









PO Box 30712 Charleston, SC 29417 2040 Savage Road Charleston, SC 29407 P 843.556.8171 F 843.766.1178

gel.com

September 13, 2019

Ms. Cynthia Logsdon Westinghouse Electric Company, LLC PO Drawer R Columbia, South Carolina 29205

Re: ENV-CONSENTA Work Order: 487768

Dear Ms. Logsdon:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 15, 2019. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4778.

Sincerely,

Hope Taylor Project Manager

Purchase Order: 4500778461

Enclosures



2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report for

WNUC009 Westinghouse Electric Co, LLC Client SDG: 487768 GEL Work Order: 487768

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Hope Taylor.



2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: ENV-CONSENTA

Client Sample ID: SS-13 (0-1) Sample ID: 487768001

Matrix: Solid

Collect Date: 12-AUG-19 11:35
Receive Date: 15-AUG-19
Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Me	ethod
-----------	-----------	--------------------	-----	----	-------	----	-----------------	---------------	-------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits
Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 99.6 (15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-13 (1-3) Sample ID: 487768002 Matrix: Solid

Collect Date: 12-AUG-19 12:10 15-AUG-19 Receive Date:

Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
Rad Liquid Scintilla	tion Analysis								

Liquid Scint Tc99, Soil "As Received"

Technetium-99 11.0 U +/-21.036.0 50.0 pCi/g JJ3 09/11/19 2213 1908282

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 95.2

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-13 (3-5) Sample ID: 487768003

Matrix: Solid

Collect Date: 12-AUG-19 12:30 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Method

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 2.05 50.0 U +/-18.331.9 pCi/g JJ3 09/11/19 2231 1908282

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 101

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: ENV-CONSENTA

Client Sample ID: SS-13 (5-7) Sample ID: 487768004

Matrix: Solid

Collect Date: 12-AUG-19 12:50
Receive Date: 15-AUG-19
Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer RecoveryTestResultNominalRecovery%Acceptable LimitsTechnetium-99m TracerLiquid Scint Tc99, Soil "As Received"95.4(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: ENV-CONSENTA

Client Sample ID: SS-13-DUP (5-7) Project: WNUC01519
Sample ID: 487768005 Client ID: WNUC009

Matrix: Solid

Collect Date: 12-AUG-19 12:50
Receive Date: 15-AUG-19
Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
Rad Liquid Scintilla	tion Analysis								

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Analyst Comments

The following Analytical Methods were performed:

Description

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer RecoveryTestResultNominalRecovery%Acceptable LimitsTechnetium-99m TracerLiquid Scint Tc99, Soil "As Received"102(15%-125%)

Notes:

Method

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon
Project: ENV-CONSENTA

Client Sample ID: SS-11 (0-1) Sample ID: 487768006

Matrix: Solid

Collect Date: 12-AUG-19 14:10
Receive Date: 15-AUG-19
Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
-----------	-----------	--------------------	-----	----	-------	----	-----------------	------------	--------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits
Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received"

98 (15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: ENV-CONSENTA

Client Sample ID: SS-11 (1-3) Sample ID: 487768007

Matrix: Solid

Collect Date: 12-AUG-19 14:25
Receive Date: 15-AUG-19
Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 U -1.34 +/-20.3 35.8 50.0 pCi/g JJ3 09/11/19 2339 1908282 1

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer RecoveryTestResultNominalRecovery%Acceptable LimitsTechnetium-99m TracerLiquid Scint Tc99, Soil "As Received"100(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-11 (3-5) Sample ID: 487768008

Matrix: Solid

Collect Date: 12-AUG-19 15:20 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 14.3 U +/-18.831.7 50.0 pCi/g JJ3 09/11/19 2356 1908282

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 96.7

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-11 (5-7) Sample ID: 487768009

Matrix: Solid

Collect Date: 12-AUG-19 15:40 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Me	ethod
-----------	-----------	--------------------	-----	----	-------	----	-----------------	---------------	-------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 U 17.3 +/-16.1 26.8 50.0 pCi/g JJ3 09/12/19 0013 1908282

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 98.3

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-12 (0-1) Sample ID: 487768010

Matrix: Solid

Collect Date: 12-AUG-19 16:00 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 8.88 32.8 09/12/19 0030 1908282 U +/-19.150.0 pCi/g JJ3

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 99.6

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: ENV-CONSENTA

Client Sample ID: SS-12 (1-3) Sample ID: 487768011

Matrix: Solid

Collect Date: 12-AUG-19 16:20 Receive Date: 15-AUG-19 Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Me	ethod
-----------	-----------	--------------------	-----	----	-------	----	-----------------	---------------	-------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer RecoveryTestResultNominalRecovery%Acceptable LimitsTechnetium-99m TracerLiquid Scint Tc99, Soil "As Received"99.5(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-12 (3-5) Sample ID: 487768012

Matrix: Solid

Collect Date: 12-AUG-19 16:40 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
-----------	-----------	--------------------	-----	----	-------	----	-----------------	------------	--------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 10.0 pCi/g 09/12/19 0104 1908282 U +/-14.5 24.5 50.0 JJ3

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 99.1

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: ENV-CONSENTA

Client Sample ID: SS-12 (5-7) Sample ID: 487768013

Matrix: Solid

Collect Date: 12-AUG-19 17:00
Receive Date: 15-AUG-19
Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer RecoveryTestResultNominalRecovery%Acceptable LimitsTechnetium-99m TracerLiquid Scint Tc99, Soil "As Received"95.1(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon
Project: ENV-CONSENTA

Client Sample ID: SS-14 (0-1) Sample ID: 487768014

Matrix: Solid

Collect Date: 13-AUG-19 08:00
Receive Date: 15-AUG-19
Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 U 4.80 +/-15.9 27.5 50.0 pCi/g JJ3 09/12/19 0138 1908282 1

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits
Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received"

98 (15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-14 (1-3) Sample ID: 487768015

Matrix: Solid

Collect Date: 13-AUG-19 08:15 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Me	ethod
-----------	-----------	--------------------	-----	----	-------	----	-----------------	---------------	-------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 1.57 U +/-15.026.2 50.0 pCi/g JJ3 09/12/19 0155 1908282

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 103

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: ENV-CONSENTA

Client Sample ID: SS-14 (3-5) Sample ID: 487768016

Matrix: Solid

Collect Date: 13-AUG-19 09:00
Receive Date: 15-AUG-19
Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer RecoveryTestResultNominalRecovery%Acceptable LimitsTechnetium-99m TracerLiquid Scint Tc99, Soil "As Received"100(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-14 (5-7) Sample ID: 487768017

Matrix: Solid

Collect Date: 13-AUG-19 09:10 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -2.9 pCi/g U +/-18.6 32.5 50.0 RP1 09/08/19 0539 1908284

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 94.1

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-14-DUP (5-7) Project: WNUC01519 Sample ID: 487768018 Client ID: WNUC009

Matrix: Solid

Collect Date: 13-AUG-19 09:10 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Method

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 9.42 27.2 U +/-16.050.0 pCi/g RP1 09/08/19 0600 1908284

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 97.4

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-10 (0-1) Sample ID: 487768019

Matrix: Solid

Collect Date: 13-AUG-19 09:55 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Method

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -7.99 +/-20.4 50.0 U 35.9 pCi/g RP1 09/08/19 0621 1908284

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 89.6 (15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-10 (1-3) Sample ID: 487768020

Matrix: Solid

Collect Date: 13-AUG-19 10:15 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
-----------	-----------	--------------------	-----	----	-------	----	-----------------	------------	--------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -0.334 +/-18.2 50.0 U 31.7 pCi/g RP1 09/08/19 0643 1908284

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 95.4

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-10 (3-5) Sample ID: 487768021

Matrix: Solid

Collect Date: 13-AUG-19 10:35 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Me	ethod
-----------	-----------	--------------------	-----	----	-------	----	-----------------	---------------	-------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -0.137 U +/-19.5 33.8 50.0 pCi/g RP1 09/08/19 0704 1908284

