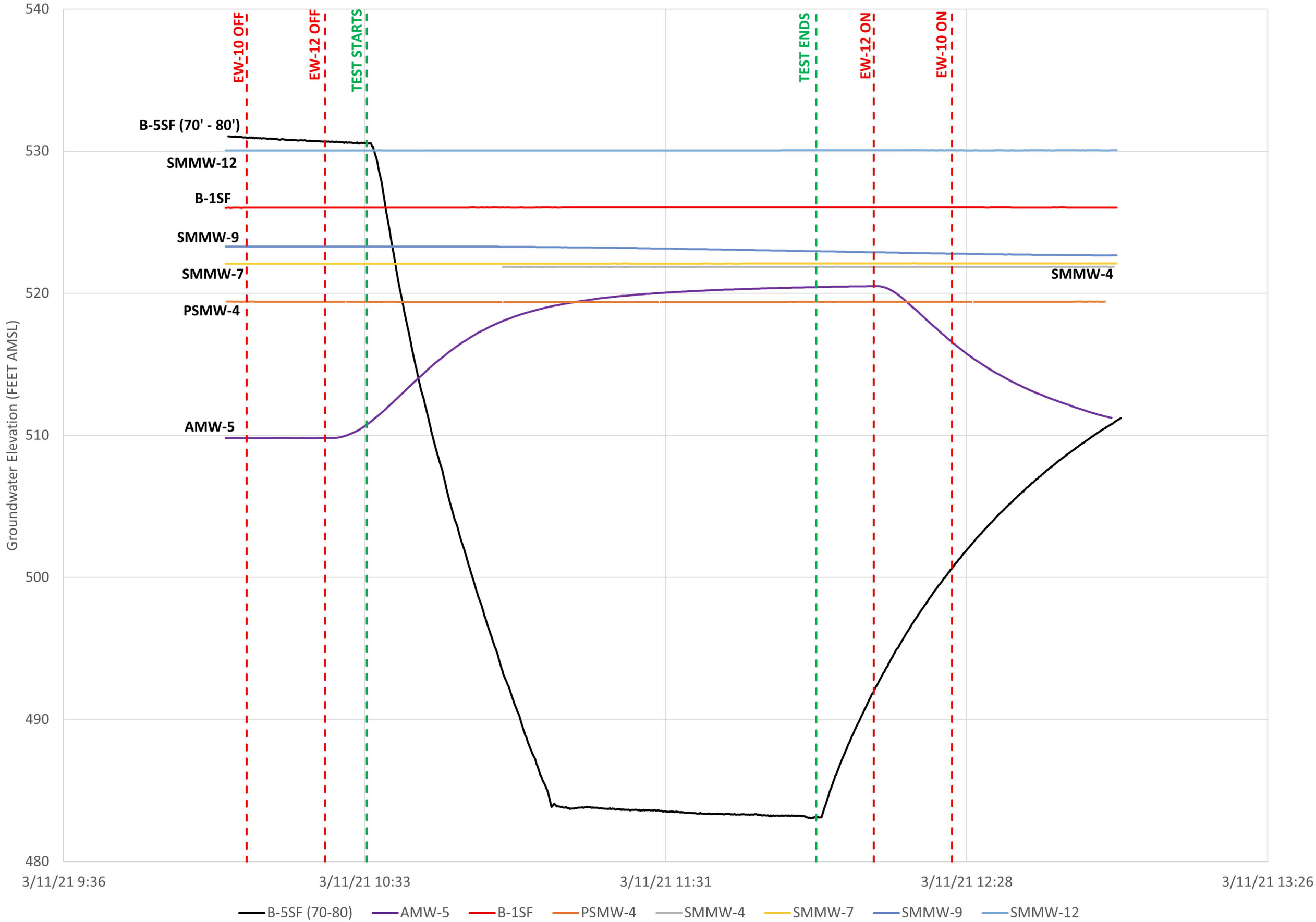
B-3SF (110' - 120') Fracture Zone Variable Rate Pump Test Hydrograph



