# Appendix Q Soil Analytical Results











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
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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

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# **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

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# **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

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# **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
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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

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# **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
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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

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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

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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
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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

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# **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
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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
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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
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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
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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

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# **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
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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
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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

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# **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
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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

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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
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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

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# **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

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# **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
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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

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# **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
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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

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# **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
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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

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# **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
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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

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# **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
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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
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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

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# **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

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# **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
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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

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-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 Me	ethod
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Rad Liquid Scintillation Analysis

Liquid Scint Tc99, Soil "As Received"

Technetium-99 0.572 +/-24.6 43.0 U 50.0 pCi/g JJ3 09/08/19 0732 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" 93.3

#### **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

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-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
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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
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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

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# **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
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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

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# **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
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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

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# **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
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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
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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

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### **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

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# **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
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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

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# **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

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# **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
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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

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# **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
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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

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# **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

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# **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

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# **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
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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

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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
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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

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# **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

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### **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
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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

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# **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

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 (0-1) Sample ID: 487768054

Matrix: Solid

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

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

Liquid Scint Tc99, Soil "As Received"

Technetium-99 -2.91 +/-24.0 42.1 50.0 U pCi/g JJ3 09/08/19 1300 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" 96.4

### **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-2 (1-3) Sample ID: 487768055

Matrix: Solid

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

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

Liquid Scint Tc99, Soil "As Received"

Technetium-99 9.60 U +/-19.733.7 50.0 pCi/g JJ3 09/08/19 1316 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

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
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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

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# **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

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# **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

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# **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

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# **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

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# **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

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# **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 Scintillation Analysis									
I' '10' (TE 00 I' '14A D. ' 14									

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

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# **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						

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# **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.

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### **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).

<b>GEL Sample ID#</b>	<b>Client Sample Identification</b>
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#	<b>Client Sample Identification</b>
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).

<b>GEL Sample ID#</b>	<b>Client Sample Identification</b>
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.

				GE	GEL Laboratories, LLC	
GEI Oude #:					2040 Savage Road	
COC Number (1):		Chain of Custody and A	Cifernistry   Madiochemistry   Madiobloassay   Specialty Analytics   Custody and Analytical Request		Charleston, SC 29407 Phone: (843) 556-8171	
PO# 4500778461 Ln I ENV-CONSENTA	GEL Work Order Number:	GEL Project Manager:	lanager:	Fax	Fax: (843) 766-1178 487768	
Client Name: Westinghouse	Р	Phone # 803.647.1920	Sample Analysis Requested (5)	Requested (5) (Fill in the r	(Fill in the number of containers for each test)	T
Project/Site Name:	Ë	Fax#	Should this s		< Preservative Type (6)	T
Address: 5801 Bluff Road, Hopkins, SC 29061			9050895			
Collected By: Lill Donis K:	Send Results To: joynerdp@westinghouse.com	westinghouse.com	pply )		Comments Note: extra sample is	S
Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (Military) Code (3) Filerced (9) Matrix (4)	Radioactive yes, please su isotopic into.) (7) Known or possible Hazi		required for sample specific QC	
(1-0) (1-1)	5.2-80	1135 C N 50	3			
(6-1) (1-3)	23.0.80	200 2 20	.*			
(3.8) (3.8)	D3: C1: 88	1230 C 2/ Sco	<b>.</b> .			
5-13 (5-7)	28-11-80	1250 C N 70	. y			
(F:S) 200-81-	20.52.52	150 FO N SO	-			
(1.8)   -5	21:55	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-			
( <del>( -1)</del> ( <del>1-2</del> )	28.5.20	000000000000000000000000000000000000000	• •			
(3.6) 11.5	2:53	520 6 2 80				
T.S.	28:0:82	540 6 7 50	3			
(1-0) 21-55	07.17.84	600 6 10 50	>			
	Chain of Custody Signatures		TAT Requested: 🗅	Normal: 大 Rush:	Specify: (Subject to Surcharge)	
Relinquished By (Signed) Date Time	Received by (signed)	Date	Fax Results: [ ] Yes [	W.No 6	2,52149	
100-1/2 8-18-24	305-	300 BX	Select Deliverable: [ ] C of A	[ ] QC Summary [	level 1 [ Level 2 [ ] Level 4	
	3		Additional Remarks:			1
3 > For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	3 mple Receipt & Review form (S		For Lab Receiving Use Only: Custody Seal Intact? [] Yes Sample Collection Time Zone: [X Eastern [] Pacific [] Central	For Lab Receiving Use Only: Custody Seal Intact? [] Yes ollection Time Zone: [X Eastern [] Pacific [] Centra	Yes     No Cooler Temp:   °C   Central	
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	l Duplicate, <b>EB</b> = Equipment Blank, MS	5 = Matrix Spike Sample, MSD = Matrix Spik	e Duplicate Sample, G ≃ Grab, C ≃ Compos	ite		
<ol> <li>Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.</li> <li>Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Water Water, W=Water, ML=Mise Liquid, SO</li> <li>Sample Analysis Requested - Analytical method requested (i.e. 8560R. 6010R7370A) and number of contained was neverted.</li> </ol>	s the sample was field filtered or - N - fo =Surface Water, WW=Waste Water, W- 8760R 6010R7470A and number of	r sample was not field filtered.  =Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, containers recovered for each (i.e. 97209 - 3.20109-21704 - 0.	eld filtered. Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal for analytic, 92609, 3, 60100-27004, 10	F=Filter, P=Wipe, U=Urine, F=Feca	l, N=Nasal	
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	, SH = Sodium Hydroxide, SA = Sulfurio	c Acid, AA = Ascorbic Acid, HX = Hexane, S	T = Sodium Thiosulfate, If no preservative i	s added = leave field blank		
7.) KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards FI = Flammahle/fonitable	Listed Waste	Other Other		Please provide any additional details	1
RCRA Metals  As = Arsenic Hg= Mercury  Ba = Barium Se= Selenium	CO = Corrosive RE = Reactive	(F.K.P and U-listed wastes.) Waste code(s):	(i.e.: High/low pH, asbeste misc. health hazards, etc.) Description:	or Curst Omerown (i.e.: Highlow pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)	below regarding nandling andor disposal concerns. (i.e.: Origin of sample(s), type of sile collected from, odd matrices, etc.)	sat e }
Cd = Cadmium Ag= Silver Cr = Chromium MR= Misc. RCRA metals	TSCA Regulated PCB = Polychlorinated					
	biphenyis					T
						-

rage.		; ;	GEL Laboratories, LLC
6050 864.Q		aboratories	2040 Savage Road
GEL Quote #:	gel.com   Chemistry   Radioct	Chemistry   Radiochemistry   Radiobioassay   Specialty Analytics	Charleston, SC 29407
COC Number "".	Chain of	Custody and Analytical Request	Phone: (843) 556-8171
PO# 4500778461 Ln I ENV-CONSENTA			Fax: (843) 766-1178
Client Name: Westinghouse	Phone # 803.647.1920	Sample Analysis Requested (5) (Fi	(Fill in the number of containers for each test)
Project/Site Name:	Fax#	Should this	< Preservative Type (6)
Address: 5801 Bluff Road, Hopkins, SC 29061		sample be considered:	
Collected By: 111 Dayston	Send Results To: joynerdp@westinghouse.com	Viqq i	Comments Note: extra sample is
Sample ID * For composites - indicate start and stop datestime	*Date Collected Collected (Military) QC Field Sample (Military) (Code (2) Filtered (3) Matrix (4)	Radioactive yes, please sul isotopic into.) (7) Known or possible Hazz	required for sample specific QC
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でいな ゴ・	0910 6 21	-	
からるころ	() Dx-13-19 0910 FD 1/50	+	
	Chain of Custody Signatures	TAT Requested: Normal: KRush:	. Specify: (Subject to Surcharge)
Relinquished By (Signed) Date Time	Received by (signed) Date	Fax Results: [ ] Yes [ PNo	Acc- ( 23
20-1/8-15-A	1305 7 8/15/19 (305	Select Deliverable: [ ] C of A [ ] QC Summary	7
		Additional Remarks:	
	[3	$\simeq$	tact? [ ] Yes [ ] No Cooler Temp:
> For sample snipping and delivery details, see Sa 1.) Chain of Custody Number = Client Determined 2. Of Codes N = Normal Sample TD = Trie Blad, FD = Trie	> For sample snipping and delivery details, see Sample Receipt & Review form (SRR.)  1.) Chain of Custody Number = Client Determined  2.) Of Codes N = Number Server, To Fig. 1 F	Sample Collection Time Zone:   Azastem     Pacific	c [ ] Central [ ] Mountain [ ] Other:
For liquid matrices, indicate with a - Y - for y	2) Seconds a require, 19 - 11th brank, 19 - 11th Duplicate, 10 - Equipment Brank, 103 - 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.	Spike Duplicate Sample, $\mathbf{G}=$ Grab, $\mathbf{C}=$ Composite	
DW=Untuking Water, GW=Uroundwater, SM sis Requested: Analytical method requested (i. ype: HA = Hydrochloric Acid, NI = Nitric Acid	1.) Mathy Codes: DW=Drinking Water, GW=Croundwater, SW=Surface Water, WW=Water, WM=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 S Bample Analysis Requested: Analytical method requested (i.e. 82608, 6010877470A) and number of containers provided for each (i.e. 82608 - 3, 601087470A - 1).  3. 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	.iquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=U, for each (i.e. 8260B - 3, 6010B7470A - 1).  ic Acid, HX = Hexanc, ST = Sodium Thiosulfate, If no preservative is added = leave field bla	.e. F=Fecal, N=Nasal
7) KNOWN OR POSSIBLE HAZARDS		Other	Please provide any additional details
RCRA Metals  As = Arsenic Hg= Mercury  Ba = 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.: Highlow pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Descrinton:	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	TSCA Regulated PCB = Polychlorinated		
	<b>biphetyls</b>		