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 97.3

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: ENV-CONSENTA

Client Sample ID: SS-10 (5-7) Sample ID: 487768022

Matrix: Solid

Collect Date: 13-AUG-19 10:45
Receive Date: 15-AUG-19
Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Me	ethod
-----------	-----------	--------------------	-----	----	-------	----	-----------------	---------------	-------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 U -6.79 +/-17.6 31.1 50.0 pCi/g RP1 09/08/19 0726 1908284 1

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer RecoveryTestResultNominalRecovery%Acceptable LimitsTechnetium-99m TracerLiquid Scint Tc99, Soil "As Received"95.9(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-8 (0-1) Sample ID: 487768023

Matrix: Solid

Collect Date: 13-AUG-19 11:25 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -19.7 34.2 50.0 U +/-18.9pCi/g RP1 09/08/19 0747 1908284

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 98.7

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: ENV-CONSENTA

Client Sample ID: SS-8 (1-3) Sample ID: 487768024

Matrix: Solid

Collect Date: 13-AUG-19 11:50
Receive Date: 15-AUG-19
Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Method

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits
Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received"

98.3 (15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-8 (3-5) Sample ID: 487768025

Matrix: Solid

Collect Date: 13-AUG-19 12:10 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch N	Method
-----------	-----------	--------------------	-----	----	-------	----	-----------------	--------------	--------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 1.09 +/-21.1 U 36.6 50.0 pCi/g RP1 09/08/19 0830 1908284

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 94.3

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-8 (5-7) Sample ID: 487768026

Matrix: Solid

Collect Date: 13-AUG-19 12:30 15-AUG-19 Receive Date: Collector: Client

	Parameter	Qualifier	Result 1	Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
--	-----------	-----------	----------	-------------	-----	----	-------	----	-----------------	------------	--------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -4.71 27.2 U +/-15.5 50.0 pCi/g RP1 09/08/19 0852 1908284

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 96.8 (15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-7 (0-1) Sample ID: 487768027

Matrix: Solid

Collect Date: 13-AUG-19 13:20 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Me	ethod
-----------	-----------	--------------------	-----	----	-------	----	-----------------	---------------	-------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 8.60 +/-17.1 29.2 U 50.0 pCi/g RP1 09/08/19 0913 1908284

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 93.6

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-7 (1-3) Sample ID: 487768028

Matrix: Solid

Collect Date: 13-AUG-19 13:45 15-AUG-19 Receive Date: Collector: Client

	Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Method
--	-----------	-----------	--------------------	-----	----	-------	----	-----------------	-------------------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -22.9 +/-23.0 41.4 50.0 U pCi/g RP1 09/08/19 0935 1908284

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 95.6 (15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-7 (3-5) Sample ID: 487768029

Matrix: Solid

Collect Date: 13-AUG-19 14:05 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
-----------	-----------	--------------------	-----	----	-------	----	-----------------	------------	--------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 +/-23.0 40.8 U -13.6 50.0 pCi/g RP1 09/08/19 0956 1908284

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 94.1

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: ENV-CONSENTA

Client Sample ID: SS-7 (5-7) Sample ID: 487768030

Matrix: Solid

Collect Date: 13-AUG-19 14:15
Receive Date: 15-AUG-19
Collector: Client

	Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Method
--	-----------	-----------	--------------------	-----	----	-------	----	-----------------	-------------------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer RecoveryTestResultNominalRecovery%Acceptable LimitsTechnetium-99m TracerLiquid Scint Tc99, Soil "As Received"93.6(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-9 (0-1) Sample ID: 487768031

Matrix: Solid

Collect Date: 13-AUG-19 14:45 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Method

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -13.4 +/-20.4 U 36.3 50.0 pCi/g RP1 09/08/19 1039 1908284

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 96

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-9 (1-3) Sample ID: 487768032

Matrix: Solid

Collect Date: 13-AUG-19 15:05 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
-----------	-----------	--------------------	-----	----	-------	----	-----------------	------------	--------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -9.16 +/-25.5 U 45.3 50.0 pCi/g JJ3 09/08/19 0715 1908285

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 90.8

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

Analyst Comments

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-9 (3-5) Sample ID: 487768033 Matrix: Solid

Collect Date: 13-AUG-19 15:30 15-AUG-19 Receive Date:

Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
Rad Liquid Scintillati	on Analysis								

Liquid Scint Tc99, Soil "As Received"

Technetium-99 0.572 +/-24.6 43.0 50.0 pCi/g JJ3 09/08/19 0732 1908285

The following Analytical Methods were performed:

DOE EML HASL-300, Tc-02-RC Modified Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

(15%-125%) 93.3

Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received"

Description

Notes:

Method

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-9 (5-7) Sample ID: 487768034

Matrix: Solid

Collect Date: 13-AUG-19 15:45 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Me	ethod
-----------	-----------	--------------------	-----	----	-------	----	-----------------	---------------	-------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 18.1 U +/-18.831.5 50.0 pCi/g JJ3 09/08/19 0749 1908285

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 96.6

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-3 (0-1) Sample ID: 487768035

Matrix: Solid

Collect Date: 14-AUG-19 08:45 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 12.9 +/-25.0 U 42.7 50.0 pCi/g JJ3 09/08/19 0805 1908285

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 93.5

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon
Project: ENV-CONSENTA

Client Sample ID: SS-3 (1-3) Sample ID: 487768036

Matrix: Solid

Collect Date: 14-AUG-19 09:00
Receive Date: 15-AUG-19
Collector: Client

	Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Method
--	-----------	-----------	--------------------	-----	----	-------	----	-----------------	-------------------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 U 4.83 +/-20.2 35.0 50.0 pCi/g JJ3 09/08/19 0822 1908285 1

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer RecoveryTestResultNominalRecovery%Acceptable LimitsTechnetium-99m TracerLiquid Scint Tc99, Soil "As Received"97.5(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-3 (3-5) Sample ID: 487768037

Matrix: Solid

Collect Date: 14-AUG-19 09:15 15-AUG-19 Receive Date: Collector: Client

	Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
--	-----------	-----------	--------------------	-----	----	-------	----	-----------------	------------	--------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -0.193 22.4 U +/-12.850.0 pCi/g JJ3 09/08/19 0838 1908285

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 88.2

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-3 (5-7) Sample ID: 487768038

Matrix: Solid

Collect Date: 14-AUG-19 09:20 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Meth	Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
--	-----------	-----------	--------	-------------	-----	----	-------	----	-----------------	------------	--------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 37.3 U 3.12 +/-21.5 50.0 pCi/g JJ3 09/08/19 0855 1908285

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 98.4

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-3-DUP (5-7) Sample ID: 487768039

Matrix: Solid

Collect Date: 14-AUG-19 09:20 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Me	ethod
-----------	-----------	--------------------	-----	----	-------	----	-----------------	---------------	-------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 +/-22.0 38.3 U 1.35 50.0 pCi/g JJ3 09/08/19 0912 1908285

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 96.9

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-4 (0-1) Sample ID: 487768040

Matrix: Solid

Collect Date: 14-AUG-19 09:50 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
-----------	-----------	--------------------	-----	----	-------	----	-----------------	------------	--------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 2.35 +/-21.2 U 36.8 50.0 pCi/g JJ3 09/08/19 0928 1908285

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 96.1

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-4 (1-3) Sample ID: 487768041

Matrix: Solid

Collect Date: 14-AUG-19 10:00 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Method
								<u> </u>

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 16.1 +/-25.0 42.4 U 50.0 pCi/g JJ3 09/08/19 0945 1908285

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 93.1

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon
Project: ENV-CONSENTA

Client Sample ID: SS-4 (3-5) Sample ID: 487768042

Matrix: Solid

Collect Date: 14-AUG-19 10:10
Receive Date: 15-AUG-19
Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 U 7.72 +/-14.7 25.1 50.0 pCi/g JJ3 09/08/19 1001 1908285 1

The following Analytical Methods were performed:

 Method
 Description
 Analyst Comments

 1
 DOE EML HASL-300, Tc-02-RC Modified

DOE EME HASE-300, TC-02-KC Modified

Surrogate/Tracer RecoveryTestResultNominalRecovery%Acceptable LimitsTechnetium-99m TracerLiquid Scint Tc99, Soil "As Received"91.4(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-4 (5-7) Sample ID: 487768043

Matrix: Solid

Collect Date: 14-AUG-19 10:20 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -3.26 21.1 50.0 U +/-11.9 pCi/g JJ3 09/08/19 1018 1908285