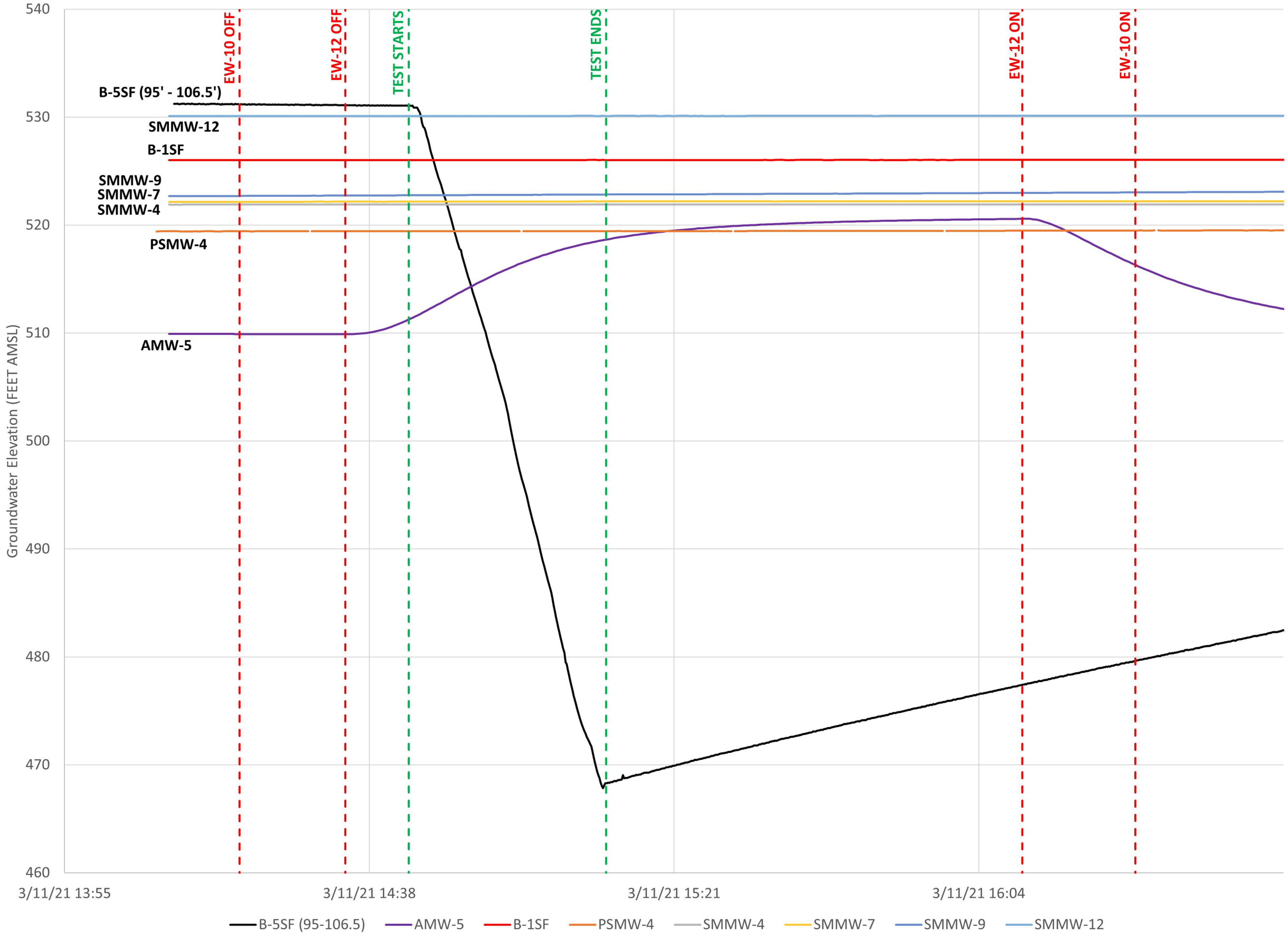
B-4SF (80' - 90') Fracture Zone Variable Rate Pump Test Hydrograph