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:	[ ] Central [ ] Mountain [ ] Other:		Fecal, N=Nasal		Plane o manife con additional Seatte				
	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	Cot 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 measuremine is add a letter of	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 C N Su		5	08-13-19 1150 C N SO	08-13-19 1210 C 1 Sa	1130 0	1320 C N S	ママッジ		Received by (signed) Date Time	1 1/2 1/208	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=	<ol> <li>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).</li> <li>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.</li> </ol>	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 (1.0)	(5-1) 8.55	(5.5) 8.55	(X.X (X.X)		X-7 (1.3)	,	Relinquished By (Signed) Date Time	MIDE 2/1 8/15/19 1305		3	<ol> <li>Sumpre Suppring and actively details, see Sample Receipt &amp; Review form (SRK).</li> <li>Chain of Custody Number = Client Determined</li> </ol>	.) 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	<ol> <li>Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided</li> <li>Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide SA = Sulfuric Acid, AA = Ascort</li> </ol>	7) KNOWN OR POSSIBLE HAZARDS   Characte	8	Hg= Mercury Se= Sclenium	nium Ag= Silver mium MR= Misc. RCRA metals	

Page: the of			GEL Lat	GEL Laboratories 11 C	
Project # 6050 46 44	GIL Labora	aboratories LLC	2040 Sav	2040 Savage Road	
CCC Number (D).	ger.com   Chemistry   Radio	Chemistry   Radiochemistry   Radiobioassay   Specialty Analytics	Charlest	Charleston, SC 29407	
2778461L	GEL Work Order Number: GEL Proje	GEL Project Manager:	Phone: (8	Phone: (843) 556-8171	
	Phone # 803.647.19	Sample Analysis Requested (5)	(Fill in t	Fax. (843) /60-11/8 he number of contains	ere for each teath
Project/Site Name:	Fax #	Should this			C. Precentifies Time (6)
Address: 5801 Bluff Road, Hopkins, SC 29061					- Heselvative Type (0)
Collected By: Will Dennis-King Ser	Send Results To: joynerdp@westinghouse.com	spa ol contr			Comments
Sample ID * For composites - indicate start and stop date time	*Time *Date Collected Collected (Military) (Military) (Oct Field (mm-dd-yy) (hhmm) Code (D) Fillered (D)	Sample Sample Sample Sadionctive Sadioncti			required for sample specific QC
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35-9 (1.3)					
55.9. MS 4.31	08-15-191505 M				
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55.9 (5.7)	13-19/15	-			
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56-5 (1-3)	10900 C 100				
	Chain of Custody Signatures	TAT Requested: Normal:	nal: Kush: Specify:	ify:	(Subject to Surcharge)
Relinquished By (Signed) Date Time	te /	Fax Results: [ ] Yes [ X] No	1. 2. 2	1 1 2	
148 16 2 19 13	3051 4/ 8115119 130	Select Deliverable: [ ] C of A [ ] QC Summary	Ξ	1 1	[ ] Level 3 [ ] Level 4
	2	Additional Remarks:			
5  For sommle shinning and delivery details are County Desired Desired Control	3	For Lab Receiving Use Only: Custody Seal Intact? [ ] Yes	tody Seal Intac	-	Cooler Temp: C
1) Chain of Custody Number = Client Determined	Carried and the control of the contr	Dampte Concernor rime zone.	wern j Fracinc   J Central		[ ] Mountain   ] Other.
<ol> <li>N.C. Coucas, 18 - Norman Sample, 18 = 11th Blank, FU = Freid Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD</li> <li>Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.</li> </ol>	) Seconds. 17 - Normal Sample, 18 = 11p 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.	x Spike Duplicate Sample, $G = Grab$ , $C = Composite$			
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Sur. 5.) Sample Analysis Requested: Analytical method requested (i.e. 826	.) 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. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).	D=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Fil 8 - 3, 6010B:7470A - 1).	lter, P=Wipe, U=Urine, F=Fecal, N=N	vasal	
5.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH 7.) KNOWN OR POSSIBLE HAZARDS (Cha	1.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SI = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank   Now OR POSSIBLE HAZARDS   Characteristic Hazards   Listed Waste	cane, ST = Sodium Thiosulfate, If no preservative is add	ed = leave field blank		
	_ ]。	OT=Other/Unknown		Please provi	Please provide any additional details below recording hondling and/or disposal
RCRA Metals CO: $As = Arsenic Hg = Mercury RE$	CO = Corrosive $(F.K.P \text{ and } U\text{-listed wastex})$ RE = Reactive Waste code(s):	(i.e.: High/low pH, asbestas, beryllium, irritants, other mice beatth because out	eryllium, irritants, other	concerns. (1	concerns. (i.e. Origin of sample(s), type
Se= Selenium	ſ	mist. neutiti nazuras, etc.)  Description:		of site collec	of site collected from, odd matrices, etc.)
Cr = Cadmium Ag= Silver Cr = Chromium MR= Misc. RCRA metals PCB	TSCA Regulated PCB = Polychlorinated				
	biphenyls				

age: 5 of 7	GE Laborate	aboratoriesuc	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 R.	Send Results To: joynerdp@westinghouse.com	nds	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) (shimm) Code (2) Filtered (d) Matrix (4)	Radioactive Yes, please suite, possible info.) Total number Total number	required for sample specific QC
51-3 (3.5)	18.14.19 3918 C 1 50	X	
15-516-4	08-14-19 0920 C N 50	1	
54.3-DUP (5-7)		;; \; \;	
(1-03 K.()	10 10 20 50 C 10 50	ーー・イン・	
(4.1) 7.17	7 2 000 2	` ` `	
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(r.k) r.12	10101 0101	+	
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86-6 (3-5)	1155 C 2 S	-	
Chain of C		TAT Requested: Normal: X Rush:	: Specify: (Subject to Surcharge)
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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.
<ol> <li>QC Codes: N = Normal Sample, 1B = 1rtp Blank, FU = 1rteld Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSI.</li> <li>Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.</li> </ol>	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, $G = \operatorname{Grab}_{\bullet} C = \operatorname{Composite}$	
!) 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) (Character)	Characteristic Hazards Listed Waste	Other Other Other University	Please provide any additional details
[3]		O1 - Outer, Dimition!  (i.e.: Highlow pH, asbestos, beryllium, irritants, other	octor regarding naming and a tisposatis, 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			GEL Laboratories, LLC	
Open #	Cal Com Chemistry I Badjoche	Chemistry   Badlochemistry   Badlochemis	Charleston SC 29407	
COC Number (1):	Chain of Custody and	officially intercontained and Analytical Request	Phone: (843) 556-8171	
1778461 LA E ENV.	GEL Work Order Number: GEL Project Manager:	:Manager:		
Client Name: Westinghouse Conferral	Phone # 803.647.1920	Sample Analysis Requested <sup>(5)</sup>	$sted\ ^{(5)}$ (Fill in the number of containers for each test)	t)
Project/Site Name:	Fax #	۱.		< Preservative Type (6)
Address: 5801 Bluff Road, Hopkins, SC 29061		sample be		
Collected By: Will Dennis-King Send R	Send Results To: joynerdp@westinghouse.com	r of con	Comn Note: extra	Comments Note: extra sample is
Sample ID * For composites - indicate start and stop date time	*Date Collected Collected OC Golden OC Field Sample (hhmm) Code © Fitered © Matrx (4)	Badioacilve yes, please sul rsotopic info.) Total number Total number	required fc	required for sample specific QC
(4.2) 3.31	9 1210 C 2			
(1-5) (3-5)	1.1449 1320 C	· ~ ·		
(5,1) 5.51	54.14.19 1315 C 1/50	-		
55.5 (3.5)	05/2/3/3/8/01/01/20			
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	シング しつ のかな!			
(3.5) 2.55	5.55	+-	-	-
Chain of C	Chain of Custody Signatures	TAT Requested: Normal:	: X Rush: Specify: (Subject to Surcharge)	Surcharge)
Relinquished By (Signed) Date Time	Received by (signed) Date   Time	Fax Results: [ ] Yes [ X] No	(Fig. 1) 443 ( b)	
1200-1-0-10 815/10 1305	51 7 8/5/19 (305	Select Deliverable: [ ] C of A [ ] QC Summary	[ ] level 1 [ ] Level 2 [ ] Level 3	[ ] Level 4
	2 0	Additional Remarks:		
2	3	For Lab Receiving Use Only: Custody Seal Intact? [ ] Yes	ustody Seal Intact? [ ] Yes [ ] No Cooler Temp:	J <sub>0</sub> 1
> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	eceipt & Review form (SRR.)	Sample Collection Time Zone: [   Easter	Sample Collection Time Zone: [] Eastern [] Pacific [] Central [] Mountain [] Other:	er.
<ol> <li>Chain of Custody Number = Chent Determined</li> <li>Coccess: N = Normal Sample. TB = Trip Blank. FD = Field Duplicate. EB = Equipment Blank. MS = Matrix Spike</li> </ol>		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	aple was field filtered or - N - for sample was not field filtered.			
<ol> <li>Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface</li> <li>Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6)</li> </ol>	.) 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: Analysical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).	Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, -3, 6010B:7470A - 1).	, P=Wipe, U=Urine, F=Fecal, N=Nasal	
5) Preservative Type: $\mathbf{H}\mathbf{A} = \mathbf{H}\mathbf{y}$ drochloric Acid, $\mathbf{N}\mathbf{I} = \mathbf{N}$ itric Acid, $\mathbf{S}\mathbf{H} = \mathbf{S}\mathbf{o}$	= Sulfuric	ne, ST = Sodium Thiosulfate, If no preservative is added $^{\circ}$	= leave field blank	
7) KNOWN OR POSSIBLE HAZARDS Charac FL = $\overline{\mathbb{R}}$	Characteristic Hazards Listed Waste  FL = Flammable/Ignitable LW= Listed Waste	OT=Other / Unknown	Please provide any additional details below regarding handling and/or disposal	onal details and/or disposal
RCRA Metals CO = C		(i.e.: High/low pH, asbestos, beryllium, irritants, other		sample(s), type
Se= Selenium	reactive reactive relative country.	misc. neaith nazards, etc.)  Description:	of site collected from, odd matrices, etc.)	matrices, etc.)
Cd = Cadmium $Ag = Silver$ $TSCA = Chromium$ $MR = Misc. RCRA metals$ $PCB = CHROMIUM$	TSCA Regulated PCB = Polychlorinated			
	biphenyls			