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 96

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-6 (0-1) Sample ID: 487768044

Matrix: Solid

Collect Date: 14-AUG-19 11:25 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Me	ethod
-----------	-----------	--------------------	-----	----	-------	----	-----------------	---------------	-------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 +/-23.3 40.0 U 7.58 50.0 pCi/g JJ3 09/08/19 1035 1908285

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 95.5

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-6 (1-3) Sample ID: 487768045

Matrix: Solid

Collect Date: 14-AUG-19 11:40 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -0.921 +/-24.2 42.4 50.0 U pCi/g JJ3 09/08/19 1051 1908285

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 93.5

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon
Project: ENV-CONSENTA

Client Sample ID: SS-6 (3-5) Sample ID: 487768046

Matrix: Solid

Collect Date: 14-AUG-19 11:55
Receive Date: 15-AUG-19
Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
•									-

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 U -13.2 +/-17.8 32.2 50.0 pCi/g JJ3 09/08/19 1108 1908285 1

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer RecoveryTestResultNominalRecovery%Acceptable LimitsTechnetium-99m TracerLiquid Scint Tc99, Soil "As Received"99.4(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-6 (5-7) Sample ID: 487768047

Matrix: Solid

Collect Date: 14-AUG-19 12:10 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 +/-23.6 50.0 U -6.56 41.9 pCi/g JJ3 09/08/19 1103 1908287

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 95.3

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-5 (0-1) Sample ID: 487768048

Matrix: Solid

Collect Date: 14-AUG-19 13:20 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 0.637 +/-21.2 U 36.9 50.0 pCi/g JJ3 09/08/19 1120 1908287

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 99.7

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-5 (1-3) Sample ID: 487768049

Matrix: Solid

Collect Date: 14-AUG-19 13:35 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Meth	Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
--	-----------	-----------	--------	-------------	-----	----	-------	----	-----------------	------------	--------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -1.62 +/-24.3 50.0 U 42.7 pCi/g JJ3 09/08/19 1136 1908287

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified 1

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Soil "As Received"			95.4	(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor PF: Prep Factor DL: Detection Limit MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-5 (3-5) Sample ID: 487768050 Matrix: Solid

Collect Date: 14-AUG-19 13:45 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Metho	od

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 4.46 +/-20.6 U 35.7 50.0 pCi/g JJ3 09/08/19 1153 1908287

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 99.7

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-5 (5-7) Sample ID: 487768051

Matrix: Solid

Collect Date: 14-AUG-19 13:55 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 0.843 28.2 U +/-16.1 50.0 pCi/g JJ3 09/08/19 1210 1908287

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 102

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SP-1 Sample ID: 487768052

Matrix: Solid

Collect Date: 14-AUG-19 14:30 15-AUG-19 Receive Date: Collector: Client

er	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method

Project:

Client ID:

WNUC01519

WNUC009

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 50.0 7.73 +/-21.136.2 pCi/g JJ3 09/08/19 1226 1908287

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 96.7 (15%-125%)

Notes:

Parameter

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SP-2 Sample ID: 487768053

Matrix: Solid

Collect Date: 14-AUG-19 14:35 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Metho	

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -1.25 +/-22.5 39.5 50.0 pCi/g U JJ3 09/08/19 1243 1908287

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Result	Nominai	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Soil "As Received"			95.1	(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor Lc/LC: Critical Level PF: Prep Factor DL: Detection Limit MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon
Project: ENV-CONSENTA

Client Sample ID: SS-2 (0-1) Sample ID: 487768054

Matrix: Solid

Collect Date: 14-AUG-19 15:25
Receive Date: 15-AUG-19
Collector: Client

	Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
--	-----------	-----------	--------------------	-----	----	-------	----	-----------------	------------	--------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 U -2.91 +/-24.0 42.1 50.0 pCi/g JJ3 09/08/19 1300 1908287 1

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits
Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received"

96.4 (15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon
Project: ENV-CONSENTA

Client Sample ID: SS-2 (1-3) Sample ID: 487768055

Matrix: Solid

Collect Date: 14-AUG-19 15:40
Receive Date: 15-AUG-19
Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer RecoveryTestResultNominalRecovery%Acceptable LimitsTechnetium-99m TracerLiquid Scint Tc99, Soil "As Received"102(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Project:

Client ID:

WNUC01519

WNUC009

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-2 (3-5) Sample ID: 487768056

Matrix: Solid

Collect Date: 14-AUG-19 15:55 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertainty	MDC	RL	Units	PF	DF Analyst Date	Time Batch Me	ethod
-----------	-----------	--------------------	-----	----	-------	----	-----------------	---------------	-------

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 4.78 37.2 U +/-21.5 50.0 pCi/g JJ3 09/08/19 1333 1908287

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 97.8

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-2 (5-7) Sample ID: 487768057

Matrix: Solid

Collect Date: 14-AUG-19 16:05 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 4.02 32.0 U +/-18.550.0 pCi/g JJ3 09/08/19 1349 1908287

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 97.9

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon
Project: ENV-CONSENTA

Client Sample ID: SS-1 (0-1) Sample ID: 487768058

Matrix: Solid

Collect Date: 15-AUG-19 08:30
Receive Date: 15-AUG-19
Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 U 0.171 +/-14.5 25.4 50.0 pCi/g JJ3 09/08/19 1406 1908287 1

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits
Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received"

99.2 (15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Company: Westinghouse Electric Company, LLC

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: ENV-CONSENTA

Client Sample ID: SS-1 (1-3) Sample ID: 487768059

Matrix: Solid

Collect Date: 15-AUG-19 08:55
Receive Date: 15-AUG-19
Collector: Client

|--|

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

The following Analytical Methods were performed:

Method Description Analyst Comments

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Result	Nominai	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Soil "As Received"			95.5	(15%-125%)

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-1 (3-5) Sample ID: 487768060

Matrix: Solid

Collect Date: 15-AUG-19 09:05 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -0.576 +/-23.3 40.8 U 50.0 pCi/g JJ3 09/08/19 1440 1908287

The following Analytical Methods were performed:

Method Description **Analyst Comments**

DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 99.9

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Project:

Client ID:

WNUC01519

WNUC009

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

Client Sample ID: SS-1 (5-7) Sample ID: 487768061

Matrix: Solid

Collect Date: 15-AUG-19 09:15 15-AUG-19 Receive Date: Collector: Client

Parameter Qualifier Result Uncertainty MDC RL Units PF DF Analyst Date Time Batch Method
--

Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -4.99 U +/-14.826.3 50.0 pCi/g JJ3 09/08/19 1456 1908287

The following Analytical Methods were performed:

Method Description **Analyst Comments** DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits (15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Soil "As Received" 97.6

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 13, 2019

Westinghouse Electric Company, LLC Company:

Address: PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Logsdon Project: **ENV-CONSENTA**

EB-01-081519 Client Sample ID: Project: WNUC01519 Sample ID: 487768062 Client ID: WNUC009

Matrix: Water

Collect Date: 15-AUG-19 09:30 15-AUG-19 Receive Date: Collector: Client

Parameter	Qualifier	Result Uncertaint	y MDC	RL	Units	PF	DF Analyst Date	Time Batch	Method
Rad Liquid Scintil	lation Analysis								
T : 110 : 4T 00	T 1 !! A D .	111							

Liquid Scint Tc99, Liquid "As Received"

Technetium-99 4.19 +/-24.3 41.9 50.0 U pCi/L JJ3 09/08/19 0351 1912084

Analyst Comments

The following Analytical Methods were performed:

Description

DOE EML HASL-300, Tc-02-RC Modified Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

(15%-125%) Technetium-99m Tracer Liquid Scint Tc99, Liquid "As Received" 96.4

Notes:

Method

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

Lc/LC: Critical Level DF: Dilution Factor DL: Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity **RL**: Reporting Limit