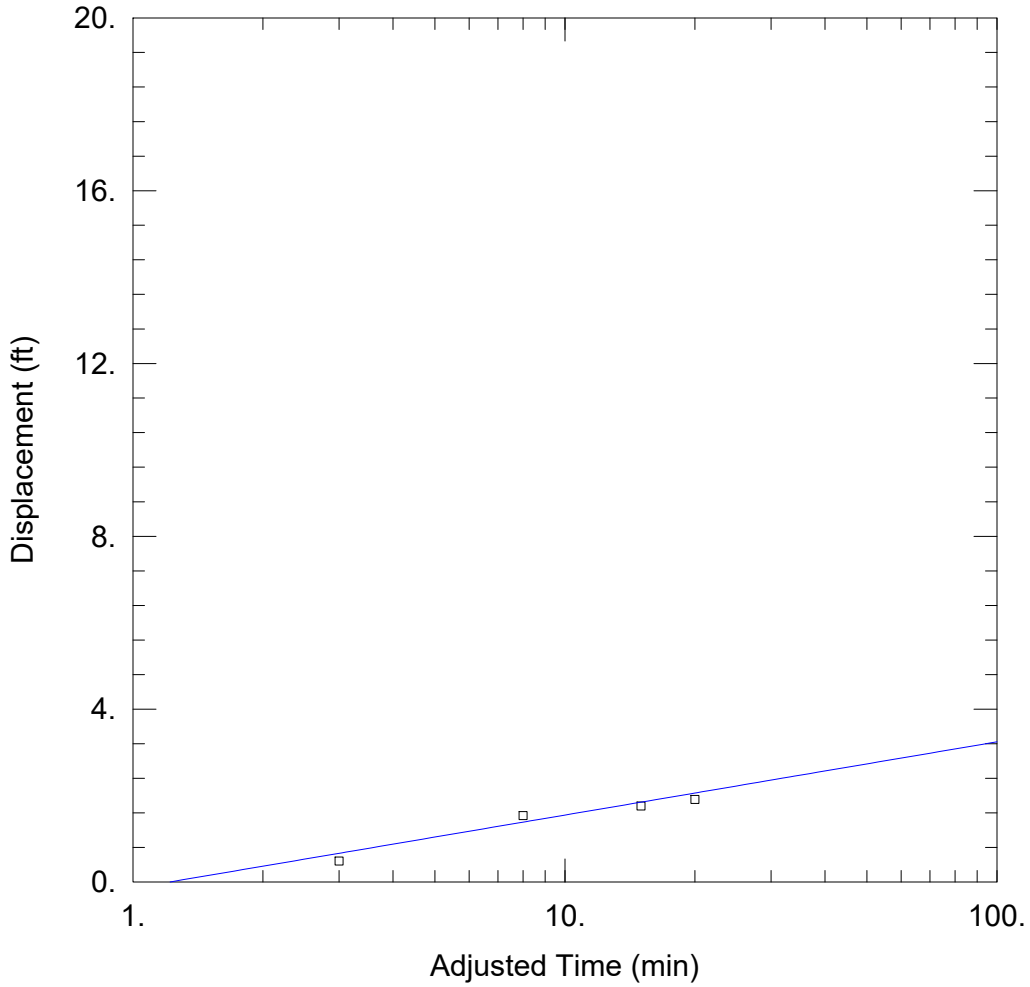


B-5SF (70' - 80') Fracture Zone Variable Rate Pump Test Hydrograph



B-5SF (95' - 106.5') Fracture Zone Variable Rate Pump Test Hydrograph





WELL TEST ANALYSIS

Data Set: \...\B-1SF (40-50).aqt
Date: 08/16/21 Time: 16:31:12

PROJECT INFORMATION

Company: NewFields
Test Well: B-1SF (40-50)

AQUIFER DATA

Saturated Thickness: 80. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
B-1SF (40-50)	0	0

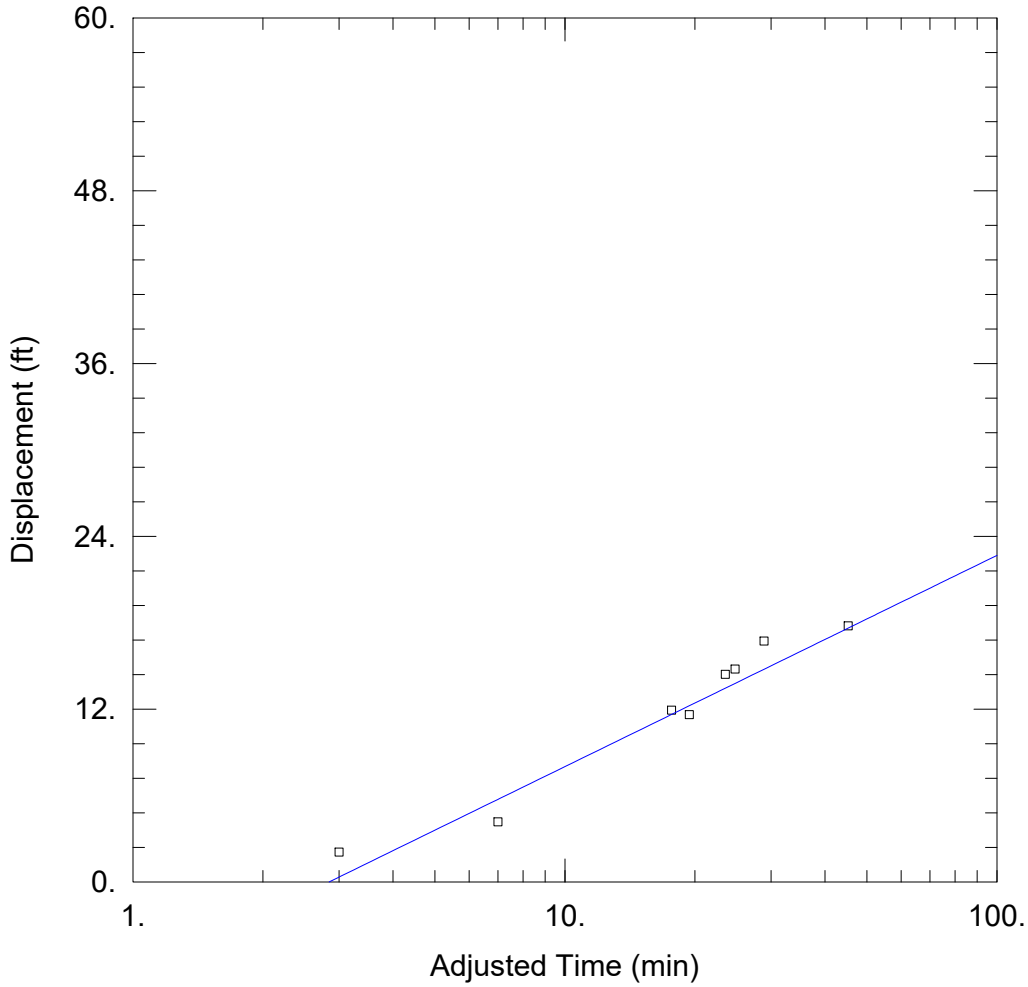
Observation Wells

Well Name	X (ft)	Y (ft)
▫ B-1SF (40-50)	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 1.041 ft^2/day S = 0.00198



WELL TEST ANALYSIS

Data Set:
Date: 08/16/21 Time: 16:35:14

PROJECT INFORMATION

Company: NewFields
Test Well: B-1SF (75-85)

AQUIFER DATA

Saturated Thickness: 80. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
B-1SF (75-85)	0	0