Page: of				-					<u>5</u>	EL Labor	GEL Laboratories, LLC	O	
Project # GONOAGAG	5		<u>abora.</u>	aboratories uc	$\mathcal{C}$				20	2040 Savage Road	e Road		
GEL Quote #:		7	emistry   Radioch	Chemistry   Radiochemistry   Radiobioassay   Specialty Analytics	oassay I Spe	cialty Analyl	ics		<u> </u>	narleston,	Charleston, SC 29407		
		Chain of C	ustody an	if Custody and Analytical Request	Kednes	ا پر			<u> </u>	one: (843	Phone: (843) 556-8171		
1/2/2/	L Work Order Number		GEL Project Manager:	t Manager:					Fa	x: (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)	st)
Project/Site Name:	Fax#			Should this								< Preser	< 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							Co Note: ex	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 <sup>(3)</sup> Matrix <sup>(4)</sup>	E & E & E & E & E & E & E & E & E & E &	own Mara or possible Haza Total number	-oT		·····				requirec	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							
(6.1)	ā	5 6	5000			<u>'</u>							
55-1 (5-5)	1000	ام ام	50 V		-	*						- Description	
(ア・ビ) ・・シン	900"	) V	S S	_		~							***************************************
EB-01-081519	(			40%		- >						I.	(%)
		3	)									}	
	Chain of Custody Signatures				TATR	TAT Requested:	Normal:	K Rush:	ush:	Specify:		(Subject t	(Subject to Surcharge)
Relinquished By (Signed) Date Time	Received by (signed)	Date	Time	Fe	Fax Results: [ ] Yes	[ ] Yes	%[X]	W		0	ر ا		
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 Sum	ımary [	] level 1	[ ] Level 2	2 [ ] Level 3	[ ] Level 4
** **	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 Sec	ıl Imtact?	[ ] Yes		Cooler Temp:	ے ا
> 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	_ [_] Pa	ciffc	Central	136164659	[ ] Mountain [ ] Other:	ier.
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, <b>G</b> = 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=(	Oil, F=Filter,	P=Wipe, U≏	-Urine, F=Fe	cal, N=Nas	Teg		
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, <b>HX</b> = Hexe	-3, 6010B/7470A ne, ST = Sodium ]	- 1). Thiosulfate, If	no preservati	ve is added =	: leave field l	olank				
7) KNOWN OR POSSIBLE HAZARDS Ch	Characteristic Hazards Lis	Listed Waste			Other		h				Please pro	Please provide any additional details	onal details
RCRA Metals CC		LW = Listed waste (F K P and U-listed wostes)	iste sted wastes )	<b>5</b>	1 = Otiner /	O1= Other / Onknown (i.e. High/lown H. achaetoe, ham/linm: meitants, other	setoe ham	Hirim free!	toute offer		below rega	rding handlin	below regarding handling and/or disposal
Hg= Mercury		Waste code(s):		W.	sc. health	misc health hazards, etc.)	(C.)		idans, curr		of site coll	t.e Origin of ected from, odd	of site collected from odd matrices, etc.)
	OCA Damilatad			ā 	Description:								
MR= Misc RCRA metals	PCB = Polychlorinated			1						ı			
Pb = Lcad	biphenyls			1 1						ı			
										- I			

#### 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	<del>v v Mari</del>			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.
$\vdash$		+	<del>-</del>	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 Trac Date 8 16 19 Page of

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



### **Report of Analysis**

**Westinghouse Electric Company** 

5801 Bluff Rd. Hopkins, SC 29061 Attention: Diana Joyner

Project Name: CVOC

Lot Number: WF01013

Date Completed:06/09/2021

06/10/2021 10:09 AM Approved and released by:

Garo Jag

Project Manager I: Blaire M. Gagne





The electronic signature above is the equivalent of a handwritten signature.

This report shall not be reproduced, except in its entirety, without the written approval of Pace Analytical Services, LLC.

#### PACE ANALYTICAL SERVICES, LLC

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

# Case Narrative Westinghouse Electric Company Lot Number: WF01013

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs or policies are qualified on the results page or discussed below.

Where applicable, all soil sample results (including LOQ and DL if requested) are corrected for dry weight unless flagged with a "W" qualifier.

If you have any questions regarding this report please contact the Pace Project Manager listed on the cover page.

#### **Volatile Organic Analysis- Method 8260D**

Matrix spike/matrix spike duplicate was not performed for batch 94841 due to insufficient volume. An LCS/LCSD was run instead.

## PACE ANALYTICAL SERVICES, LLC

## Sample Summary Westinghouse Electric Company

Lot Number: WF01013 Project Name: CVOC Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SS-17-3-4	Solid	05/29/2021 1005	06/01/2021
002	SS-17-7-8	Solid	05/29/2021 1015	06/01/2021
003	SS-18-2-3	Solid	05/29/2021 1030	06/01/2021
004	SS-18-7-8	Solid	05/29/2021 1040	06/01/2021
005	SS-19-6-7	Solid	05/29/2021 1050	06/01/2021
006	SS-19-7-8	Solid	05/29/2021 1100	06/01/2021
007	SS-21-1-2	Solid	05/29/2021 1115	06/01/2021
008	SS-21-7-8	Solid	05/29/2021 1125	06/01/2021
009	SS-20-7-8	Solid	05/29/2021 1135	06/01/2021
010	SS-20-1-2	Solid	05/29/2021 1145	06/01/2021
011	SS-22-6-7	Solid	05/29/2021 1215	06/01/2021
012	SS-22-7-8	Solid	05/29/2021 1225	06/01/2021
013	SS-22-7-8 DUP	Solid	05/29/2021 1225	06/01/2021
014	SS-23-6-7	Solid	05/29/2021 1240	06/01/2021
015	SS-23-7-8	Solid	05/29/2021 1250	06/01/2021
016	SS-24-3-4	Solid	05/29/2021 1300	06/01/2021
017	EB-01-052921	Aqueous	05/29/2021 1315	06/01/2021
018	SS-24-7-8	Solid	05/29/2021 1330	06/01/2021
019	SS-25-5-6	Solid	05/29/2021 1345	06/01/2021
020	SS-25-7-8	Solid	05/29/2021 1355	06/01/2021
021	SS-26-3-4	Solid	05/29/2021 1405	06/01/2021
022	SS-26-7-8	Solid	05/29/2021 1420	06/01/2021
023	SS-27-1-2	Solid	05/29/2021 1435	06/01/2021
024	SS-27-7-8	Solid	05/29/2021 1445	06/01/2021
025	SS-27-7-8 Dup	Solid	05/29/2021 1445	06/01/2021
026	SS-28-1-2	Solid	05/29/2021 1545	06/01/2021
027	SS-28-7-8	Solid	05/29/2021 1555	06/01/2021
028	SS-29-4-5	Solid	05/29/2021 1620	06/01/2021
029	SS-29-7-8	Solid	05/29/2021 1635	06/01/2021
030	TB-01-052921	Aqueous	05/29/2021 1020	06/01/2021
031	TB-02-052921	Aqueous	05/29/2021 1340	06/01/2021
032	EB-02-052921	Aqueous	05/29/2021 1555	06/01/2021