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Page 1 of 3

Report Date: September 13, 2019

Westinghouse Electric Company, LLC

PO Drawer R

Columbia, South Carolina

Contact: Ms. Cynthia Logsdon

Workorder: 487768

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range A	nlst	Date Time
Rad Liquid Scintillation Batch 1908282										
QC1204359988 487768010 DUP										
Technetium-99	U	8.88	U	1.98	pCi/g	N/A		N/A	JJ3	09/12/19 02:46
	Uncertainty	+/-19.1		+/-10.9						
QC1204359989 LCS										
Technetium-99	429			414	pCi/g		96.3	(75%-125%)		09/12/19 03:02
	Uncertainty			+/-24.3						
QC1204359987 MB										
Technetium-99			U	5.40	pCi/g					09/12/19 02:29
	Uncertainty			+/-11.3						
Batch 1908284 ———										
QC1204359991 487768017 DUP										
Technetium-99	U	-2.9	U	-7.72	pCi/g	N/A		N/A	RP1	09/08/19 11:21
	Uncertainty	+/-18.6		+/-18.0						
QC1204359992 LCS										
Technetium-99	566			500	pCi/g		88.4	(75%-125%)		09/08/19 11:43
	Uncertainty			+/-29.2						
QC1204359990 MB										
Technetium-99			U	-0.872	pCi/g					09/08/19 11:00
	Uncertainty			+/-15.2						
Batch 1908285 ——										
QC1204359994 487768032 DUP										
Technetium-99	U	-9.16	U	-2.61	pCi/g	N/A		N/A	JJ3	09/08/19 11:41
	Uncertainty	+/-25.5		+/-21.8						
QC1204359995 LCS										
Technetium-99	394			389	pCi/g		98.9	(75%-125%)		09/08/19 11:57
	Uncertainty			+/-24.1						
QC1204359993 MB										
Technetium-99			U	2.91	pCi/g					09/08/19 11:24
	Uncertainty			+/-12.3						

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 487768 Page 2 of 3

Parmname		NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Ti	me
Rad Liquid Scintillat Batch 1908												
QC1204359997	487768057 DUP											
Technetium-99		U	4.02	U	-9.39	pCi/g	N/A		N/A	JJ3	09/08/19 1	5:30
		Uncertainty	+/-18.5		+/-18.0							
QC1204359998	LCS											
Technetium-99		503			519	pCi/g		103	(75%-125%)		09/08/19 1	15:47
		Uncertainty			+/-30.3							
QC1204359996 Technetium-99	MB			U	2.68	nCi/a					09/08/19 1	15.12
recnnenum-99		I I		U	+/-14.3	pCi/g					09/08/19 1	.3:13
		Uncertainty			+/-14.3							
Batch 1912	2084 ———											
QC1204369419	LCS											
Technetium-99		854			881	pCi/L		103	(75%-125%)	JJ3	09/08/19 ()4:34
		Uncertainty			+/-48.2							
QC1204369420	LCSD											
Technetium-99		854			861	pCi/L	2.24	101	(0%-20%)		09/08/19 ()4:55
		Uncertainty			+/-46.7							
QC1204369418	MB											
Technetium-99				U	6.72	pCi/L					09/08/19 ()4:13
		Uncertainty			+/-28.4							

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

- ** Analyte is a Tracer compound
- < Result is less than value reported
- > Result is greater than value reported
- BD Results are either below the MDC or tracer recovery is low
- FA Failed analysis.
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- M M if above MDC and less than LLD
- M REMP Result > MDC/CL and < RDL
- N/A RPD or %Recovery limits do not apply.

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Page 3 of 3

Parmname NOM Sample Qual QC Units RPD% REC% Range Anlst Date Time

N1 See case narrative

Workorder:

- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Q One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
- R Sample results are rejected

487768

- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- UJ Gamma Spectroscopy--Uncertain identification
- UL Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y Other specific qualifiers were required to properly define the results. Consult case narrative.
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable. ^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Radiochemistry Technical Case Narrative Westinghouse Electric Co, LLC SDG #: 487768

Product: Liquid Scint Tc99, Soil

Analytical Method: DOE EML HASL-300, Tc-02-RC Modified

Analytical Procedure: GL-RAD-A-059 REV# 5

Analytical Batch: 1908282

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
487768001	SS-13 (0-1)
487768002	SS-13 (1-3)
487768003	SS-13 (3-5)
487768004	SS-13 (5-7)
487768005	SS-13-DUP (5-7)
487768006	SS-11 (0-1)
487768007	SS-11 (1-3)
487768008	SS-11 (3-5)
487768009	SS-11 (5-7)
487768010	SS-12 (0-1)
487768011	SS-12 (1-3)
487768012	SS-12 (3-5)
487768013	SS-12 (5-7)
487768014	SS-14 (0-1)
487768015	SS-14 (1-3)
487768016	SS-14 (3-5)
1204359987	Method Blank (MB)
1204359988	487768010(SS-12 (0-1)) Sample Duplicate (DUP)
1204359989	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Liquid Scint Tc99, Soil

Analytical Method: DOE EML HASL-300, Tc-02-RC Modified

Analytical Procedure: GL-RAD-A-059 REV# 5

Analytical Batch: 1908284

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID# Client Sample Identification

```
SS-14 (5-7)
487768017
487768018
                       SS-14-DUP (5-7)
487768019
                       SS-10 (0-1)
487768020
                       SS-10 (1-3)
                       SS-10 (3-5)
487768021
487768022
                       SS-10 (5-7)
                       SS-8 (0-1)
487768023
487768024
                       SS-8 (1-3)
                       SS-8 (3-5)
487768025
487768026
                       SS-8 (5-7)
487768027
                       SS-7 (0-1)
                       SS-7 (1-3)
487768028
487768029
                       SS-7 (3-5)
                       SS-7 (5-7)
487768030
487768031
                       SS-9 (0-1)
                       Method Blank (MB)
1204359990
1204359991
                       487768017(SS-14 (5-7)) Sample Duplicate (DUP)
1204359992
                       Laboratory Control Sample (LCS)
```

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Liquid Scint Tc99, Soil

Analytical Method: DOE EML HASL-300, Tc-02-RC Modified

Analytical Procedure: GL-RAD-A-059 REV# 5

Analytical Batch: 1908285

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
487768032	SS-9 (1-3)
487768033	SS-9 (3-5)
487768034	SS-9 (5-7)
487768035	SS-3 (0-1)
487768036	SS-3 (1-3)
487768037	SS-3 (3-5)
487768038	SS-3 (5-7)
487768039	SS-3-DUP (5-7)
487768040	SS-4 (0-1)
487768041	SS-4 (1-3)
487768042	SS-4 (3-5)
487768043	SS-4 (5-7)
487768044	SS-6 (0-1)
487768045	SS-6 (1-3)
487768046	SS-6 (3-5)
1204359993	Method Blank (MB)
1204359994	487768032(SS-9 (1-3)) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Liquid Scint Tc99, Soil

Analytical Method: DOE EML HASL-300, Tc-02-RC Modified

Analytical Procedure: GL-RAD-A-059 REV# 5

Analytical Batch: 1908287

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
487768047	SS-6 (5-7)
487768048	SS-5 (0-1)
487768049	SS-5 (1-3)
487768050	SS-5 (3-5)
487768051	SS-5 (5-7)
487768052	SP-1
487768053	SP-2
487768054	SS-2 (0-1)
487768055	SS-2 (1-3)
487768056	SS-2 (3-5)
487768057	SS-2 (5-7)
487768058	SS-1 (0-1)
487768059	SS-1 (1-3)
487768060	SS-1 (3-5)
487768061	SS-1 (5-7)
1204359996	Method Blank (MB)
1204359997	487768057(SS-2 (5-7)) Sample Duplicate (DUP)
1204359998	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Liquid Scint Tc99, Liquid

Analytical Method: DOE EML HASL-300, Tc-02-RC Modified

Analytical Procedure: GL-RAD-A-059 REV# 5

Analytical Batch: 1912084

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
487768062	EB-01-081519
1204369418	Method Blank (MB)