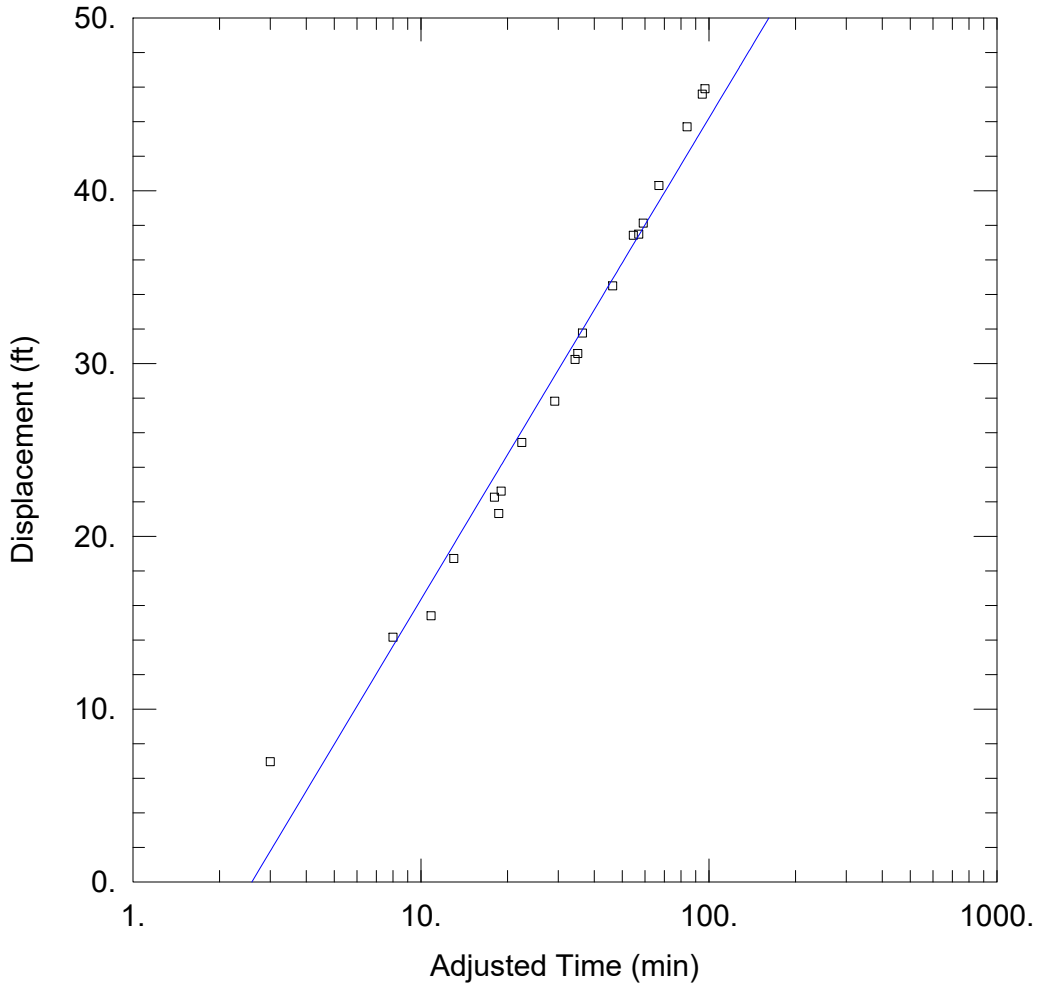
Observation Wells

Well Name	X (ft)	Y (ft)
□ B-1SF (75-85)	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 0.4087 ft^2/day S = 0.001814



WELL TEST ANALYSIS

Data Set: \...\B-2SF (95-105).aqt
Date: 08/16/21 Time: 14:46:31

PROJECT INFORMATION

Company: NewFields
Test Well: B-2SF (95-105)

AQUIFER DATA

Saturated Thickness: 80. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
B-2SF (95-105)	0	0