(32 samples)

## PACE ANALYTICAL SERVICES, LLC

## Detection Summary Westinghouse Electric Company

Lot Number: WF01013 Project Name: CVOC Project Number:

Sample	e Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
007	SS-21-1-2	Solid	Tetrachloroethene	8260D	5.8		ug/kg	12
010	SS-20-1-2	Solid	Tetrachloroethene	8260D	21		ug/kg	15
010	SS-20-1-2	Solid	Trichloroethene	8260D	17		ug/kg	15
023	SS-27-1-2	Solid	cis-1,2-Dichloroethene	8260D	11		ug/kg	28
023	SS-27-1-2	Solid	Trichloroethene	8260D	8.1		ug/kg	28
026	SS-28-1-2	Solid	Tetrachloroethene	8260D	9.3		ug/kg	31
026	SS-28-1-2	Solid	Trichloroethene	8260D	12		ug/kg	31

(7 detections)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-001

Matrix: Solid

Description: SS-17-3-4

Date Sampled: 05/29/2021 1005

% Solids: 92.0 06/02/2021 0028

Date Received: 06/01/2021

Project Name: **CVOC**Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/03/2021 1352 JM1		94223	5.43

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	5.0	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	5.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	5.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	5.0	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	5.0	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	5.0	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	5.0	ug/kg	1
	Run 1 Accept	ance				

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		102	47-138
1,2-Dichloroethane-d4		94	53-142
Toluene-d8		102	68-124

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

Q = Surrogate failure

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

L = LCS/LCSD failure

H = Out of holding time

W = Reported on wet weight basis

S = MS/MSD failure

Client: Westinghouse Electric Company

Laboratory ID: WF01013-002

Description: SS-17-7-8

Matrix: Solid

Date Sampled:05/29/2021 1015

Project Name: CVOC

% Solids: 88.4 06/02/2021 0028

Date Received: 06/01/2021

Project Number:

 Run
 Prep Method
 Analytical Method
 Dilution
 Analysis Date
 Analyst
 Prep Date
 Batch
 Sample Wt.(g)

 1
 5035
 8260D
 1
 06/03/2021 1304
 JM1
 94223
 6.09

CAS	Analytical				_
Number	Method	Result Q	LOQ	Units	Run
107-06-2	8260D	ND	4.6	ug/kg	1
75-35-4	8260D	ND	4.6	ug/kg	1
156-59-2	8260D	ND	4.6	ug/kg	1
156-60-5	8260D	ND	4.6	ug/kg	1
127-18-4	8260D	ND	4.6	ug/kg	1
79-01-6	8260D	ND	4.6	ug/kg	1
75-01-4	8260D	ND	4.6	ug/kg	1
	Number 107-06-2 75-35-4 156-59-2 156-60-5 127-18-4 79-01-6	Number         Method           107-06-2         8260D           75-35-4         8260D           156-59-2         8260D           156-60-5         8260D           127-18-4         8260D           79-01-6         8260D	Number         Method         Result         Q           107-06-2         8260D         ND           75-35-4         8260D         ND           156-59-2         8260D         ND           156-60-5         8260D         ND           127-18-4         8260D         ND           79-01-6         8260D         ND	Number         Method         Result         Q         LOQ           107-06-2         8260D         ND         4.6           75-35-4         8260D         ND         4.6           156-59-2         8260D         ND         4.6           156-60-5         8260D         ND         4.6           127-18-4         8260D         ND         4.6           79-01-6         8260D         ND         4.6	Number         Method         Result         Q         LOQ         Units           107-06-2         8260D         ND         4.6         ug/kg           75-35-4         8260D         ND         4.6         ug/kg           156-59-2         8260D         ND         4.6         ug/kg           156-60-5         8260D         ND         4.6         ug/kg           127-18-4         8260D         ND         4.6         ug/kg           79-01-6         8260D         ND         4.6         ug/kg

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	47-138
1,2-Dichloroethane-d4		87	53-142
Toluene-d8		101	68-124

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40% Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-003

Matrix: Solid

Description: SS-18-2-3

Date Sampled: 05/29/2021 1030

Project Name: CVOC

% Solids: 91.5 06/02/2021 0028

Date Received: 06/01/2021

Project Number:

A Brown Date - Databa Carron la Wit (a)

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/03/2021 1415 JM1		94223	6.21

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.4	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.4	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.4	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.4	ug/kg	1
_	Run 1 Accept	tance				

Surrogate	Q	Run 1 A % Recovery	Acceptance Limits
Bromofluorobenzene		102	47-138
1,2-Dichloroethane-d4		92	53-142
Toluene-d8		102	68-124

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

Q = Surrogate failure

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

L = LCS/LCSD failure

H = Out of holding time

W = Reported on wet weight basis

S = MS/MSD failure

Client: Westinghouse Electric Company

Laboratory ID: WF01013-004

Matrix: Solid

Description: SS-18-7-8

Date Sampled: 05/29/2021 1040 Project Name: CVOC

% Solids: 90.8 06/02/2021 0028

Date Received: 06/01/2021 Project Number:

 Run
 Prep Method
 Analytical Method
 Dilution
 Analysis Date
 Analyst
 Prep Date
 Batch
 Sample Wt.(g)

 1
 5035
 8260D
 1
 06/03/2021 1437 JM1
 94223
 5.36

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	5.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	5.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	5.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	5.1	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	5.1	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	5.1	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	5.1	ug/kg	1

SurrogateQRun 1 RecoveryAcceptance LimitsBromofluorobenzene10447-1381,2-Dichloroethane-d49753-142Toluene-d810068-124

LOQ = Limit of Quantitation B = Detected in the method blank

ND = Not detected at or above the LOQ N = Recovery is out of criteria

H = Out of holding time W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40% Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Client: Westinghouse Electric Company

Laboratory ID: WF01013-005

Description: SS-19-6-7

Date Sampled: 05/29/2021 1050 Project Name: CVOC Matrix: Solid

Date Received: 06/01/2021

Project Number:

% Solids: 91.4 06/02/2021 0028

Run	Prep Method	<b>Analytical Method</b>	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/03/2021 1503 JM1		94223	6.20

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.4	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.4	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.4	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.4	ug/kg	1
	Pun 1 Accent	ance				

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		100	47-138
1,2-Dichloroethane-d4		92	53-142
Toluene-d8		103	68-124

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range Q = Surrogate failure ND = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% L = LCS/LCSD failure S = MS/MSD failure H = Out of holding time W = Reported on wet weight basis

Client: Westinghouse Electric Company

Laboratory ID: WF01013-006

Description: SS-19-7-8

Matrix: Solid

Date Sampled: 05/29/2021 1100

Date Received: 06/01/2021 Project Number: % Solids: 87.2 06/02/2021 0028

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/03/2021 1526 JM1		94223	5.87

Project Name: CVOC

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.9	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.9	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.9	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.9	ug/kg	1
	Run 1 Accept	ance				

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		103	47-138
1,2-Dichloroethane-d4		93	53-142
Toluene-d8		103	68-124

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range Q = Surrogate failure ND = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% L = LCS/LCSD failure S = MS/MSD failure H = Out of holding time W = Reported on wet weight basis

Client: Westinghouse Electric Company

Laboratory ID: WF01013-007

Description: SS-21-1-2

Matrix: Solid

Date Sampled: 05/29/2021 1115

Project Name: CVOC % Solids: 90.8 06/02/2021 0028

Date Received: 06/01/2021

Project Number:

Run	Prep Method	<b>Analytical Method</b>	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/03/2021 1549 JM1		94223	6.01

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.6	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.6	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.6	ug/kg	1
Tetrachloroethene	127-18-4	8260D	5.8	4.6	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.6	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.6	ug/kg	1
	Run 1 Accept	ance				

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		100	47-138
1,2-Dichloroethane-d4		91	53-142
Toluene-d8		105	68-124

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

B = Detected in the method blank W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Project Name: CVOC

75-01-4

Client: Westinghouse Electric Company

Laboratory ID: WF01013-008

Description: SS-21-7-8

Run Prep Method

Vinyl chloride

1

94223

5035

Matrix: Solid

5.1

Date Sampled: 05/29/2021 1125

% Solids: 88.9 06/02/2021 0028

5.53

ug/kg

1

Date Received: 06/01/2021 Project Number:

**Analytical Method** 

8260D

Dilution **Analysis Date Analyst Prep Date** Batch Sample Wt.(g)

ND

	CAS	Analytical				
Parameter	Number	Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	5.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	5.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	5.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	5.1	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	5.1	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	5.1	ua/ka	1

8260D

06/03/2021 1611 JM1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	47-138
1,2-Dichloroethane-d4		95	53-142
Toluene-d8		102	68-124

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range Q = Surrogate failure ND = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% L = LCS/LCSD failure S = MS/MSD failure H = Out of holding time W = Reported on wet weight basis

Client: Westinghouse Electric Company

Laboratory ID: WF01013-009

Description: SS-20-7-8

Matrix: Solid

Date Sampled: 05/29/2021 1135 Project Name: CVOC % Solids: 86.5 06/02/2021 0028

Date Received: 06/01/2021 Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/03/2021 1633 JM1		94223	5.79

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	5.0	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	5.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	5.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	5.0	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	5.0	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	5.0	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	5.0	ug/kg	1
	Run 1 Accent	ance				

Q	% Recovery	Limits
	102	47-138
	95	53-142
	102	68-124
	Q	Q % Recovery 102 95

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

B = Detected in the method blank

W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-010

Description: SS-20-1-2

Matrix: Solid

Date Sampled: 05/29/2021 1145

Project Name: CVOC

% Solids: 89.9 06/02/2021 0028

Date Received: 06/01/2021

Project Number:

Run P	rep Method	<b>Analytical Method</b>	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/03/2021 1656 JM1		94223	6.45

Barranatar	CAS	Analytical	Decute O	100	Huita	D
Parameter	Number	Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.3	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.3	ug/kg	1
Tetrachloroethene	127-18-4	8260D	21	4.3	ug/kg	1
Trichloroethene	79-01-6	8260D	17	4.3	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.3	ug/kg	1

,		3. 3
Surrogate	Run 1 Acceptance Q % Recovery Limits	
Bromofluorobenzene	100 47-138	
1,2-Dichloroethane-d4	92 53-142	
Toluene-d8	103 68-124	

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ H = Out of holding time

B = Detected in the method blank N = Recovery is out of criteria W = Reported on wet weight basis E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-011

Description: SS-22-6-7

Project Name: CVOC

Matrix: Solid

Date Sampled:05/29/2021 1215

% Solids: 89.2 06/02/2021 0028

Date Received: 06/01/2021 Project Number:

 Run
 Prep Method
 Analytical Method
 Dilution
 Analysis Date
 Analyst
 Prep Date
 Batch
 Sample Wt.(g)

 1
 5035
 8260D
 1
 06/03/2021 1719
 JM1
 94223
 5.43

	CAS	Analytical				
Parameter	Number	Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	5.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	5.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	5.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	5.2	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	5.2	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	5.2	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	5.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	47-138
1,2-Dichloroethane-d4		95	53-142
Toluene-d8		103	68-124

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40% Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-012

Description: SS-22-7-8

Date Sampled: 05/29/2021 1225 Project Name: CVOC Matrix: Solid

% Solids: 88.8 06/02/2021 0028

Date Received: 06/01/2021

1

Project Number:

Run Prep Method **Analytical Method** Dilution **Analysis Date Analyst Prep Date** Batch Sample Wt.(g) 5035 8260D 06/03/2021 1742 JM1 94223 5.87

	CAS	Analytical				
Parameter	Number	Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.8	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.8	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.8	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	47-138
1,2-Dichloroethane-d4		94	53-142
Toluene-d8		102	68-124

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ H = Out of holding time

B = Detected in the method blank N = Recovery is out of criteria W = Reported on wet weight basis E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-013

Description: SS-22-7-8 DUP

Project Name: CVOC

Matrix: Solid

Date Sampled:05/29/2021 1225

% Solids: 87.4 06/02/2021 0028

Date Received: **06/01/2021** Project Number:

 Run
 Prep Method
 Analytical Method
 Dilution
 Analysis Date
 Analyst
 Prep Date
 Batch
 Sample Wt.(g)

 1
 5035
 8260D
 1
 06/03/2021 1805
 JM1
 94223
 5.97

	CAS	Analytical				
Parameter	Number	Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.8	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.8	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.8	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	47-138
1,2-Dichloroethane-d4		95	53-142
Toluene-d8		102	68-124

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

Q = Surrogate failure

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

L = LCS/LCSD failure

H = Out of holding time

W = Reported on wet weight basis

S = MS/MSD failure

Client: Westinghouse Electric Company

Laboratory ID: WF01013-014

Description: SS-23-6-7

Matrix: Solid

Date Sampled:05/29/2021 1240

Project Name: CVOC

% Solids: 87.3 06/02/2021 0028

Date Received: 06/01/2021 Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/03/2021 1828 JM1		94223	5.86

	CAS	Analytical				
Parameter	Number	Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.9	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.9	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.9	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.9	ug/kg	1

Surrogate	Q	Run 1 A % Recovery	cceptance Limits
Bromofluorobenzene		101	47-138
1,2-Dichloroethane-d4		91	53-142
Toluene-d8		101	68-124

LOQ = Limit of Quantitation

B = Detected in the method blank

ND = Not detected at or above the LOQ

H = Out of holding time

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

Q = Surrogate failure

P = The RPD between two GC columns exceeds 40%

L = LCS/LCSD failure

S = MS/MSD failure

Client: Westinghouse Electric Company

Laboratory ID: WF01013-015

Description: SS-23-7-8

Project Name: CVOC

Matrix: Solid

Date Sampled: 05/29/2021 1250

% Solids: 87.7 06/02/2021 0028

Date Received: 06/01/2021 Project Number:

 Run
 Prep Method
 Analytical Method
 Dilution
 Analysis Date
 Analyst
 Prep Date
 Batch
 Sample Wt.(g)

 1
 5035
 8260D
 1
 06/04/2021 1234
 JM1
 94375
 6.10

	CAS	Analytical				
Parameter	Number	Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.7	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.7	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.7	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.7	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.7	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.7	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	47-138
1,2-Dichloroethane-d4		94	53-142
Toluene-d8		104	68-124

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40% Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-016

Description: SS-24-3-4

Matrix: Solid

Date Sampled: 05/29/2021 1300 Project Name: CVOC

Date Received: 06/01/2021

Project Number:

% Solids: 85.2 06/02/2021 0028

Run	Prep Method	<b>Analytical Method</b>	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/04/2021 1256 JM1		94375	6.33

CAS Number	Analytical Method	Result Q	1.00	Units	Run
107-06-2	8260D	ND ND			1
75-35-4	8260D	ND	4.6	ug/kg	1
156-59-2	8260D	ND	4.6	ug/kg	1
156-60-5	8260D	ND	4.6	ug/kg	1
127-18-4	8260D	ND	4.6	ug/kg	1
79-01-6	8260D	ND	4.6	ug/kg	1
75-01-4	8260D	ND	4.6	ug/kg	1
•	75-35-4 156-59-2 156-60-5 127-18-4 79-01-6	107-06-2 8260D 75-35-4 8260D 156-59-2 8260D 156-60-5 8260D 127-18-4 8260D 79-01-6 8260D	107-06-2 8260D ND 75-35-4 8260D ND 156-59-2 8260D ND 156-60-5 8260D ND 127-18-4 8260D ND 79-01-6 8260D ND	107-06-2 8260D ND 4.6 75-35-4 8260D ND 4.6 156-59-2 8260D ND 4.6 156-60-5 8260D ND 4.6 127-18-4 8260D ND 4.6 79-01-6 8260D ND 4.6	107-06-2       8260D       ND       4.6       ug/kg         75-35-4       8260D       ND       4.6       ug/kg         156-59-2       8260D       ND       4.6       ug/kg         156-60-5       8260D       ND       4.6       ug/kg         127-18-4       8260D       ND       4.6       ug/kg         79-01-6       8260D       ND       4.6       ug/kg

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		102	47-138
1,2-Dichloroethane-d4		94	53-142
Toluene-d8		104	68-124

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

B = Detected in the method blank W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-017

Description: EB-01-052921

Matrix: Aqueous

Date Sampled: 05/29/2021 1315

Project Name: CVOC

Date Received: 06/01/2021

Project Number:

Run Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch
1 5030B	8260D	1	06/09/2021 0159 CJL2		94841

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND	1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND	1.0	ug/L	1

Surrogate	Q	Run 1 A % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		92	70-130

LOQ = Limit of Quantitation Q = Surrogate failure ND = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% L = LCS/LCSD failure S = MS/MSD failure H = Out of holding time W = Reported on wet weight basis

Client: Westinghouse Electric Company

Laboratory ID: WF01013-018

Description: SS-24-7-8

Matrix: Solid

Date Sampled: 05/29/2021 1330

Date Received: 06/01/2021

Project Name: CVOC

% Solids: 86.3 06/02/2021 0028

Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260D	1	06/04/2021 1319 JM1		94375	5.99	
								Ξ