1204369419 Laboratory Control Sample (LCS)

1204369420 Laboratory Control Sample Duplicate (LCSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Project # GOND NOT OF			GEL Laboratories, LLC
	gelcom Chemistry Radiochemi	Chemistry I Radiochemistry I Radiobioassay I Specialty Analytics	Z040 Savage Road Charleston, SC 29407
COC Number (1).	Chain of Custody and A	Custody and Analytical Request	Phone: (843) 556-8171
CONSENTA	GEL Work Order Number: GEL Project Manager:	lanager:	Fax: (843) 766-1178 487768
Client Name: Westinghouse	Phone # 803.647.1920	Sample Analysis Requested (5) (Fill i	(Fill in the number of containers for each test)
Project/Site Name:	Fax #		Preservative Type (6)
Address: 5801 Bluff Road, Hopkins, SC 29061		sample be considered:	
Collected By: Jill Disting: Send	Send Results To: joynerdp@westinghouse.com	r.qs bbjy	Comments Note: extra sample is
Sample ID * For composites - indicate start and stop date time	*Date Collected Collected Oclected (Military) QC Freld Sample (mm-dd-yy) (hhmm) Code (2) Filtered (9) Matrix (4)	Radioactive yes, please suj isotopic into.) possible Haza Total number	required for sample specific QC
55-13 (0-1)	08-12-19 1135 C N SO	3	
\$5-13 (1-3)	3.17.69 (210 C ~ 50	(×	
55-13 (3-5)	08-17-19 1230 C N 30	*	
55-13 (5-7)	08-12-19 1250 C N 30	`````\	
SS-18-10-6 (5:11)	08-17-19 1250 FO N SO	**	
(7.5) 17.55	08 12 0 0 0 0 0 0 0	3 2	
55-11 (1.3)	08 10 7 500 101-0-80	\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.	
55-11 (5-5)	28-17-19 520 6 7 7 3	*	
5.5	7 7 0	4	
55:12 (0-0)	08-11-19 1600 6 1/ 50	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
,	Chain of Custody Signatures	TAT Requested: Normal: X Rush:	Specify: (Subject to Surcharge)
Refinquished By (Signed) Date Time	Received by (signed) Date	Fax Results: [] Yes [WNo [2.5-1+0
141168-19 21519 3	305 - 200 300 1305	Select Deliverable: [] C of A [] QC Summary	[] level 1 [] Level 2 [] Level 3 [] Level 4
	$\frac{2}{\zeta}$	Additional Remarks:	
3 For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)		Sample Collection Time Zone: [X Eastern [] Pacific [] Centra	ct? [] Yes [] No Cooler Temp: CC [] Central [] Mountain [] Other:
) Chain of Custody Number = Client Determined) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Dupli	trix Spike Sample, MSD = Matrix Spi	e Duplicate Sample, $G=Grab$, $C=Composite$	
) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Water, W=Water, MI=Mise Liquid, SO	.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Water, WH=Mise Liquid, SO—Soil, SD=Sediment, SL=Studge, SS=Solid Waste, O=Oil, F=Filter, P=Wine, 11=1 frine, F=Ex-rol, N=N-rool	ment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wine 11=1 inne	E-Foral NaMarcal
.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and m.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA	Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. <i>8260B - 3, 6010B/7470A - 1</i>). Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thios	unber of containers provided for each (i.e. 8260B - 3, 6010B 7470A - 1). = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosultate, If no preservative is added = leave field blank	
KNOWN OR POSSIBLE HAZARDS Char	Characteristic Hazards Listed Waste	Other	Please provide any additional details
ICRA Metals See Arsenic Hg= Mercury RE = Barium Se= Selenium	FL = Flammable/Ignitable LW= Listed Waste CO = Corrosive (F, K, P and U-listed wastes.) RE = Reactive Waste code(s):	OT= Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Doscrintion:	
nium Ag= Silver nium MR= Misc. RCRA metals	TSCA Regulated PCB = Polychlorinated		
	biphenyls		
			1972 CONTO CONTO CONTO DE CONT

rage.			**		GEL Laboratories, LLC
70 70 10 10 10 10 10 10 10 10 10 10 10 10 10			Jries II.c		2040 Savage Road
GEL Quote #:			iístry i Radiobioassay	l Specialty Analytics	Charleston, SC 29407
COC Number VII	CEI Work Order Munker.	Chain of Custody and Analytical Request	Analytical Ked	uest	Phone: (843) 556-8171
Client Name: Westinghouse		OEL Froject Munager: Phone # 803.647.1920		Commis Analysis Dogunded (5) (E311 :	Fax: (843) 766-1178
Project/Site Name:	Fax#		Should thic	TIIIT) marganhay sichmic andum	
Address: 5801 Bluff Road, Hopkins, SC 29061			sample be	Siners	- rieservance Type (o)
Collected By: 1111 72 251	Send Results To: joynerdp@westinghouse.com	estinghouse.com	Ajdo	P/P	Comments Note: extra sample is
Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (Code (2) Filed Sample (thum) Code (2) Filetred (3) Matrix (4)	Radioactive yes, please sur isotopic info.) (7) Known or possible Haza	rədmun latoT	required for sample specific QC
	7 6-10-19			*	
-83 GS421	08-12-19 (1	160000 N SO		× -	
7.7	5	1		*	
(0-0)	0 - 1 - 20	640 6 2 50			
(1.0)	<u> </u>	3			
7				- X	
		59 6 / 2 gs		3	
デック・ア・ソ		0910 6 A1 50		-	
16 22-77		09:0 50 250		-	
	in of Custod		TA	TAT Requested: Normal: Kush:	Specify: (Subject to Surcharge)
	Time Received by (signed)	Date Tim	Fax Resu	Fax Results: [] Yes [PNo G:	415-103
A STORY	K Part N	2021 5115116	Select De	Select Deliverable: [] C of A [] QC Summary	[] level i [] Level 2 [] Level 3 [] Level 4
	2		Addition	Additional Remarks:	1
shipping and delivery details, see	5 Solution Standing and delivery details, see Sample Receipt & Review form (SRR)		For Lab	For Lab Receiving Use Only: Custody Seal Intact? [] Yes Sample Collection Time Zone: [WEstern [] Pacific [] Contest	12 [] Yes [] No Cooler Temp: [°C 1.0
1.) Chain of Custody Number = Client Determined 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = F	1.) Chain of Custody Number = Client Determined 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite	= Matrix Spike Sample, MSD = Matrix Spil	ce Duplicate Sample, G		T AVOITING IN
For liquid matrices, indicate with a - Y - fc : DW =Drinking Water, GW =Groundwater, :	 Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Mise Liquid, SO 	sample was not field filtered. Vater, ML=Misc Liquid, SO=Soil, SD=Sec	liment, SL=Sludge, SS=	3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. 1.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Water, W=Water, ML=Mise Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Soild Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal	P=Fecal, N=Nasal
sis Requested: Analytical method requestec 'ype; HA = Hydrochloric Acid, NI = Nitric +	 Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided 1. Preservative Type: HA = Hydrochloric Acid, IN = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorb 	ntainers provided for each (i.e. <i>8260B</i> - 3 , <i>6010B</i> 7470A - 1). Acid, <i>AA</i> = Ascorbic Acid, <i>HX</i> = Hexane, <i>ST</i> = Sodium Thios	6010B7470A - 1). ST = Sodium Thiosulfat	5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1). 5.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank	
1) KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	Other		Please provide any additional details
RCRA Metals As = Arsenic Hg= Mercury Ba = Barium Se= Selenium	FL = Flammable/Ignitable CO = Corrosive RE = Reactive	LW= Listed Waste (F.K.P and U-listed wastes.) Waste code(s):	OT= Other / (i.e.: High/lo misc. health Description:	OT=Other / Unknown (i.e.: Highlow pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:	below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)
Cd = Cadmium Ag= Silver Cr = Chromium MR= Misc. RCRA metals Db = 1 and	TSCA Regulated PCB = Polychlorinated				
	biphenyls				