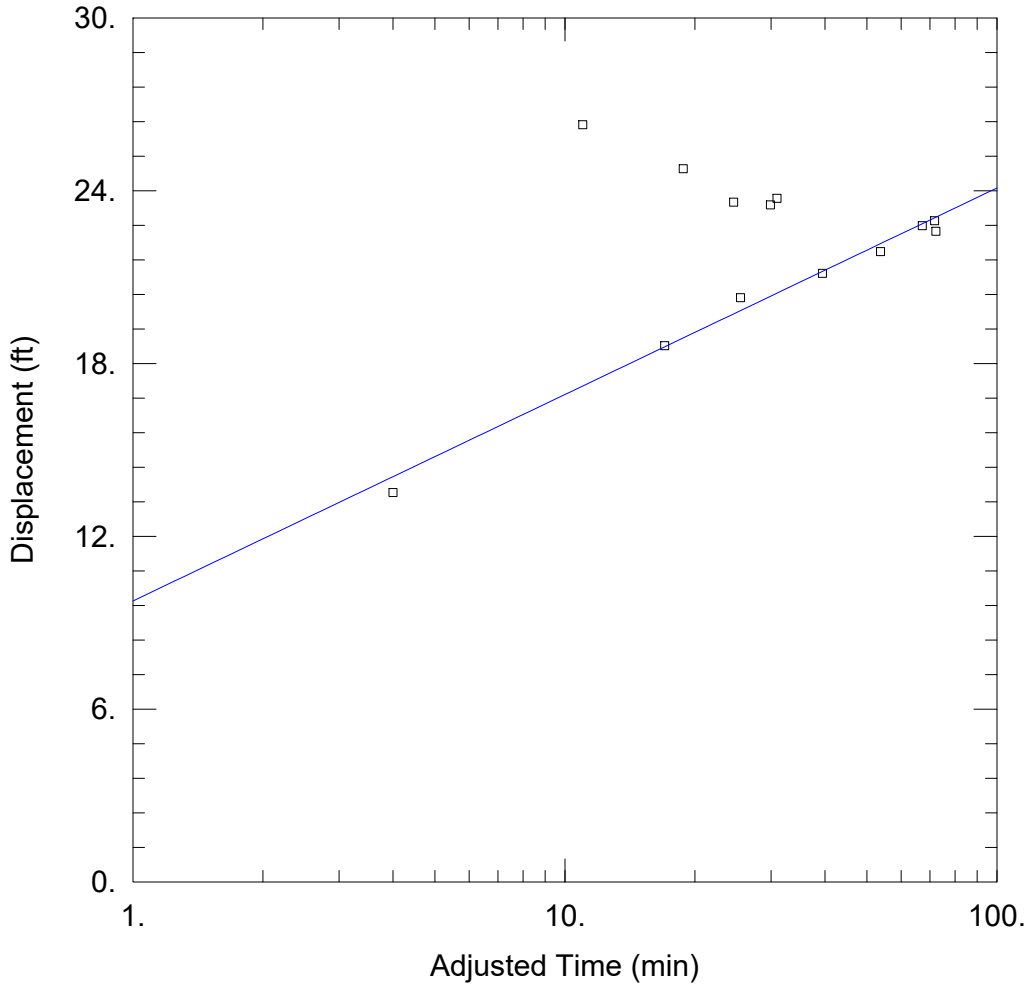
Observation Wells

Well Name	X (ft)	Y (ft)
B-2SF (95-105)	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 3.799 ft^2/day S = 0.01534



WELL TEST ANALYSIS

Data Set: \...\B-3SF (65-75).aqt
Date: 08/16/21 Time: 16:41:43

PROJECT INFORMATION

Company: NewFields
Test Well: B-3SF (65-75)

AQUIFER DATA

Saturated Thickness: 80. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
B-3F (65-75)	0	0

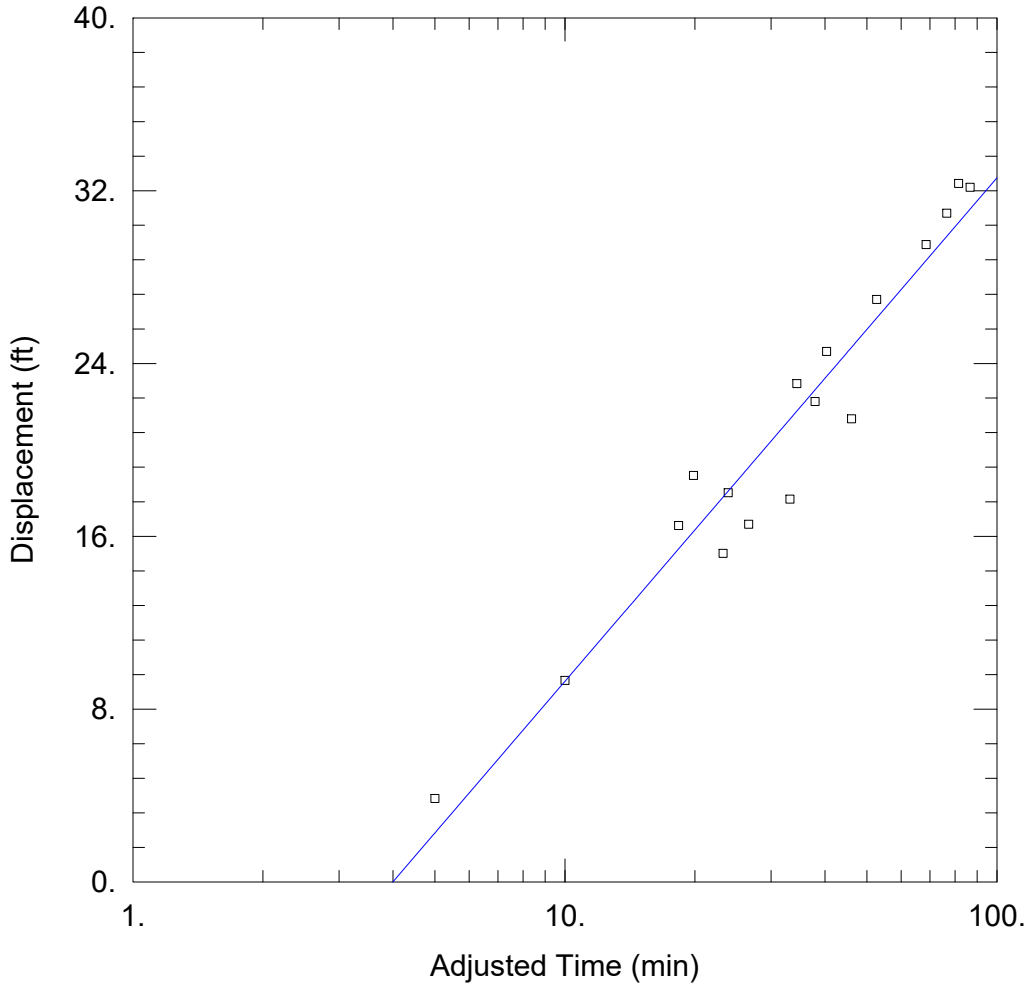
Observation Wells

Well Name	X (ft)	Y (ft)
▫ B-3F (65-75)	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 3.247 ft^2/day S = 0.0002207