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.8	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.8	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.8	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.8	ug/kg	1
	Run 1 Accept	ance				

_	Surrogate	Q	% Recovery	Limits
	Bromofluorobenzene		104	47-138
	1,2-Dichloroethane-d4		97	53-142
	Toluene-d8		105	68-124

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range ND = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% H = Out of holding time W = Reported on wet weight basis

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Client: Westinghouse Electric Company

Laboratory ID: WF01013-019

Description: SS-25-5-6

Matrix: Solid

Date Sampled:05/29/2021 1345

Project Name: CVOC % Solids: 87.8 06/02/2021 0028

Date Received: 06/01/2021

5035

Run Prep Method

Project Number:

<b>Analytical Method</b>	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
8260D	1	06/04/2021 1341 JM1		94375	5.95

Parameter		Num	CAS iber	Analytical Method	Result	Q	LOQ	Units	Run
1,2-Dichloroethane		107-0	06-2	8260D	ND		4.8	ug/kg	1
1,1-Dichloroethene		75-3	35-4	8260D	ND		4.8	ug/kg	1
cis-1,2-Dichloroethene		156-5	9-2	8260D	ND		4.8	ug/kg	1
trans-1,2-Dichloroethene		156-6	60-5	8260D	ND		4.8	ug/kg	1
Tetrachloroethene		127-1	8-4	8260D	ND		4.8	ug/kg	1
Trichloroethene		79-0	01-6	8260D	ND		4.8	ug/kg	1
Vinyl chloride		75-0	)1-4	8260D	ND		4.8	ug/kg	1
Surrogate	Q	Run 1 A % Recovery	Acceptan Limits						
Bromofluorobenzene		101	47-138	3					
1,2-Dichloroethane-d4		95	53-142	2					
Toluene-d8		102	68-124	ļ					

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

Q = Surrogate failure

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

L = LCS/LCSD failure

H = Out of holding time

W = Reported on wet weight basis

S = MS/MSD failure

Client: Westinghouse Electric Company

Laboratory ID: WF01013-020

Description: SS-25-7-8

Matrix: Solid

Date Sampled: 05/29/2021 1355

Project Name: CVOC

% Solids: 88.6 06/02/2021 0028

Date Received: 06/01/2021

Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/04/2021 1404 JM1		94375	5.84

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND ND	4.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.8	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.8	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.8	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.8	ug/kg	1

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		102	47-138
1,2-Dichloroethane-d4		94	53-142
Toluene-d8		101	68-124

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Client: Westinghouse Electric Company

Laboratory ID: WF01013-021

Description: SS-26-3-4

Matrix: Solid

Date Sampled:05/29/2021 1405 Project Name: CVOC

% Solids: 88.2 06/02/2021 0028

Date Received: 06/01/2021 Project Number:

 Run
 Prep Method
 Analytical Method
 Dilution
 Analysis Date
 Analyst
 Prep Date
 Batch
 Sample Wt.(g)

 1
 5035
 8260D
 1
 06/04/2021 1427 JM1
 94375
 6.03

CAS Number	Analytical Method	Result Q	LOQ	Units	Run
107-06-2	8260D	ND	4.7	ug/kg	1
75-35-4	8260D	ND	4.7	ug/kg	1
156-59-2	8260D	ND	4.7	ug/kg	1
156-60-5	8260D	ND	4.7	ug/kg	1
127-18-4	8260D	ND	4.7	ug/kg	1
79-01-6	8260D	ND	4.7	ug/kg	1
75-01-4	8260D	ND	4.7	ug/kg	1
	Number 107-06-2 75-35-4 156-59-2 156-60-5 127-18-4 79-01-6	Number         Method           107-06-2         8260D           75-35-4         8260D           156-59-2         8260D           156-60-5         8260D           127-18-4         8260D           79-01-6         8260D	Number         Method         Result         Q           107-06-2         8260D         ND           75-35-4         8260D         ND           156-59-2         8260D         ND           156-60-5         8260D         ND           127-18-4         8260D         ND           79-01-6         8260D         ND	Number         Method         Result         Q         LOQ           107-06-2         8260D         ND         4.7           75-35-4         8260D         ND         4.7           156-59-2         8260D         ND         4.7           156-60-5         8260D         ND         4.7           127-18-4         8260D         ND         4.7           79-01-6         8260D         ND         4.7	Number         Method         Result         Q         LOQ         Units           107-06-2         8260D         ND         4.7         ug/kg           75-35-4         8260D         ND         4.7         ug/kg           156-59-2         8260D         ND         4.7         ug/kg           156-60-5         8260D         ND         4.7         ug/kg           127-18-4         8260D         ND         4.7         ug/kg           79-01-6         8260D         ND         4.7         ug/kg

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		102	47-138
1,2-Dichloroethane-d4		95	53-142
Toluene-d8		100	68-124

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40% Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-022

Description: SS-26-7-8

Date Sampled: 05/29/2021 1420

Matrix: Solid

Project Name: CVOC

% Solids: 84.5 06/02/2021 0028

Date Received: 06/01/2021

Project Number:

Run	Prep Method	<b>Analytical Method</b>	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/04/2021 1450 JM1		94375	6.13

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.8	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.8	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.8	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.8	ug/kg	1
	Run 1 Accept	ance				

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		102	47-138
1,2-Dichloroethane-d4		95	53-142
Toluene-d8		101	68-124

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

B = Detected in the method blank W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-023

Description: SS-27-1-2

Matrix: Solid

Date Sampled: 05/29/2021 1435

% Solids: 88.8 06/02/2021 0028

Date Received: 06/01/2021 Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/04/2021 1513 JM1		94375	6.53

Project Name: CVOC

CAS Number	Analytical Method	Result O	LOQ	Units	Run
107-06-2	8260D	ND ND	4.3	ug/kg	1
75-35-4	8260D	ND	4.3	ug/kg	1
156-59-2	8260D	11	4.3	ug/kg	1
156-60-5	8260D	ND	4.3	ug/kg	1
127-18-4	8260D	ND	4.3	ug/kg	1
79-01-6	8260D	8.1	4.3	ug/kg	1
75-01-4	8260D	ND	4.3	ug/kg	1
	Number 107-06-2 75-35-4 <b>156-59-2</b> 156-60-5 127-18-4 <b>79-01-6</b>	Number         Method           107-06-2         8260D           75-35-4         8260D           156-59-2         8260D           156-60-5         8260D           127-18-4         8260D           79-01-6         8260D	Number         Method         Result         Q           107-06-2         8260D         ND           75-35-4         8260D         ND           156-59-2         8260D         11           156-60-5         8260D         ND           127-18-4         8260D         ND           79-01-6         8260D         8.1	Number         Method         Result Q         LOQ           107-06-2         8260D         ND         4.3           75-35-4         8260D         ND         4.3           156-59-2         8260D         11         4.3           156-60-5         8260D         ND         4.3           127-18-4         8260D         ND         4.3           79-01-6         8260D         8.1         4.3	Number         Method         Result Q         LOQ         Units           107-06-2         8260D         ND         4.3         ug/kg           75-35-4         8260D         ND         4.3         ug/kg           156-59-2         8260D         11         4.3         ug/kg           156-60-5         8260D         ND         4.3         ug/kg           127-18-4         8260D         ND         4.3         ug/kg           79-01-6         8260D         8.1         4.3         ug/kg

Surrogate	Q	Run 1 / % Recovery	Acceptance Limits	
Bromofluorobenzene		100	47-138	
1,2-Dichloroethane-d4		92	53-142	
Toluene-d8		103	68-124	

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

B = Detected in the method blank W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-024

Description: SS-27-7-8

Matrix: Solid

Date Sampled: 05/29/2021 1445

Project Name: CVOC

% Solids: 84.7 06/02/2021 0028

Date Received: 06/01/2021

Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/04/2021 1536 JM1		94375	6.43

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.6	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.6	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.6	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.6	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.6	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.6	ug/kg	1
	Run 1 Accept	tance				

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		100	47-138
1,2-Dichloroethane-d4		92	53-142
Toluene-d8		100	68-124

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

B = Detected in the method blank W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-025

Description: SS-27-7-8 Dup

Date Sampled: 05/29/2021 1445 Project Name: CVOC Matrix: Solid

% Solids: 81.9 06/02/2021 0028

Date Received: 06/01/2021

Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/04/2021 1558 JM1		94375	6.12

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	5.0	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	5.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	5.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	5.0	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	5.0	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	5.0	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	5.0	ug/kg	1
Surrogate	Run 1 Accept					

47-138	
53-142	
68-124	
)	68-124

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

B = Detected in the method blank W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-026

Description: SS-28-1-2

Matrix: Solid

Date Sampled: 05/29/2021 1545

Project Name: CVOC

% Solids: 82.8 06/02/2021 0028

Date Received: 06/01/2021

Project Number:

1 5035 8260D 1 06/04/2021 1621 JM1 94375 6.47	Run Prep Metho	od Analytical Weth	oa Dilution	Analysis Date Analys	t Prep Date	Batch	Sample wt.(g)
	1 50	35 8260	D 1	06/04/2021 1621 JM1		94375	6.47

	CAS	Analytical				
Parameter	Number	Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.7	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.7	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.7	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.7	ug/kg	1
Tetrachloroethene	127-18-4	8260D	9.3	4.7	ug/kg	1
Trichloroethene	79-01-6	8260D	12	4.7	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.7	ug/kg	1

Surrogate	Q	Run 1 A % Recovery	Acceptance Limits	
Bromofluorobenzene		101	47-138	
1,2-Dichloroethane-d4		92	53-142	
Toluene-d8		104	68-124	

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

W = Reported on wet weight basis

P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-027

Description: SS-28-7-8

Matrix: Solid

Date Sampled: 05/29/2021 1555

Date Received: 06/01/2021

% Solids: 78.6 06/02/2021 0028

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/04/2021 1710 JM1		94375	6.54

Project Name: CVOC

Project Number:

	CAS	Analytical				
Parameter	Number	Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.9	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.9	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.9	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.9	ug/kg	1
Currente	Run 1 Accept					
Surrogate	Q % Recovery Lim	ItS				

Surrogate	Q	% Recovery	Limits	
Bromofluorobenzene		98	47-138	
1,2-Dichloroethane-d4		90	53-142	
Toluene-d8		100	68-124	

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

B = Detected in the method blank W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-028

Description: SS-29-4-5

Matrix: Solid

Date Sampled: 05/29/2021 1620

Project Name: CVOC % Solids: 90.9 06/02/2021 0028

Date Received: 06/01/2021

Project Number:

 Run
 Prep Method
 Analytical Method
 Dilution
 Analysis Date
 Analyst
 Prep Date
 Batch
 Sample Wt.(g)

 1
 5035
 8260D
 1
 06/04/2021 1733
 JM1
 94375
 6.20

CAS	Analytical				
Number	Method	Result Q	LOQ	Units	Run
107-06-2	8260D	ND	4.4	ug/kg	1
75-35-4	8260D	ND	4.4	ug/kg	1
156-59-2	8260D	ND	4.4	ug/kg	1
156-60-5	8260D	ND	4.4	ug/kg	1
127-18-4	8260D	ND	4.4	ug/kg	1
79-01-6	8260D	ND	4.4	ug/kg	1
75-01-4	8260D	ND	4.4	ug/kg	1
	Number 107-06-2 75-35-4 156-59-2 156-60-5 127-18-4 79-01-6	Number         Method           107-06-2         8260D           75-35-4         8260D           156-59-2         8260D           156-60-5         8260D           127-18-4         8260D           79-01-6         8260D	Number         Method         Result         Q           107-06-2         8260D         ND           75-35-4         8260D         ND           156-59-2         8260D         ND           156-60-5         8260D         ND           127-18-4         8260D         ND           79-01-6         8260D         ND	Number         Method         Result         Q         LOQ           107-06-2         8260D         ND         4.4           75-35-4         8260D         ND         4.4           156-59-2         8260D         ND         4.4           156-60-5         8260D         ND         4.4           127-18-4         8260D         ND         4.4           79-01-6         8260D         ND         4.4	Number         Method         Result         Q         LOQ         Units           107-06-2         8260D         ND         4.4         ug/kg           75-35-4         8260D         ND         4.4         ug/kg           156-59-2         8260D         ND         4.4         ug/kg           156-60-5         8260D         ND         4.4         ug/kg           127-18-4         8260D         ND         4.4         ug/kg           79-01-6         8260D         ND         4.4         ug/kg

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		104	47-138
1,2-Dichloroethane-d4		97	53-142
Toluene-d8		102	68-124

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-029

Description: SS-29-7-8

Matrix: Solid

Date Sampled: 05/29/2021 1635

Project Name: CVOC

% Solids: 85.6 06/02/2021 0028

Date Received: 06/01/2021

Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260D	1	06/04/2021 1815 JM1		94375	6.67

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	4.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260D	ND	4.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	4.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	4.4	ug/kg	1
Tetrachloroethene	127-18-4	8260D	ND	4.4	ug/kg	1
Trichloroethene	79-01-6	8260D	ND	4.4	ug/kg	1
Vinyl chloride	75-01-4	8260D	ND	4.4	ug/kg	1
Surrogate	Run 1 Accept Q % Recovery Limi					

Surrogate Q	% Recovery	Limits
Bromofluorobenzene	101	47-138
1,2-Dichloroethane-d4	94	53-142
Toluene-d8	102	68-124

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

B = Detected in the method blank W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-030

Description: TB-01-052921

Matrix: Aqueous

Date Sampled: 05/29/2021 1020

Project Name: CVOC

Date Received: 06/01/2021

Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch
1	5030B	8260D	1	06/09/2021 0224 CJL2		94841

	CAS	Analytical				
Parameter	Number	Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND	1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND	1.0	ug/L	1

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		91	70-130

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

B = Detected in the method blank W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

Client: Westinghouse Electric Company

Laboratory ID: WF01013-031

Description: TB-02-052921

Date Sampled: 05/29/2021 1340 Project Name: CVOC

Matrix: Aqueous

Date Received: 06/01/2021

Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch
1	5030B	8260D	1	06/09/2021 0249 CJL2		94841

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND	1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		86	70-130
Toluene-d8		91	70-130

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

W = Reported on wet weight basis

P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.) 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Client: Westinghouse Electric Company

Laboratory ID: WF01013-032

Description: EB-02-052921

Matrix: Aqueous

Date Sampled: 05/29/2021 1555

Project Name: CVOC

Date Received: 06/01/2021

Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date Analyst	Prep Date	Batch
1	5030B	8260D	1	06/09/2021 0314 CJL2		94841

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND	1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		91	70-130

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time

B = Detected in the method blank W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

## Chain of Custody and Miscellaneous Documents

## Pace Analytical "

## PACE ANALYTICAL SERVICES, LLC

Telephone No. 803-791-9700 Fax No. 803-791-9111 108 Vantage Point Drive • West Columbia, SC 29172 www.pacelabs.com

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12168

Number

Remarks / Coolar J.D. 23°C Hondan Mundan Medoswage WF01013 Quate Na. OD Requirements (Specify) 7,000 EMT6 MTP8 27TB Ç 3.2 Classe OBSC OBSC 橹 Jayer de Cuestaphouse, com Analysis (Attach list if more space is needed) mwarahu II Receip! Temp □ Po son Telephone No. / E-mail JOS Pack □ Skin Initiant 529117 × × × X × × X × × 3 Possible Hazard Identification XXIon-Hazud — Planmable peroji. Svati 4. Laboratory receivedby Received on the (Circle) EN 9208 ķΛ 5 1 in 18 S M į, L No of Contritions by Preservative Type LAS USE ONLY 1. Received by 2. Repelled by 3. Received by BOWH юзан Check Switch Sebrat to Client X Disposal by Lata 77 ST Report to Contact Medica Projects AND DOGS (MINE HAM TATE X ×  $\searrow$ × × X X X X 72 Sampier's Signature All samples are retained for four weeks from receipt Geographic Geographic 3 فغ Ü ঔ Ś b Ů V V Ø K Sample Disposal Printed Mame Collection Time (Millery) Carrie Carrie 100 1030 240 000 133 100 24.7 Date Oate Date 50 unless other arrangements are made. Turn Around Time Required (Prior tak approval required for expedited IAT), 5/21/21 5/29/21 5/2/21 12/15/51 12/32/51 12/12/5 5/8/21 131/21 5/24/21 12/22/5 Cofection Date(3) Zto Code 25/06/2 F.O. No. Containers for each service rusy be combined on one fine,) 劉 Sample ID / Description Phase client Westing house Standard O Rush (Spenify) T Op ĵŝ de I Address 5801 Blukt ĠΟ Ļ ť 00 ri. W N Relinguished by A I Cir Hopkins Sin ٣ 2. Refraguished by Refragacited by 4. Refinguished by 58,200 55-17 55- 6 55-21-55. 18 55-20-55.21. Project Neme 8/3 55, 18 Project No.