GEL Laboratories, LLC 2040 Savage Road	Charleston, SC 29407	Fax: (843) 766-1178	(Fill in the number of containers for each test)	< Preservative Type (6)		Comments Note: extra sample is	required for sample specific QC											Specify: (Subject to Surcharge)				? [] Yes [] No Cooler Temp: °C	[] Central [] Mountain [] Other:		Fecal, N=Nasal		Plane o manife can additional Jeants				
	Chemistry i Radiochemistry i Radiobioassay i Speciatry Analytics Custody and Analytical Request		Sample Analysis Requested (5)	\$.	sample be considered:	sp.i.	Ves, please info.) (7) Known or possible Haza		2	~~~		* -	*	2		+	2	TAT Requested: Normat: Kush:	Fax Results: 1 Yes 14 No] C of A [] QC Summary	Additional Remarks:	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	Sumple Collection Time Zone: [] Pacific [] Central [] Mountain [] Other:	Ouplicate Sample, $G=Grab$, $C=Composite$	ent. SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=	(08/7470A-1). = Sodium Thiseultan Pf. o messessiins is addal - 1 - 1 - 1111-1	Other	OT= Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other	misc, health hazards, etc.) Description:		
GEL Laboratories Lc	Chain of Custody and An	1 1	Phone # 803.647.1920	Fax#		Send Results To: joynerdp@westinghouse.com	*Time *Date Collected Collected (Military) (Military) (Code (3) Filete Sample (mm-dd-yy) (thmm) Code (3) Filetered (3) Matrix (4)	08 70 7	28-13-19 1015 C N SO	28-13-19 1035 6 N Su		5	08-13-19 1150 C N SO	28-13-19 12.10 6 11 50	1130 0	1320 C N S	ママッジ		Received by (signed) Date Time	1 2 8/15/18 1308	2			2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite	3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. 4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waster, W=Water, W=Water, W=Waster, W=W=Waster, W=Waster, W=W=W=W=W=W=W=W=W=W=W=W=W=W=W=W=W=W=W=	 Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1). Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide SA = Sulfaric Acid, AA = According Acid, HX = Havane ST = Seedium Thissolitas is not at a factor of the second state. 	Characteristic Hazards Listed Waste	Tgnitable		TSCA Regulated PCB = Polychlorinated	biphenyis
Page: 3 of Project # 605(GC 4 d	COC Number (1).	Ln 1 ENV-CONSENTA	Client Name: Westinghouse	Project/Site Name:	Address: 5801 Bluff Road, Hopkins, SC 29061	Collected By: Send Re	Sample ID * For composites - indicate start and stop date time	35-(0 (0-1)	15-10 (1-3)	(5-6) 01.50	(F-S) 01-55	\$5.8 (4.1)	(5-1) 8.55	(3.5) 8.55	(X.X.X)		X-7 (1.3)	,	Relinquished By (Signed) Date Time	MIDE 24 81519 1305		3	 Sumpre Suppring and actively details, see Sample Receipt & Review form (SRK). Chain of Custody Number = Client Determined. 	.) QC Codes: $N = Normal Sample$, $TB = Trip Blank$, $FD = Field Duplicate$,	3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. 4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Mise Liquid, SO	 Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide SA = Sulfuric Acid, AA = Ascort 	7) KNOWN OR POSSIBLE HAZARDS Characte	8	Hg= Mercury Se= Sclenium	nium Ag= Silver mium MR= Misc. RCRA metals	

Page: * of		***************************************		GEL Laboratories 11 C	<u> </u>
Project # COSQ NO LA	GIL Laborat	aboratories LLC		2040 Savage Road	
CED Autore 7.	gel.com Chemistry Radioche	Chemistry Radiochemistry Radiobioassay Specialty Analytics	Analytics	Charleston, SC 29407	
2778461L	GEL Work Order Number: GEL Project Manager:	Manager:		Phone: (843) 556-8171	
	Phone # 803.647.19		Sample Analysis Requested (5) (Fill in	(Fill in the number of containers for each test)	iers for each tact!
Project/Site Name:	Fax#	Should this			C. Precargativa Tyma (6)
Address: 5801 Bluff Road, Hopkins, SC 29061					- Hosel valive 19pe (0)
Collected By: Will Dennis-King Send	Send Results To: joynerdp@westinghouse.com	spa ol contr			Comments Note: extra comple to
Sample ID * For composites - indicate start and stop date time	*Date Collected Collected Collected (Military) QC Field Sample (mm-dd-yy) (hhmm) Code ^(D) Filtered ^(D) Matrix ^(d)	Radioactive Radioactive sociopic info.) 7) Known or possible Haza Total number			required for sample specific QC
11.72 (3.5)	(1) YOF 0				
55-14 (5:4)	1 / V V V V V V V V V V				
()-0) 6-55	\ \ \ \ \ \				
35-9 (1.3)					
55.9. 25 9.31	OK-15-191505 MX 21 3 3				
15-10 GM-P-53	1505 Las 1505 Las	-			
55.9 (3.5)	> 6	* = = = = = = = = =			
55.9 (5.4)	13-19/15	-			
55-3 (0-1)					
56-5 (1-3)	10900 C 100				
	Chain of Custody Signatures	TAT Requested:	ted: Normal: Kush:	Specify:	(Subject to Surcharge)
Relinquished By (Signed) Date Time	te /	Fax Results: [] Yes	(es [X] No	8,421.61	0
11 81519 13	051 4 8115119 1305	Select Deliverable	Select Deliverable: [] C of A [] QC Summary	1 1	2 [] Level 3 [] Level 4
	2	Additional Remarks:	ks;		
5 For sommle shinning and delivery details are County Desired Desired Control	Dooing to Desire Company	For Lab Receiving	tody Seal Intac	-	Cooler Temp: C
Chain of Custody Number = Client Determined	weedpra neweryjonn (onthe)	Sampre Concention rime Lone. Pressiem	asiem [] Pacinic	Central Mou	[] Mountain [] Other.
2.) AC. Codes: N = Normal Sample, 1B = 1 rip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD 5.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.	.) QC Codes. N = Normal Sample, IB = 1rp Blank, FD = Frield Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite .) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.	pike Duplicate Sample, G = Grab, C :	= Composite		
 Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Sample Analysis Requested: Analytical method requested (i.e. 8260E 	.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Fitter, P=Wipe, U=Urine, F=Fecal, N=Nasal.) Sample Analysis Requested: Analysis an method requested (i.e. 82608, 60108/7470A) and number of containers provided for each (i.e. 82608 - 3, 60108/7470A - 1).	ediment, SL=Sludge, SS=Solid Wast 3, 6010B/7470A - 1).	e, O=Oil, F=Filter, P=Wipe, U=Urine, F	=Fecal, N≈Nasal	
5.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = 1.). Preservative Type: Ha = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank SKNOWN AD BOSCHOLE HAZABORE	, ST = Sodium Thiosulfate, If no pres	servative is added = leave field blank		
	Characteristic Hazards Listed Waste RI = Flammahle/Ignifable I W-1 intent Worth	Other		Please pro	Please provide any additional details
S		OI = Omer / Unknown (i.e.: High/low p.H. asb	O1= Other / Unknown (i.e.: High/low pH. askestos_beryllium_trritants_other		below regarding handling and/or disposal
As = Arsenic Hg= Mercury RE = Ba = Barium Se= Selenium	RE = Reactive Waste code(s):	misc. health hazards, etc.)	ds, etc.)		of site collected from, odd matrices, etc.)
Ag= Silver	TSCA Regulated				
	= Polychlormated hinkonyle				
	upirenyis				