WELL TEST ANALYSIS

Data Set: \...\B-3SF (90-100).aqt
Date: 08/16/21 Time: 15:08:47

PROJECT INFORMATION

Company: NewFields
Test Well: B-3SF (90-100)

AQUIFER DATA

Saturated Thickness: 80. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
B-3SF (90-100)	0	0

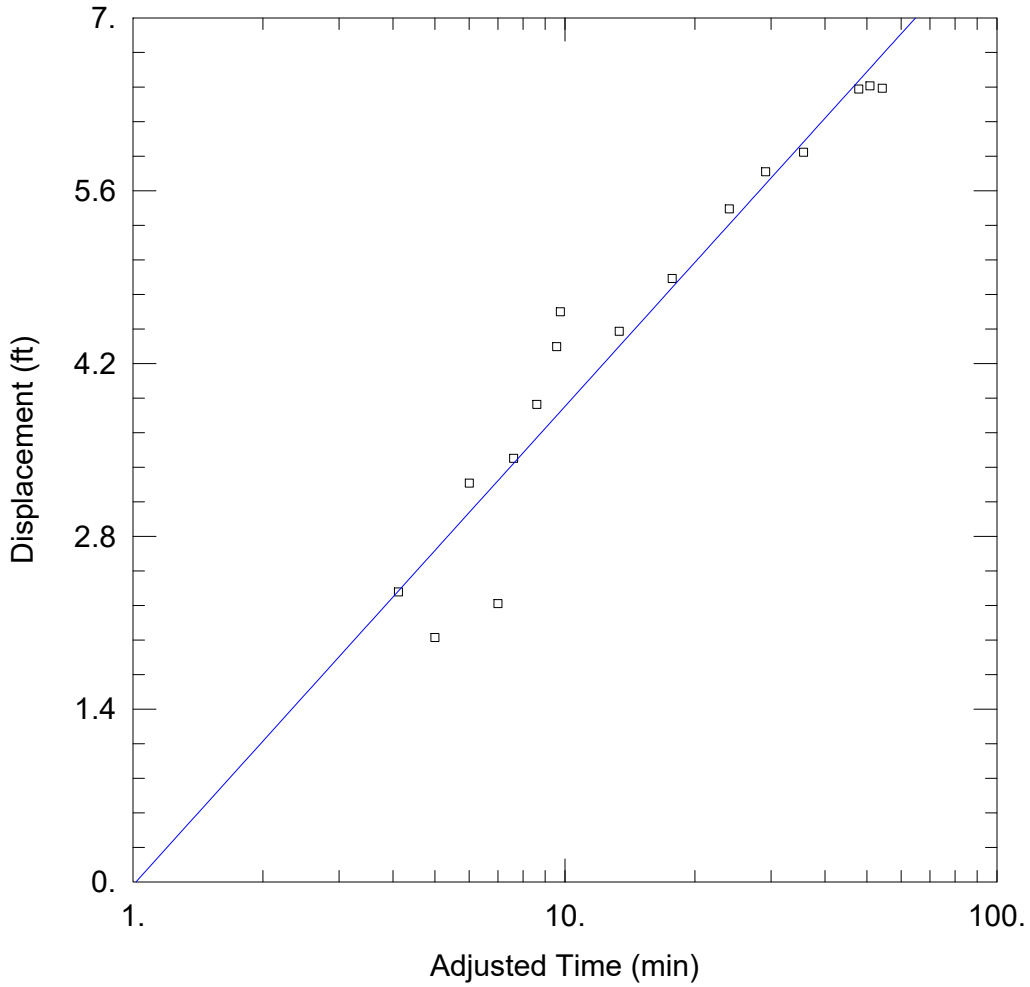
Observation Wells

Well Name	X (ft)	Y (ft)
□ B-3SF (90-100)	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 0.6657 ft^2/day S = 0.004151



WELL TEST ANALYSIS

Data Set: \...\B-3SF (110-120).aqt
Date: 08/16/21 Time: 15:10:00

PROJECT INFORMATION

Company: NewFields
Test Well: B-3SF (110-120)