DISTRIBUTION: WILTE & VELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

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Pace Analytical "

106 Vantage Point Drive • West Columbia, SC 29172 Telephone No. 808-791-9700 Fax No. 803-791-9111 www.pacolabs.com

121683 Number

WF01013 Temarks / Coolar LD. 2,33 Coursell Number MEXICALE OF 707 Cucle No. QC Requirements (Specify) 1000 Tens 1350 Mag 3.7.8 comedo e usimpara con Osla Oate 990 Analysis (Attach list if more space is neached) Receipt Toray moduli C C) Polson Telephone No. / E-mail foe Peth C Skin friftant ON ( Seek 50/12 × × × × × 1 × × X بحز Possible frazerd (dentification KNon-Hazard | Ferruratio 4. Labaratory reneinali by Received on ice (Circle) 5 EN STAN Š 10 1 5 15 15 LA. 15 No of Containers by Praservethe Type MON LAB USE ONLY 2. Received by 1. Received by Received by ж 3 отин Cracks of South K2584 Thurk Suffer - Return to Client III Disposal by Lab Report to Contact Trymer 7815 Marrix LIMB Jerre Time Ж × × × × X Sampler's Signature Note: All samples are retained for four weeks from receipt mosturgeg. Ø Printed Name 3 Ô જી ٧ Ÿ Ó V ৩ Sample Disposed Calc | 2.1 Calbation Trass (Military) 1330 03 1250 1330 1225 (330 1225 380 12.50 Caro 1215 3 unless other arrangements are made. 12/32/5 hum Andunid Trans Required (Prior lab agmoval regelved for expedited IAT.) 12/22/5 17/5/5 120/201 124/24 5/28/21 12/22/5 12/52/5 Collection Date(s) 5/25/21 12/12/ 25.000 dz P.O. No. (Containers for each sample way he combined on one line.) 器が 55,24-7-8-W5 55-22-7-8-Da 5.24-7-B-MS Sample 10 / Descriptor 5801 Bluk Rd MES Thay house K Standard | Rush (Specify) RI MOR EB-01-052921 55.22.7.8 55.23 .6-7 7,4 7 35-22-6-7 55.24.7.8 Pap Kins t. Relinguished by, Reinquished by 4. Relinquished by 2. Retinguished by 55-24-Project Neme 55.23 Project No.

DISTRIBUTION: WHITE & YELLOW-Return to leboratory with Sample/b); PINK-Field/Clant Copy

3 Cocument Number: MEXCONE-01

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# Pace Analytical 106 Vantage Po

PACE ANALYTICAL SERVICES, LLC 106 Vantage Point Drive • West Columbia, SC 29172 Telephone No. 809-791-9700 Fax No. 803-791-9111 www.paoelabs.ccm

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Number

Remarks / Cooler LD. WF01013 Occide No. Targo Disnik OC Requirements (Specify) 196 Тла Time Time joynedp@nesthallousc, com 9350 Date 왕 Analysis (Allsoh fist If more space is needed,  $\leq$ C Gharan D Polson Telephone No. / E-mail for Pock Skin Imilant ショコハン × × ١٤, × × × >× 188 Possible Hazard folynillication ousy. PRU 4. Laboratory received by LAB USE ONLY Received on toe (Circle) EX 5805 ŝ 5 5 in 1.0 3 حيا No of Cantahers by Preturnaline Type HOM 2, Approximal by S. Received by f. Received by IJН const 1630年大名名 10524 Church Confectio ☐ Return to Offent XDR, cost by Lab seveloj) Haport to Contact Joynes incody 444 1979  $\mathcal{Q}_{\mathrm{III}}^{\mathrm{opt}}$ Matth 9 1 77me × ×  $\overline{z}$ × X × Sampier's Signature Note: All samples are retained for four weeks from receipt Ø ڻ ئ ঔ ڻ J 17 Š U 3 Printed Marra Sample Disposal Cata S N 13.45 Collector This (Adhes) 335 (F) 15.4% 135 Page 1720 シェエハ 15/2 Oate Ome えん uniess other arrangements are made. × Turn Around Time Regulred (Prin: Its) approval required for especified IAT.) 32/2 12/22/51 12/2/2 5/29/2 5/31/21 5/21/21 5/21/21 9/29/24 5/28/21 Callection Darefs) PO No. 26,006 湯 (Солитов Ю евай вящие тлу ве соловнее по опечина) 7.8. Ħ Sample 10 / Description ☐ Rush (Specify) W 3,4 ング・グール 90 αO Plane Ą Ú 4 ŕ ζ, Chent Chestaghouse ċ Address Blate 55.26-27.7 1. Relinquistred by Freject Name, LT 27, or Hapkiss 55-26-7000 2. Reknaushed by 3. Relinguished by 4. Reinquished by 55.25 ζ 1200 Standard A Project No.

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106 Vantage Point Drive - West Columbia, SC 29172 felephone No. 803-791-9700 Fax No. 803-791-9111 www.pacelabs.com

121684

Number

WF01013 Flamants / Cooler LD. 2.3°C Cocument Number: MECCONS-01 El 57,78 Quote No. Terry Shark GC Requirements (Specify) TATIE Times TATA Ame ç ijoynesky e vestrajhavski cam S. Hard Car Selec Analysis (Albach tist if more space is needed) The Uniformatical Pocojet Temp. C Skin Triffant C Roison Telephane No. / Bengi 世紀の ş 50110 X X ×  $\sim$ × × Possible Hazard Identification X Non-Hazard II Rammathe program grand 4. Laboratory received by LAB USE ONLY Received on ice (Circle) AH 9808 5 5 4 15 No of Contenters by Presonative Type 3. Received by 1. Received by 2. Received by (06) NI N ROMH And K Saute Churk Sudik 1052A Teturn to Client & Disposal by Lab Reports Contact District South 12015 12015 Matrix KIN TAME Time James Х × SMS. X Sampler's Signature × X Ü Note: All samples are retained for four weeks from receipt а рафиор-о спирав Ò Ü S 8 ও 13 2 | 1 | 2 i Printed Martie Sample Disposal Cestector, Time (Mitter) 1020 1020 1340 525 1420 53.5 Oete Dete Caste 1555 unless other arrangements are made. lum Around Time Required (Prior is aguaval required for expedited DL) 29/21 5/15/12 125426 5/24/21 5/24/21 129.64 Coffeehor Date(8) 12/2/ Zp Code 29061 FO. No. (Confahlers Ar each service may be comolocified on one file.) 能が 25 52-56-46-80 Sample ID / Despriprion RIS Phase Standard U Rush (Specify) -05292 129290-18-01-05292 Wes Bahaus 55-29-4-5-1. Retirm curing they by K Authors Bluff 55-29-4-5 15-28-7-8 ctalkus 2. Relimpuished by Felinquiched by 4. Reunquished by 30 -02 Project Marae Project No. B 50 È

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(st: PUM-Field/Cliant Copy



### Samples Receipt Checklist (SRC) (ME0018C-15)

Issuing Authority: Pace ENV - WCOL

Revised:9/29/2020 Page 1 of 1

## Sample Receipt Checklist (SRC)

Client: Westinghouse	Cooler Inspected by/date: JRG2 / 06/01/2021 Lot #: WF01013
	ace   Client   UPS   FedEx   Other:
Yes V No	Were custody scals present on the cooler?
	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA	Chlorine Strip ID: NA Tested by: NA
	n receipt / Derived (Corrected) temperature upon receipt  %Solid Snap-Cup ID: 21-238
	Blank Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C  Wet Ice Ice Packs Dry Ice None
	2 If the property of the second secon
Yes No No	PM was Notified by: phone / email / face-to-face (circle one).
	4. Is the commercial courier's packing slip attached to this form?
✓ Yes □ No	5. Were proper custody procedures (relinquished/received) followed?
Yes No	6. Were sample IDs listed on the COC?
Y Yes No	7. Were sample IDs listed on all sample containers?
Yes No	8. Was collection date & time listed on the COC?
Yes No	Was collection date & time listed on all sample containers?
✓ Yes □ No	10. Did all container label information (ID, date, time) agree with the COC?
Yes No	11. Were tests to be performed listed on the COC?
☑ Yes □ No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
✓ Yes ⊔ No	13. Was adequate sample volume available?
Yes ✓ No	14. Were all samples received within 1/4 the holding time or 48 hours, whichever comes first?
☐ Yes ☑ No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐Ycs ☑No ☐NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
Yes No VNA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes □No ▼NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐Yes ☐No ☑NA	<ol> <li>Were all applicable NH<sub>2</sub>/TKN/cyanide/phonol/625.1/608.3 (&lt; 0.5mg/L) samples free of</li> </ol>
	residual chlorine?
U Yes U No ☑NA	20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc) correctly transcribed from the COC into the comment section in LIMS?
Yes No	21. Was the quote number listed on the container label? If yes, Quote #
	Must be completed for any sample(s) incorrectly preserved or with headspace.)
Sample(s) NA in sample receiving with	were received incorrectly preserved and were adjusted accordingly  MAml_ of circle one: H2SO4, HNO3, HCl, NaOH using SR # NA
Time of preservation NA	. If more than one preservative is needed, please note in the comments below.
Sample(s) NA	were received with bubbles >6 mm in diameter.
Samples(s) NA	were received with TRC $> 0.5 \text{ mg/L}$ (If #19 is $n\sigma$ ) and were
	mple receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: NA
SR barcode labels applied	by: <u>JRG2</u> <u>Date: 06/01/2021</u>
Comments:	