age: 5 of 7	GE Laborate	aboratories	GEL Laboratories, LLC 2040 Savage Road
JEL Quote #: COC Number (1):	get.com Chemistry Radiochemistry Radiobioassay Speci	Chemistry I Radiochemistry I Radiobioassay I Specialty Analytics Custody and Analytical Request	Charleston, SC 29407 Phone: (843) 556-8171
0778461 Las Carles	GEL Work Order Number: GEL Project Manager:	Manager:	Fax: (843) 766-1178
Client Name: Westinghouse	Phone # 803.647.1920	Sample Analysis Requested (5) (Fill	in the number of containers for each test)
roject/Site Name:	Fax#	Should this	< Preservative Type (6)
Address: 5801 Bluff Road, Hopkins, SC 29061		sample be considered:	
Collected By: Will Dennis-King Send Re	Send Results To: joynerdp@westinghouse.com	nos jo	Comments Note: extra sample is
Sample ID *For composites - indicate start and stop date/time	*Date Collected Collected Collected (Military) QC Field Sample (mm-dd-yy) (hhmm) Code ⁽²⁾ Filtered ⁽³⁾ Matrix ⁽⁴⁾	Radioactive ves, please sulfaces, please sulfaces (7) Known or possible thazs	required for sample specific QC
51-3 (3.5)	18.14.19 3915 C 1 50	* 1	
15-716-4	12.14.19 1920 C N SO		
54.3-DUP (5-7)		;; <u>`</u>	
(1-03 K-5)	10 10 20 50 C 10 50	ーー・イ・	
(4.1) 7.17	7 2 000 2	` ` `	
51.4 (4.5)	1000 6 10	1 1 1	
(r.k) r.12	10101 0101	4	
(1-0) 0)-55	S ~ 2 3211	` ' '	
(ドニ) ソンソ	7 0 0 0 1		
86-6 (3-5)	1155 C 2 S	-	
Chain of C		TAT Requested: Normal: X Rush:	: Specify: (Subject to Surcharge)
Relinquished By (Signed) Date Time	Received by (signed) Date Time	Fax Results: [] Yes [X] No [11 80300146
M. C. B. 12 815/19 305	5 1 7 8/15/19 1305	Select Deliverable: [] C of A [] QC Summary	
	2	Additional Remarks:	
	3	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	ntact? []Yes []No Cooler Temp: [°C
> For sample snipping and genvery details, see Sample Kecepp & Keview Jorm (SKK). Chain of Custody Number = Client Determined	есегрі « кечлем Jorm (экк.)	outpre concernor rime zone. In taxino 1 contra 1 woundain 1 Outp.	o Livenna Livonnan Livoner.
 QC Codes: N = Normal Sample, 1B = 1rtp Blank, FU = 1rteld Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSI. Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. 	QC Codes: N = Normal Sample, 1B = 1rtp Blank, FD = Freid Duplicate, EB = Equipment Blank, MS = Matrx Spike Sample, MSD = Matrx Spike Duplicate Sample, G = Grab, C = Composite Field Filtered. For flouid marriees, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.	pike Duplicate Sample, $G = \operatorname{Grab}_{r} C = \operatorname{Composite}$	
!) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Water, W=Water, W=Water, ML=Mise Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal	Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=S	sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=U	ne, F-Fecal, N=Nasal
(i.e. 82608 - 3, 6010874704 - 1). Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank	Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thion	3, 6010B/7470A - 1). e, ST = Sodium Thiosulfate, If no preservative is added = leave field bla	
() KNOWN OR POSSIBLE HAZARDS (Character of the Edit of	Characteristic Hazards Listed Waste	Other Other University	Please provide any additional details
[3]		O1 - Outer, Dimition! (i.e.: Highlow pH, asbestos, beryllium, irritants, other	octow regarding naming and or atsposar its, other concerns, (i.e.: Origin of sample(s), type
As = Arsenic Hg= Mercury RE = Reactive Ba = Barium Se= Selenium	eactive Waste code(s):	misc. health hazards, etc.) Description:	of site collected from, odd matrices, etc.)
Ag= Silver	TSCA Regulated		
	roycinoi mateu biphenyls		

0	+01000		GEL	GEL Laboratories, LLC	<i>r</i>)
Open #	Chemistry Badioths	Chemistry Badjochemistry Badjobioassay Specially Anatylics		Charleston SC 29407	
COC Number (1):	Chain of Custody and	of Custody and Analytical Request		Phone: (843) 556-8171	•
1778461 LA E ENU.	GEL Work Order Number: GEL Project Manager:	t Manager:		Fax: (843) 766-1178	
Client Name: Westinghouse Conferr A	Phone # 803.647.1920	Sample Analysis Requested ⁽⁵⁾	Requested (5) (Fill in the nu	(Fill in the number of containers for each test,	ers for each test)
Project/Site Name:	Fax #	۱.			< Preservative Type (6)
Address: 5801 Bluff Road, Hopkins, SC 29061		sample be considered:			
Collected By: Will Dennis-King Send R	Send Results To: joynerdp@westinghouse.com	r of con		F100-100-100-100-100-100-100-100-100-100	Comments Note: extra sample is
Sample ID * For composites - indicate start and stop date time	*Pate Collected Collected OC Golected (Military) OC Field Sample (hhmm) Code © Filtered © Matrax (4)	Radioactive yes, please sul sotopic info.) Dosaible Haza Total number			required for sample specific QC
(4.5) 7.51	9 1210 C 2				
(1-5) (2-5)	1.1449 1320 C	7 - 1			
(5,1) 5.51	54-14-19 (335 6 7/5	-			
55.5 (3.5)	02 / 2 3 346 01-41-80	-			
(T:5) 5.55	355 0 2 5	4			
1-05	3	-			
7.05	_	-4			
(1-0) (-15					
(とこ) いい	マンベーリ マブゲー				
(3.5) 7.55	5.55.0				
Chain of C	Chain of Custody Signatures	TAT Requested:	Normal: X Rush:	Specify:	(Subject to Surcharge)
Relinquished By (Signed) Date Time	Received by (signed) Date Time	Fax Results: [] Yes [[X] No (C	745 - 1 65	
1200-60-10 815119 1305	5 1 7 8 15 19 130S	Select Deliverable: [] C of A [] QC Summary	1	[] level 1 [] Level 2	2 [] Level 3 [] Level 4
	2 0	Additional Remarks:			
2	3	For Lab Receiving Use (For Lab Receiving Use Only: Custody Seal Intact? [] Yes	Yes [] No (Cooler Temp: °C
> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	teceipt & Review form (SRR.)	Sample Collection Time Zone: [Eastern [] Pacific [] Central [] Mountain [] Other:	Eastern []Pacific []	Central [] Mou	ntain [] Other:
 Chain of Custody Number = Chent Determined Coccess: N = Normal Sample. TB = Trip Blank. FD = Field Duplicate. EB = Equipment Blank. MS = Matrix Spike 		Sample. MSD = Matrix Spike Duplicate Sample. G = Grab. C = Composite	site		
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered	nple was field filtered or - N - for sample was not field filtered.				
1) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal). Sample Analysis Requested: Analytical method requested (i.e. 82608, 60108/7470A) and number of containers provided for each (i.e. 8260B - 3, 60108/7470A - 1).	Matrix Codes: DW =Drinking Water, GW =Groundwater, SW =Surface Water, WW =Waste Water, W =Water, ML =Misc Liquid, SO =Soil, SD =Sediment, SL =Sludge Sample Analysis Requested: Analytical method requested (i.e. 8260B , 6010B /7470A) and number of containers provided for each (i.e. <i>8260B</i> - 3, <i>6010B</i> /7470A - 1)	-Sediment, SL=Sludge, SS=Solid Waste, O=Oil - 3, 6010B/7470A - 1).	l, F=Filter, P=Wipe, U=Urine, F=Feca	i, N≕Nasal	
5) Preservative Type: $\mathbf{H}\mathbf{A}=\mathbf{H}\mathbf{y}$ drochloric Acid, $\mathbf{N}\mathbf{I}=\mathbf{N}$ itric Acid, $\mathbf{S}\mathbf{H}=\mathbf{S}\mathbf{c}$	= Sulfuric	ne, $\mathbf{ST}=\mathbf{Sodium}$ Thiosulfate, If no preservative	: is added = leave field blank		
7) KNOWN OR POSSIBLE HAZARDS Charac FL = FI	Characteristic Hazards Listed Waste FL = Flammable/Ignitable LW= Listed Waste	OT= Other / Unknown		Please pro below rega	Please provide any additional details below regarding handling andor disposal
RCRA Metals CO = C		(i.e.: High/low pH, asbes	(i.e.: High/low pH, asbestos, beryllium, irritants, other	concerns.	concerns. (i.e.: Origin of sample(s), type
Se= Selenium	Washer Conte(s):	misc. neaun nazaras, etc.) Description: —		of site colli	of site collected from, odd matrices, etc.)
Cd = Cadmium $Ag = Silver$ $TSCA I$ $Cr = Chromium$ $MR = Misc. RCRA metals$ $PCB = I$	TSCA Regulated PCB = Polychlorinated				
	biphenyls				
				<u> </u>	