AQUIFER DATA

Saturated Thickness: 80. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

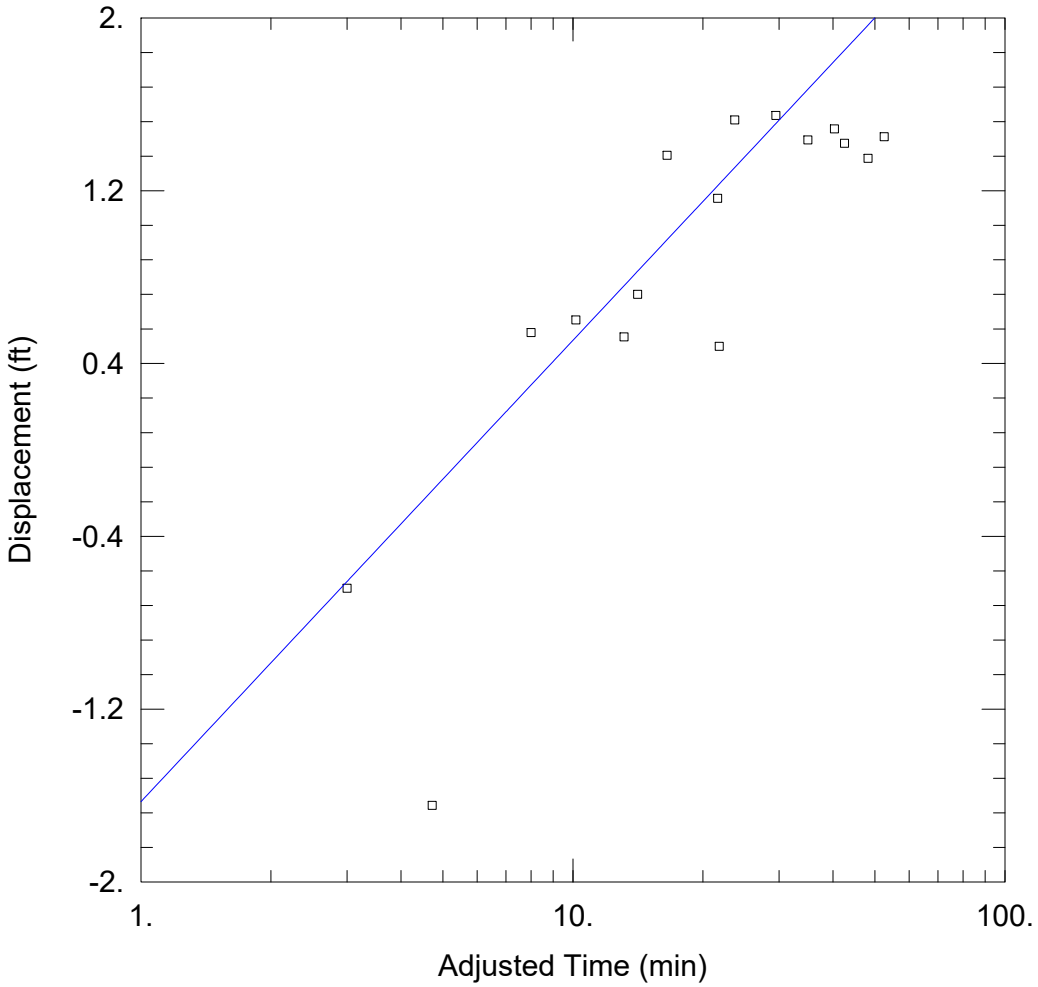
Well Name	X (ft)	Y (ft)
B-3SF (110-120)	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
□ B-3SF (110-120)	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob
T = 24. ft^2/day S = 0.03805



WELL TEST ANALYSIS

Data Set: \...\B-4SF (80-90).aqt
Date: 08/16/21 Time: 17:02:49

PROJECT INFORMATION

Company: NewFields
Test Well: B-4SF (80-90)

AQUIFER DATA

Saturated Thickness: 80. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
B-4SF (80-90)	0	0