Page: of				-					<u> </u>	EL Labor	GEL Laboratories, LLC	Ų		
Project # GONOAGAG	5		<u>abora.</u>	aboratories uc	\mathcal{C}				20	2040 Savage Road	ge Road			
GEL Quote #:		7	emistry Radioch	Chemistry Radiochemistry Radiobioassay Specialty Analytics	oassay I Spe	cialty Analyl	ics		<u> </u>	narleston,	Charleston, SC 29407			
And the Control of th		Chain of C	ustody an	of Custody and Analytical Request	Kednes	<u></u>			<u></u>	ione: (84)	Phone: (843) 556-8171			
1/2/2/	L Work Order Number		GEL Project Manager:	t Manager:				22	Fa	к: (843)	Fax: (843) 766-1178			
Client Name: Westinghouse Confer	4	Phone # 803.647.1	17.1920		Samp	Sample Analysis Requested (5)	is Reque		ill in the	number	of contain	(Fill in the number of containers for each test)	test)	
Project/Site Name:	Fax#			Should this								< Pres	< Preservative Type (6)	
Address: 5801 Bluff Road, Hopkins, SC 29061				sample be considered:										
Collected By: Will Dennis-King Se	Send Results To: joynerdp@westinghouse.	nghouse.com	п		spar							Note:	Comments Note: extra sample is	
Sample ID * For composites - indicate start and stop date time	*Date Collected Collected (Military) e (mm-dd-yy) (hhmm)	OC Code (3)	Field Sample Filtered ⁽³⁾ Matrix ⁽⁴⁾	E & E & E & E & E & E & E & E & E & E &	own Mara or possible Haza Total number	-oT		· · · · · · · · · · · · · · · · · · ·		<i>-</i>		requir	required for sample specific QC	
7.5	300/ BI-NI-80		\ \ \ \			X								
55.7. MS (5.7)	091 61-1-80	J	3		energi (Caranta)	×								
1-82 OSM - 5 - 58	7) 08-14-19 1605	S. C.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0		X								
35-1 60-17	DX-15:19 0830	2	200	0		X						est (S		
(6.)	ā	5 6	5000			<u>'</u>								
55.1 (5-5)	1000	ام ام	50 V		-	*						e e e e e e e e e e e e e e e e e e e		
(P.G) >>	900") V	S S	_		~								
EB-01-081519	(40%		- >						I.	(9)	Π
		3)									1		Π
												Architecture (
	Chain of Custody Signatures				TATR	TAT Requested:	Normal:	7-1	Z Rush:	Specify:	-	(Subjec	(Subject to Surcharge)	
Relinquished By (Signed) Date Time	Received by (signed)	Date	Time	Fe	Fax Results: [] Yes	[] Yes	% [X]	W		0	الله الله			
1.01/21/2 1001/1/101	*55 N	18/18	7 (8) r	Sc	elect Delive	Select Deliverable: [] C of A [] QC Summary [] level 1	C of A] QC Sun	ımary [] level 1	[] Level 2	2 Level 3	13 [] Level 4	Ī
** **	2	•)	A	Additional Remarks;	emarks:						1	į.	
3	3			F	or Lab Rec	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	Only: C	ıstody Se	ıl Intact?	[] Yes		Cooler Temp:	J°C	
> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	ole Receipt & Review form (SRR.)			Sample Collection Time Zone: Eastern Pacific Central	Tection Til	ne Zone.	M Easter		cific	Central	136164659	[] Mountain [] Other:	Other:	
1.) Cutati of Custody Number = Citett Deformined 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite	uplicate, $\mathbf{E}\mathbf{B}=Equipment$ Blank, $\mathbf{M}\mathbf{S}=Mz$	atrix Spike Samp	ile, MSD = Matrix	Spike Duplicate S	ample, G = G	rab, C = Com	posite							
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not	he sample was field filtered or - N - for sam	ple was not field	field filtered,											
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, WL=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Soild Waste, O=Oil, F=Filter, P=Wipc, U=Urine, F=Fecal, N=Nasal	urface Water, WW=Waste Water, W=Wate	r, ML=Misc Lic	luid, SO=Soil, SD	Sediment, SL=Slı	ıdge, SS=Soli	d Waste, O=(Jil, F≃Filter,	P=Wipe, U	-Urine, F=F	ecal, N=Nas	Įė,			
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1). 6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank	260B, 6010B/7470A) and number of contai H = Sodium Hydroxide, SA = Sulfuric Acid	ners provided fo l, AA = Ascorbic	r each (i.e. <i>8260B</i> : Acid, HX = Hexe	-3, 6010B/7470A ne, ST = Sodium]	- 1). Thiosulfate, If	no preservati	ve is added =	leave field	blank					
7) KNOWN OR POSSIBLE HAZARDS Ch	Characteristic Hazards Lis	Listed Waste			Other		h				Please pro	wide any ada	Please provide any additional details	
RCRA Metals CC		LW = Listed waste (F K P and U-listed wostes)	iste sted wastes)	5	1 = Otiner /	O1= Other / Onknown (i.e. High/lown H. achaetoe, ham/linm: meitants, other	setne ham	Hirms inc	tomes atte		below reg	irding handl	below regarding handling and/or disposal	78
Hg= Mercury		Waste code(s):		W.	sc. health	misc health hazards, etc.)	(C.)	filmin)	dento, com		of site coll	ected from, o	concerns, t.e. Origin of sample(s), type of site collected from, odd matrices, etc.)	
	OCA Damilatad			ā 	Description:									
MR= Misc RCRA metals	PCB = Polychlorinated			1						1				
Pb = Lcad	biphenyls			1 1						ı				
														Π

SAMPLE RECEIPT & REVIEW FORM

Clic	nt: WNUC			SDG	STARVCOCAWork Order: 487768
Rec	cived By: SB	7.3	- 1		e Received: 8/15/19
	Carrier and Tracking Number	v v Mari			Circle Applicable: FedEx Enpress FedEx Ground UPS Field Services Courier Other
Sus	pected Hazard Information	Yes	No	+11.1	Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
\vdash		+	-	1	
A)S	hipped as a DOT Hazardous?	_	8000	เเบ	ard Class Shipped: N2910, Is the Radioactive Shipment Survey Compliant? YesNo
B)	Did the client designate the samples are to be sived as radioactive?	1	/	CO	C notation or radioactive stickers on containers equal client designation.
	Did the RSO classify the samples as loactive?		/	Ma: Cla	ximum Net Counts Observed* (Observed Counts - Area Background Counts):CPM / mR/Hr assified as: Rad 1 Rad 2 Rad 3
<u>D</u>	Did the client designate samples are hazardous	2	/		C notation or hazard labels on containers equal client designation.
E)	Did the RSO identify possible hazards?		_	PCI	O or E is yes, select Hazards below. B's Flammable Foreign Soil RCRA Asbestos Beryllium Other:
_	Sample Receipt Criteria	Yes	ž	S	
I	Shipping containers received intact and scaled?	-			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	/			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	2			Preservation Method: Wet lee lee Packs Dry ice None Other. *all temperatures are recorded in Celsius TEMP:
4	Daily cleck performed and passed on IR temperature gun?	/			Temperature Device Serial #:
5	Sample containers intact and scaled?				Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	/	المتحدد	Ī	Sample ID's and Containers Affected:
7	Do any samples require Volatile Analysis?		1000		If Preservation added, Lot#: If Yes, are Encores or Soil Kits present for solids? Yes No NA (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes No NA (If unknown, select No) Are liquid VOA vials free of headspace? Yes No NA Sample ID's and containers affected:
8	Samples received within holding time?				1D's and tests affected:
9	Sample ID's on COC match ID's on bottles?				ID's and containers affected:
10	Date & time on COC match date & time on bottles?	1			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
1	Number of containers received match number indicated on COC?	/			Circle Applicable: No container count on COC Other (describe)
12	[GEL provided?	1			
13	COC form is properly signed in relimquished/received sections?	/			Circle Applicable: Not relinquished Other (describe)
Co	numents (Use Continuation Form if needed):		. ALT A	•	_

M (or PMA) review: Initials TMC Date 8 16 19 Page 1 of 1

List of current GEL Certifications as of 13 September 2019

State	Certification
Alaska	17-018
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122020-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019–013
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-19-15
Utah NELAP	SC000122019-28
Vermont	VT87156
Virginia NELAP	460202
Washington	C780