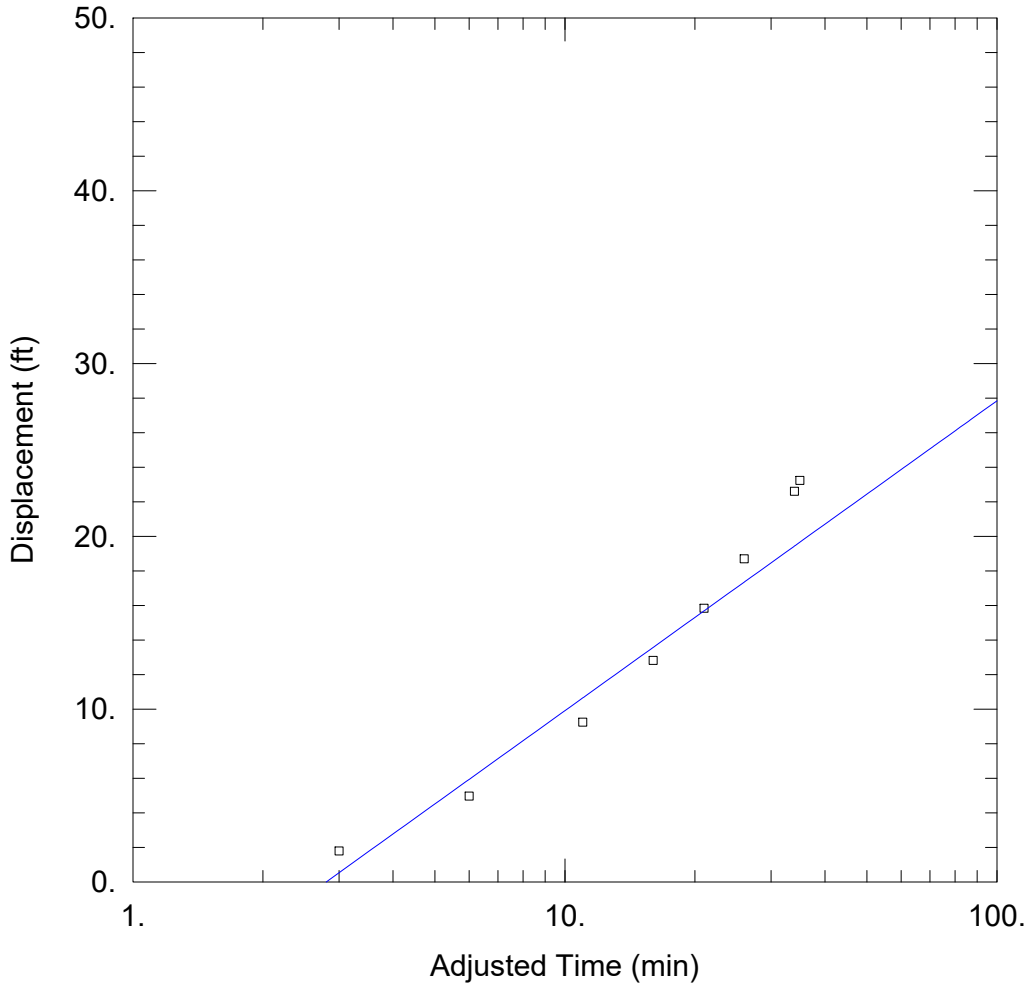
Observation Wells

Well Name	X (ft)	Y (ft)
B-4SF (80-90)	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 26.42 ft^2/day S = 0.2385



WELL TEST ANALYSIS

Data Set: \...\B-5SF (70-80).aqt
Date: 08/16/21 Time: 19:04:48

PROJECT INFORMATION

Company: NewFields
Test Well: B-5SF (70-80)

AQUIFER DATA

Saturated Thickness: 80. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
B-5SF (70-80)	0	0

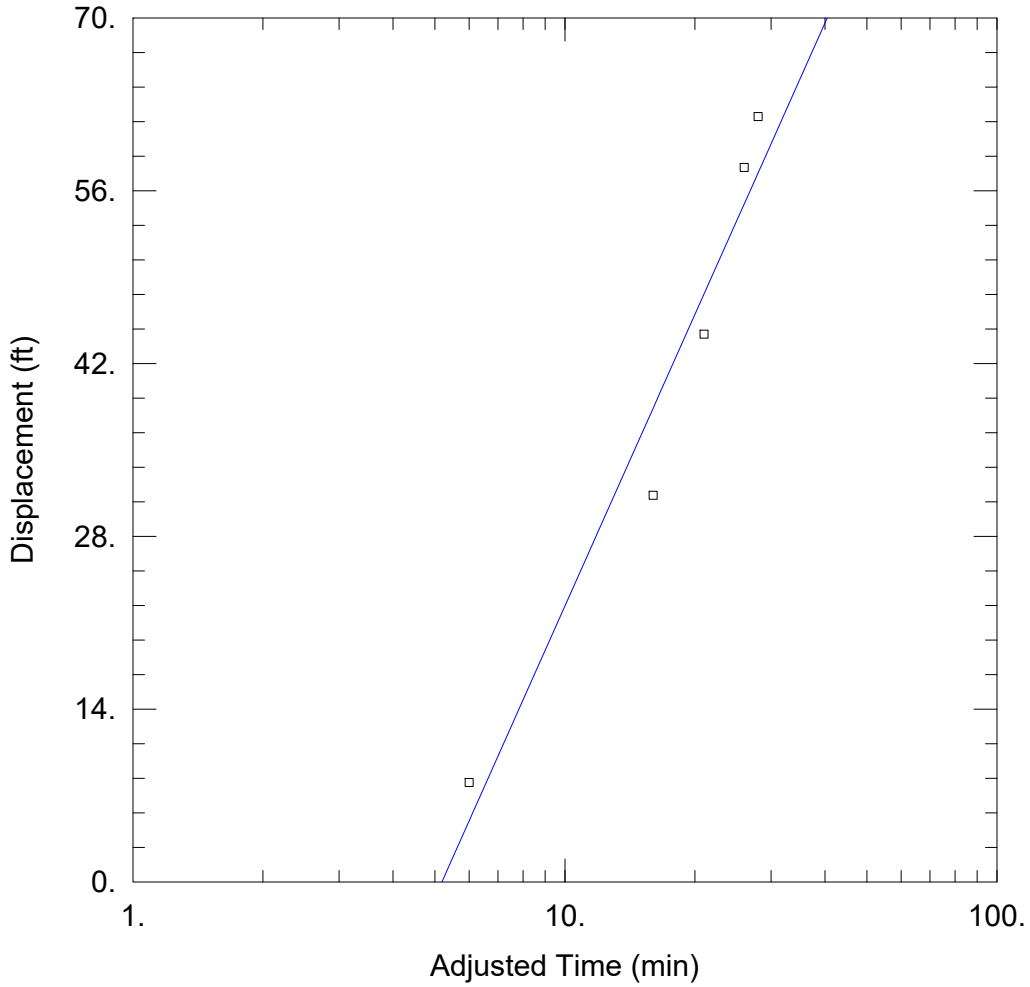
Observation Wells

Well Name	X (ft)	Y (ft)
□ B-5SF (70-80)	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 0.4917 ft^2/day S = 0.002149



WELL TEST ANALYSIS

Data Set: \...\B-5SF (95-106.5).aqt
Date: 08/16/21 Time: 19:07:11

PROJECT INFORMATION

Company: NewFields
Test Well: B-5SF (95-106.5)

AQUIFER DATA

Saturated Thickness: 80. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
B-5SF (95-106.5)	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
□ B-5SF (95-106.5)	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 0.2247 ft^2/day S = 0.001819

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